Rethinking connectedness: Improving access to professional learning for regional and remote teachers
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Abstract

Transformation of Australian education is occurring at a rapid rate through the implementation of a number of initiatives. These initiatives include the Digital Education Revolution, the move to a National Curriculum and the implementation of a National Framework for Professional Standards for Teachers and Principals. As these initiatives are rolled out to schools across Australia, the equitable access to professional learning to support all teachers, regardless of their geographical location, is in question. A number of studies have been conducted in Australia that highlight the importance of professional learning and the difficulty faced by regional and remote teachers with regard to access (Gerard Daniels, 2007; Lyons, Cooksey, Panizzon, Parnell & Pegg, 2006; Ministerial Review of Schooling, 1994; Rural and Remote Education Advisory Council, 2000; Vinson, 2002). Along with access to professional learning, has been the discussion of effective modes of delivery. Face to face professional learning, in regional and metropolitan areas, is offered in isolation, or in some cases, is complimented with virtual learning environments. The need for a more sustainable approach to professional learning is highly necessary. A mixed method research approach was utilised in order to answer the primary research question “In what ways might technology be used to support professional learning of regional and remote teachers in Western Australia?” This research paper outlines the findings from the study including the significance of travel time; impact of limited relief teachers; implications for promotion and teacher registration; professional learning communities being valued but often limited by small staff numbers; professional learning conducted in the local context being preferred; professional learning established at the teacher and school level being desirable; teachers being confident in using technology and accessing PD online if required; and social cohesiveness being valued and often limited by isolation. Further, this research has culminated in the development of a “model of rethinking connectedness” that would facilitate improving the amount and variety of professional learning available to regional and remote teachers.

Introduction

With the change in Federal government in 2007 and the election of two different Prime Ministers since that time, the promise of an educational revolution aiming to invest in human capital through the education of the Australian people was presented. The Minister for Education at the time, Gillard (2008), discussed three key points for transforming our schools which included the improvement of quality teaching, ensuring every child benefits and mandating transparency and accountability. Further, Gillard (2008) stated the educational reform of Australian Schools will “offer new support for the development and leadership of our teachers” and “establishing new national professional standards for teachers”. With the clear expectation on a national level for transformation in Australian Schools comes the need for transformation of teachers working within those schools. A number of initiatives are considered to assist with such reform including the implementation of a Digital Education Revolution, the move to a National Curriculum and the implementation of a National Framework for Professional Standards for Teaching.
In Western Australia, with a significant number of schools in regional and remote areas, there has been ongoing research and reporting into issues affecting teacher retention in these areas. The report, *Schooling in Rural Western Australia*, compiled some 15 years ago, made extensive recommendations with regard to increasing resources to professional development (Ministerial Review of Schooling, 1994). More recently, in 2000, the *Pathways to better education and training for rural and remote Western Australia* report once again identified access to professional development as a significant area of concern for teachers outside of the metropolitan area (Rural and Remote Education Advisory Council, 2000). This report posed the benefits of a cross-sectoral approach to professional development, where schools from the DET, Catholic and Independent sectors might move to a joint approach to offer their staff professional learning in communities that were a considerable distance from the metropolitan area. However, the implementation of these findings and policies into practice appear to be limited.

Along with access to professional development, has been the discussion of effective modes of delivery. Face to face professional development, in regional and metropolitan areas, is offered in isolation, or in some cases, is complimented with virtual learning environments. Wallace and Boylan (2007) explored a number of issues affecting the retention of rural teachers and noted importance of the ‘provision of in-service education that is well supported both financially and by staff release in rural places as well as in larger regional and urban centres’ (p. 27). This is supported by Auh and Pegg (2009) who believe professional development held within a school, based on issues to be solved within that school appear to be most beneficial. This research showed that teachers gain more from professional development that is situated within the local context and based on their needs. As schools are faced with budgetary constraints the reality of this occurring in Western Australia is questionable.

