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Teachers' Perceptions of the Impact of Professional Development on Learning and Teaching in a Developing Nation

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Abstract: This research examined teachers' perceptions of the impact of Professional Development (PD) programmes on learning and teaching in two Fijian secondary schools. Through a qualitative research design, data were gathered using document analysis and semi-structured interviews with 30 teachers from the two case study schools. The major findings to emerge from teachers views were: 1) whether teachers are novice or experienced, PD is needed to sustain the changes made to their teaching practice; 2) the PD needs of rural and urban teachers are slightly different; and 3) the opportunity for teachers to collaborate to share ideas forms the foundation of PD. Overall, the teachers' perceptions had validated that teachers engaged in productive PD tend to work together with their colleagues to improve student learning. This study provides information on the PD needs of the teachers in Fiji, which could benefit developing nations and beyond.

Keywords: Professional Development (PD); Ministry of Education; learning and teaching; impact; perceptions; rural; urban; Fiji.

Introduction

Fiji is spread across 332 islands in the South Pacific Ocean and according to the 2007 census had a population of 837,271. Around half the population (412,425) are settled in rural areas (Fiji Bureau of Statistics, 2007).

Fiji's geographical structure, limited size and the dispersed nature of the population are the root problems of the provision of educational facilities and quality teachers (Lingam & Lingam, 2013). Due to the islandness and the remoteness, primary and secondary schools are disseminated all over Fiji. Approximately 80% of primary and 52% of secondary schools are classified as rural and remote schools (Ministry of Education, 2014a).

Fiji being a developing country faces challenges with educational resources. Lack of resources has a substantial impact on the quality of educational provision (Fiji Islands Education Commission, 2000; UNESCO, 2008). Fiji continues to pursue its dream to make Fiji a 'knowledge based society' (*People's Charter for Change, Peace and Progress*, 2008).

The UNESCO's *Dakar Framework for Action* (2000) adopted a world declaration on Education for All (EFA) which established the goal to provide every child with primary school education by 2015 (Ministry of Education, 2014b). Due to two political coups (in 2000 and 2006), even though there were some other recommendations and action plans (see below), this initiative is still being implemented. According to Bole (2014):

The Ministry of Education has begun taking steps to ensure that this commitment is realised in all schools. New initiatives have been pursued for implementation to ensure that education is made a priority for all Fijians. Though the goal is challenging, the Ministry of Education continues to pursue possibilities and alternatives that will permit all Fijians to be educated and improve their lives (cited in Ministry of Education, 2014b, p. 2).

Through the Fijian Government's *Strategic Development Plan* (Ministry of National Planning, 2009), the *People's Charter for Change, Peace and Progress* (Ministry of National Planning, 2008), the *Roadmap for Democracy and Socio-Economic Development* (Ministry of National Planning, 2009) and the recommendations of the Education Commission 2000 report (Fiji Islands Education Commission, 2000), the Ministry of Education adopted its vision in the new direction as "Quality Education for Change, Peace and Progress" (Ministry of Education, 2014a). The Ministry of Education has encouraged educational initiatives and reforms to build an enhanced educated Fiji. According to the Ministry of Education (2014a), some of the reforms include:

- Establishment of the Teachers Registration Board
 - Provision of the transport assistance
 - Provision of free text books and localising the context
 - Upgrading of primary schools to secondary schools in rural areas
 - Upgrading existing junior secondary schools into fully fledged secondary schools till Year 13
 - Reviewing the curriculum through the formulation of the Fiji National Curriculum Framework
 - Provision of incentives for rural teachers
 - Development of the new Fiji Education Management Information System (FEMIS)
 - Improvement of teacher quality through training incentives and capacity building
 - Tuition fee free grant for all Primary and Secondary school students
- (Ministry of Education, 2014a, p. 6-7)

Camburn and Han (2015) argued that practically every country in the world had carried out some form of curriculum reform over the preceding two decades, yet there is time, and again inadequate support provided for the teachers to modify and advance new approaches to their teaching. It is important for teachers to undergo relevant PD programmes to bring continuous development in their knowledge and skills.

In Fiji, teachers' PD exists in various forms with its primary function to improve staff skills and competencies in producing improved educational results for the students (Villegas-Reimers, 2003). Some common strategies to implement teacher PD are workshops, seminars, conferences, symposia, staff meeting/development, in-house training, work attachments and long-term in-service training. The ongoing training of teachers is an important aspect of professional development. PD is seen as the catalyst to modifying theory into best teaching practices (Kent, 2004).

Review of Related Literature

Definition of PD

According to Stout (1996), PD is a central tool for altering teacher behaviours. In the educational profession, educators have often interchanged the terms PD, professional learning, in-service training, and staff development. Jones and Lowe (1990) referred to PD as a continuing process that changes a teacher's practice. Teachers must look at ways to explore transferring research-based knowledge into classroom practices. PD should offer practices that provide new techniques, strategies, methods, and approaches with feedback in a non-threatening environment (Barnard, 2004). Thakral (2011) suggested that PD was a process in which learning opportunities were created for teachers, resulting in students receiving the benefits from the teachers' new knowledge.

Guskey (2000) described PD programmes as a way in which to alter the professional practices, beliefs, and understanding of school teachers toward an articulated end. He names the end as being student learning. Therefore, PD programmes should bring about change in a teacher's classroom practices and beliefs, thus resulting in added student learning. According to Uranga (1995), PD should be used to improve and refine teachers' knowledge and skills. PD should be an integral part of the school programme and not just a supplemental in-service (Uranga, 1995).

Barnard (2004) pointed out that all activities for PD must relate to a larger programme goal. Many teachers resent traditional PD Model, sitting through long days of in-service training and not receiving any educational benefits. Some value it but it is all too rarely implemented into their classrooms (Burke, 2000). Hence, Ministry of Education facilitators in Fiji often experience frustration when workshops and conferences fail to lead to significant change in practice when the teachers return to their classrooms. However, according to Sharma (2012) and Mohan (2016), Fiji was still engaged with the traditional PD model.

Traditional PD Model

Traditional models of teacher PD have been described as teacher-centred. Girvan, Conneely and Tangney (2016) have argued that traditional PD is the transformation of information by an expert which is supposed to be replicated to practice. They have further stipulated that the focus was on the transfer of information as an individual process to bring the immediate change in teachers' practice. But research has shown that