**Literature Review**

The term professional development within the education sector is something of an archaic term. While much of the literature has reference to professional development, more recently, the education sector has moved to the notion of *professional learning* for teachers rather than the *professional development* of teachers. Professional learning indicates a more holistic approach where formal and informal opportunities for teachers encourage reflective practice, collaboration and improving student outcomes. This section aims to provide the history from the original focus on individual teacher professional development to the more holistic professional learning approach.
One of the most critical targets of education reform is the continuing development and learning of teachers (Desimone, 2009). During the 1970s and early 1980s a number of major studies contributed to the literature on effective staff development (Joyce & Showers, 1980; Knowles, 1973; Sparks, 1983).

Thomas Guskey dedicated over two decades to the importance of identifying evidence of effectiveness in professional development programs (Guskey, 1986; Guskey, 1999, Guskey; 2003). An early model of teacher change was developed in a four step linear process and proposed significant changes in teachers’ beliefs and attitudes occur only after they have undertaken learning, implemented it in the classroom and identified a change in the students learning (Guskey, 1986). The causal chain on which professional development programs were traditionally based can be seen in Figure 1.

![Figure 1 Model of teacher change (Guskey, 1986).](image)

Although Guskey’s model was highly valuable to the field of professional development in the eighties, further models have identified the process of teacher change is non-sequential and in fact, highly interconnected (Clarke & Hollingsworth, 2002; Newmann, King & Youngs, 2000). These interconnected models recognise the complexity of professional development and unlike Guskey’s model, consider the environment surrounding the teacher to be critical to professional growth. Figure 2 reflects the domains that encompass the teacher’s world and contribute to teacher professional growth, not confined to the personal domain alone.
The professional development of teachers and improvement of the teaching profession as a whole requires a paradigm shift (Sparks, 1994). Drawing upon Sparks, Billett (1998) alluded to teachers’ professional development being a phenomenon that can be part of their daily teaching within their classrooms. Billett's study proposed that by engaging in authentic activities and a framework of guided learning in the workplace, the knowledge of construction occurs in context and is not then tested by transfer between learning place and work place (Billett, 1998).

A similar vision is held by Zmuda, Kuklis and Kline (2004) who pose a shared school vision of continuous improvement where staff development is the key to achieving transformation toward the school as a competent system. The competent system at the school level is built by teachers who believe they can function more successfully collectively rather than at an individual level. Working toward a shared vision allows staff to be active participants of a continuous improvement journey who see the value of innovation and how this translates to student achievement. “Each school must identify its core beliefs, develop a shared vision, measure the congruency between the current reality and the vision, determine the changes that will close the gaps, support teachers during the change process, and foster a culture of collective autonomy and accountability” (Zmuda, Kuklis & Kline, 2004).

Much of the literature specifically focussed on regional and remote education around Australia indicates the issues might be similar between states and territories, however the vast distances in Western Australia are somewhat amplified. To contextualise this study, it is important to understand the previous research that has been conducted into education within these areas.
A national report from the Commonwealth Schools Commission entitled *Schooling in Rural Australia 1988* made ten recommendations to improve access and quality of rural schooling (Commonwealth Schools Commission, 1988). Of these recommendations, three were pertinent to this current study and include teacher in-service, off campus teacher education and information technologies. The Commonwealth Schools commission has since been abolished; however recent inquiries have stated “that even today full implementation of these 1987 recommendations would go a long way towards addressing the future needs of rural and remote school education” (HREOC, 2000).

In Western Australia, with a significant regional and remote area, there has been ongoing research and reporting into issues affecting teacher retention in regional areas. The report, *Schooling in Rural Western Australia 1994*, compiled some 15 years ago, made extensive recommendations with regard to increasing resources to professional development. This review and other anecdotal evidence in relation to rural and remote Australia was the catalyst for a much larger national review entitled Bush Talks. The objectives of this review were to: “identify major human rights issues confronting people living beyond the main population areas; to inform rural and remote area Australians about human rights and to develop projects to enhance the enjoyment of human rights in 1999 and 2000” (HREOC, 1999). The HREOC provides the following rationale for conducting the review:

> In almost every aspect of our work, the Human Rights and Equal Opportunity Commission has noticed that people in rural and remote Australia generally come off second best. Distance, isolation, lower incomes and minority status all exacerbate the experience of discrimination, harassment, and lack of services and participation (HREOC, 1999).

The Bush Talks review included community meetings across Australia, however in Western Australia, only five communities were visited and these were larger regional communities (many being cities) including Geraldton, Albany, Bunbury, Kalgoorlie and Narrogin. This in itself is alarming, with the largest distance travelled for the review being Kalgoorlie, a regional city, some 595 kilometres from the capital city of Perth. Although Kalgoorlie may be considered an outback town, it is not considered to be remote or isolated in that it has an extensive transport network of rail, bus and air services both within the state and to the eastern states. Although a range of crucial issues including health, aged care, youth services, telecommunications and education were
raised, the review could have provided a broader range of communities that encapsulated more communities in more remote locations.

Similarly, in 2000, the *Country Roads: Pathways to better education and training for rural and remote Western Australia* report once again identified access to professional development as a significant area of concern for teachers outside of the metropolitan area (Rural and Remote Education Advisory Council, 2000). This report also posed the benefits of a cross-sectoral approach to professional development. However, the implementation of these findings and policies into practice appear to be limited.

**Theoretical Framework**

Previous research by Henderson (2006) focused on asynchronous communications in a blended learning postgraduate environment. Building on Henderson’s study, the outcome of this research aimed to propose a conceptual framework through the development of a model that would focus on both synchronous and asynchronous communication. It was proposed at the beginning of this study that the community cohesion model, in Figure 3, designed to sustain professional development over time, would be the basis for developing a model of professional learning in this study.

![Figure 3 Model of community cohesion (Henderson, 2006).](image)

**Context of the Study**

In Western Australia, Kindergarten to Year 12 schooling is divided into two systems and a sector. While government and Catholic schools are within systems (DoE and CEO), independent schools comprise a sector. This study has focussed on the largest employer of teachers within schools in Western Australia, the Department of Education (DoE) system.
In terms of population, almost 74% of the State resides in the Perth metropolitan area, a further 11% resides in the South West and the remaining 15% is scattered throughout the other non-metropolitan areas (Australian Government, 2010). Due to the large expanse of the state of Western Australia, the DoE formerly divided its schools into districts. This study was conducted at the time when the organisational structure included these districts, however, in 2011 a restructure of DoE occurred to include regions rather than districts. The current regions comprise of two located in the metropolitan area (North and South) and six located outside of the metropolitan area (Kimberly, Pilbara, Midwest, Wheatbelt, Southwest and Goldfields).

Figure 4 indicates the original district boundaries, within the map of the state, that are relevant to this study. There were formerly fourteen education districts, of which seven districts include the employment of teachers in the Country Teaching Program and the Remote Teaching Service. Data in this paper are discussed in terms of these seven districts, rather than the current restructured regions.

Figure 4  Former DoE district boundaries (Department of Education, 2010).

Schools classified in the Country Teaching Program are located more than 35 kilometres outside the Perth metropolitan area, however many are in small, isolated and challenging communities. The Remote Teaching Service (RTS) schools are some of the most isolated schools in the world. Some may be in small towns whereas others are in community settings with predominantly Aboriginal populations.
Public school teachers employed within the DoE system are categorised as Graduate Teachers (first two years), Teacher (seven increments), Senior Teacher (application process) and Level 3 Classroom Teacher (application process). There is a promotional system in terms of school administration such as heads of learning areas, deputy principal or principal for which teachers have the opportunity to apply for.

It is important to provide a context of the positions available to teachers within this system as both the Senior Teacher and Level 3 Classroom Teacher are required to provide evidence of approved professional learning through either postgraduate study or the Professional Learning Institute (PLI) modules. This brings to the fore the importance of access to professional learning for teachers who are working outside of the metropolitan area.

**Aims and Objectives**

The primary aim of this research was to develop a conceptual framework that would facilitate improving the amount and variety of professional learning available to regional and remote teachers.

The following objectives assisted in achieving the research aim:

1. Examine the existing strategies in place to provide professional learning to regional and remote areas of Western Australia.
2. Investigate regional and remote teachers’ perceptions of their access to professional learning in Western Australia.
3. Describe current practice and technologies available to support a professional learning community over a geographically dispersed distance.
4. Devise a conceptual framework to facilitate a professional learning community through the application of synchronous and asynchronous technologies.

**Methodology and Research Design**

This study was conducted in phases, referred to as an explanatory mixed methods design. An extensive review of the literature was undertaken in order to position this study in the context of the previous research and identify the gaps in the literature.
Data were collected in two different stages. Quantitative data were collected to provide a general picture of the research problem, followed by the qualitative data to further refine the general picture (Fraenkel & Wallen, 2006). This closely fits with Creswell & Plano Clark’s (2007, p.71) purpose for using such an approach in that “qualitative data helps explain or build upon initial quantitative results.”

The survey was conducted during 2009. Approximately 720 surveys were sent to 50 schools within the Remote Teaching Service and Country Teaching Program of the Department of Education (WA). Of these, almost 15% (n=106) of teachers responded to the survey. After analysis of the returned surveys and the removal of two unanswered survey forms, the final number of respondents for the survey sample was 104. The survey instrument consisted of five categories which included forty two statements.

Qualitative data for the study were collected over a period of 14 months, from March 2009 through to May 2010. A total of ten teachers were willing to participate in interviews conducted by email, telephone and where possible, in person. Of these ten participants, four identified as classroom teachers and six were administrators in the role of principal or deputy principal within a school. Six participants were females and four were males. These teachers were employed in schools that ranged from employing a teaching staff of three to thirty staff. Experience working in a regional location ranged from four months to twenty years.

The final phase allowed the researcher to consider associations and relationships from the findings and formulate a conceptual framework to facilitate improving the amount and variety of professional learning available to regional and remote teachers by using synchronous and asynchronous technologies. The results of this mixed-method research have provided a better understanding of the research problem than either approach alone.

Findings

Eight key findings emerged from the research through the process of triangulation of the data collected within this study. These findings were then used to inform the conceptualisation of the Rethinking Connectedness Model. This section of the paper will report the eight findings.

Travel Time & Teachers’ Personal Time
The quantitative data from this study strongly indicated that both regional and remote teachers (84.5% of total population) perceive the time taken in travelling to access face to face professional development (PD) is significant. Further analysis of the data revealed that there was significance (p<0.05) between those teachers working in the CTP (regional) and the RTS (remote). It is pertinent to note that regional areas are generally less isolated and located physically closer to regional centres or the metropolitan area, whereas, remote locations are significantly isolated meaning travel time is far greater.

Qualitative responses within the interviews indicated that often the travelling time was greater than the time spent attending the actual PD. With teachers explaining that one to two days in a car to a major regional centre, in order to catch a flight to Perth often required them to be out of their school for up to week in order to attend a PD opportunity.

Whilst the focus on travel time within the Access to PD category was not surprising, the impact on a teachers’ personal time was considered to be of particular importance to the teachers in this study. The quantitative survey revealed a large number of the teachers in this study (93.3%) believed that personal time was impacted if they were to access face to face PD. This was further discussed in the qualitative interviews, where one teacher described travelling on a weekend to be able to attend PD that started on the Monday. Being away from her children on the weekend and needing to organise someone to care for them and transport them to their sporting events was of great significance to her personal life. This was supported by a graduate teacher who reported the need to travel 200km to a major regional centre from her remote community on a Friday after school in order to attend mandated graduate PD modules being offered on a weekend in order to not interrupt the school staffing. This, however, impacted on her personal time. A common theme was the impact of attending PD on fellow teaching staff as many teachers were often not replaced with a substitute teacher. The importance of substitute teachers is discussed under another finding further into this section. These data have suggested a need to explore ways of presenting professional learning opportunities that limit the necessity for travel.

**Limited Availability of Relief Teachers**

The survey item on access to relief teachers was not rated considerably highly by the total population of the study; however, qualitative data revealed this to be of great impact on teachers gaining leave of absence from their teaching in order to attend PD. Further, this question appeared to have more relevance to the remote teachers. This is supported by the quantitative
data where there was a statistically significant difference (p<0.05) reported between those teachers working in the CTP (regional) and the RTS (remote). This indicates that regional teachers have better access to relief teachers which might be explained by RTS schools generally being located in predominantly indigenous communities. From the qualitative data it was evident that teacher relief was considered to mean the employment of a casual staff member for the days they were away, but also considered to mean when fellow permanent staff members were covering their teaching role. In very small schools, where no teacher relief was available within the community, the absence of a teacher on PD meant they would need to reshuffle the students into other classes which then impacted on the student teacher ratios for that time. When school leaders left the school to access PD, this often meant DOTT relief was not available to the entire teaching staff as this was often covered by the school leaders. Therefore, the data indicated that teachers and school leaders considered the variable associated with PD attendance carefully prior to making the decision to attend.

Promotion and Teacher Registration

Apart from the benefits to teacher professionalism and student learning that PD offers, there is also an extrinsically motivating factor offered to teachers working in the Department of Education schools of this state. Teachers are required to provide evidence of approved professional learning in order to gain promotion and renew teacher registration. This brings to the fore the importance of access to professional learning for teachers who are working outside of the metropolitan area.

The impact of limited access to professional learning might explain the smallest group of respondents (n= 6, representing 5.8% of all respondents) were those who had successfully completed the Level 3 Classroom Teacher process. Further, within this study, no remote teachers identified as having Level 3 classification, all six were from the CTP cohort. This might indicate that teachers in regional and remote areas are disadvantaged in terms of promotion within the department due to their challenges associated with accessing professional learning.

Value of Professional Learning Communities

For many participants in this study, a professional learning community was underpinned by the notion of working in groups, supporting each other, sharing PD and learning together. The value of professional learning communities was demonstrated where 81.5% of teachers from the quantitative survey chose to be part of the professional learning community within their school. Similarly, learning with and from your work colleagues (including mentoring) and attending regional
workshops were the two highest valued approaches to PD by teachers across all seven districts. This result supports that teachers in this study believed a professional learning community is one of the most valuable forms of PD approaches available to them. In terms of teaching in a very small school with sometimes very inexperienced teachers, this could provide a number of limitations.

Two studies conducted by Leonard and Leonard (2001, 2003) into professional collaboration among teachers found logistical structure and size of the school was an integral reason as to why professional collaborations did not occur or were not sustained. The respondents from this study were employed within schools that ranged from a staff of two qualified teachers to 65 qualified teachers, showing a large variance in staff numbers which could possibly impact on the respondents’ view of learning communities, networking and collegiality. A large proportion (45.3%) of respondents reported being employed within a school that had less than ten teachers employed. This indicates the survey data is representative of teachers who work not only in geographical isolation but also with a limited number of colleagues. The need for teachers to collaborate with others outside of their schools was recognised by many participants with 100% strongly agreeing or agreeing that attending PD with teachers from other schools was highly valuable and 86.3% stating that this allowed them to engage in a more positive PD experience. From the qualitative data, the notion of school based PD and the questioning of the effectiveness and quality of such an approach was raised by one principal: “I think this is creating an inbred culture, as ideas and innovation are not being pollinated from outside (P1).” As the numbers of staff in schools are affected by student enrolment, in many regional and remote schools there will often be teachers facing limitations in the choice of face to face collaboration.

Professional Learning in the Local Context

Under the broader category of Value of PD Approach, teachers were asked to rate the value of regional workshops. Regional workshops were identified as those held within their school or local regional district and, therefore, are considered in the local context. Teachers (from 82.3% to 100%) reported regional workshops as very high and high in value across all teaching districts with exception of the Goldfields district where 60% of teachers reported very high or high value for regional workshops. Another item asked teachers to rate the value of learning with and from your colleagues, including mentoring. This item received very high and high value reported (from 82.4% to 100%) across all teaching districts with exception of the Goldfields district where 70% of teachers reported very high or high value. These two items were the only items that were explicitly linked to professional learning in the local context, and were also the two highest valued across all regions apart from the Goldfields district who reported university postgraduate courses as most
valued. From the qualitative data, the desire for PD to be delivered in the local context was raised voluntarily by two teachers who discussed schools collaborating in local areas to bring quality PD into the town or district.

**Professional Learning Established at Teacher and School Level**

The *PD Selection* category of the survey contained items that gathered perceptions on why and how teachers might choose to undertake professional learning. Two items within this category revealed that teachers strongly believed their professional learning must be linked to their own needs and the needs of their students. Very high levels of agreement were reported from all teaching regions across items Q39 and Q42 which stated that teachers should be free to select PD based on their perceived needs and that PD should help teachers build new skills and identify strategies to better meet the needs of their students. Similarly, the total population data indicated 99% of teachers believed PD should help teachers build new skills and identify strategies to better meet the needs of their students (Q42) and 93.3% of teachers believed they should be free to select PD based on their perceived needs (Q39). McWilliam (2002) and more recently, Parr (2004) posed the argument against a bureaucratic approach to professional development where policy makers convey single-solutions to skill development. These approaches are often not truly reflective of the needs of teachers at the coalface and research shows that on return to the classroom have not informed teaching practice or improved student learning (Anderson & Henderson, 2004; Trinidad, 2004). Professional learning needs to be driven from the teachers and school level and then facilitated and supported by those at the organisational level, not delivered from a top down approach.

It was found that teachers in this study could see value in school priorities and programs influencing their professional learning to some extent, however, at the system level where policies were made, were not included in this sentiment. From the total population data, the highest mean (2.14) indicated that teachers believed their PD should be connected to the school’s priorities and endorsed programs. There were no teachers who strongly disagreed with this statement. Further qualitative data revealed that both teachers and principals could see the necessity in this with one commenting that she enjoyed being involved in PD that was focussed on the priorities of the school because “these priorities are focussed around the betterment of student outcomes (T4)”.

**Teachers Confident in Accessing and Using Technology**
Over half of the teachers in this study (66%) reported having a sufficient number of computers in their schools and 63.1% reported having fast, reliable internet access at their schools. Similarly, when asked about their home environments, 93.1% of teachers had access to a computer at home and 61.7% reported fast, reliable internet access in their homes. In 2007, three-quarters of the schools in the Department of Education network had 10 megabytes per second (Mbps) broadband service. Others were between 1Mbps and 10Mbps, with 37 schools using satellite links (Cisco Systems, 2007). These schools using satellite connections would be in the remote communities, which might explain the statistics for the total population.

Within the Use of Technology category, high levels of confidence in using technology and accessing PD online (if required) were reported across six out of the seven teaching regions. Teachers in the Goldfields reported highest levels of confidence and Kimberley teachers reported lowest levels of confidence. This may be linked to the perceptions of support for ICT and technology, where Goldfields teachers reported the highest perceived support and Kimberley teachers reported the lowest perceived support.

Value of Social Cohesiveness

Many teachers moving to regional and remote areas find the feeling of isolation detrimental to their social networks they may have had prior to relocating. This can impact considerably on the retention of teachers in these communities. In her study of first-year rural teachers, Sharplin (2008) found that lack of contact with other teachers in their subject area was of major concern. At a more collegial level, it was found that many teachers suffered professional isolation as did other service professionals in regional areas and were “equally at risk of leaving their profession in those first critical years in country placements” (Herrington & Herrington, 2001, p. 1). The current study extended this research as the qualitative data collection provided evidence that teachers felt professional networking was often conducted during breaks in informal situations and this was highly valued within the teaching community. This notion of social cohesiveness, being an explicit issue for regional and remote teachers, links very clearly to the community cohesion model.

Model of Rethinking Connectedness

The model in Figure 5 provides a conceptual framework for facilitating teacher professional development through an online learning community to deliver just-in-time (JIT) and individualised support to teachers in their local context. The teacher is the key element at the core of the model and understanding their individual professional needs is essential. In line with the findings, the
second layer ensures the professional learning allows teachers to be situated in their local context; yet engage with other professionals within their schools, within their districts and across boundaries of districts. Ideally, a variety of learning opportunities would be made available that include just-in-time (JIT) support and meetings that are planned on a regular basis. For this to occur, the third layer of the model requires a vision from the principal at the school level to ensure the professional learning, although catering for teachers' professional needs, is ultimately linked to the school priorities and the student needs within the individual school. The fourth layer of the model provides the technology that is available to support such an initiative. The use of both asynchronous and synchronous technologies is necessary to cater for those who prefer to collaborate and learn within a real-time environment. Those who are unable to join at specified times in the synchronous environment would access asynchronous communication tools.

This model has implications for a range of stakeholders involved with professional learning for teachers in regional and remote areas. Those in educational governance, including, but not limited to the Department of Education in WA, may find this model beneficial to inform policy changes in professional learning at the system level. Providers of professional learning, including, but not limited to the PLI and a wide range of professional associations, will find implementing the model will ensure the needs of teachers in regional and remote areas are considered at the planning stage.
stages of professional learning scheduling. Principals and school leaders are encouraged to apply the model when planning school vision, school priorities and professional learning of all teaching staff, to ensure a more collegiate approach to professional learning has been applied. This will assist in the move toward a holistic approach to professional learning and one that moves away from one-off skill development.

Conclusions

The notion of professional development in education is grounded in a historical perspective that may provide a nuance of negativity for some experienced teachers. For many teachers, they may recall a day out of their school context where a knowledgeable other upskilled them with new ideas and practices. They returned to their classroom only to be too busy in their teaching role to implement these new skills learnt outside of the teaching context. Finally, there was not any follow up on the success of the implementation and as a result the PD may not have stood the test of transfer between learning place and workplace. In line with previous literature, the author proposes this model is antiquated and requires a major paradigm shift (Billett, 1998; Desimone, 2009; DuFour & Eaker, 2009; Sparks, 1994).

In line with the literature, the author proposes the concept of delivering PD and accessing PD from regional and remote areas be reconsidered. This research lies at the nexus of one key issue. Teachers as professionals must adopt a continuous cycle of improvement within their workplace and thus require a learning support network that underpins that cycle. In the case of regional and remote teachers, the only logistical possibility is to provide this through technology that offers synchronous and asynchronous communication.

For regional and remote teachers to gain access to such a rich sharing environment, technology offers the most convenient and affordable option to do so. The findings from this study have provided evidence that teachers find it difficult to leave their school to attend PD, they value the notion of collaboration and sharing in professional learning communities and although uncertain about online communities, many are confident with using technology. The culture of an online professional learning community is not simply a network of teachers who can communicate over distances. It needs to fundamentally provide a dialogue between professionals of curriculum, teaching, learning and assessment. However, as discussed in the findings, there also needs to be an element of social cohesion. Teachers value the informal networking opportunities that are presented in face to face PD and therefore would benefit from opportunities to develop those social connections in an online environment.
References


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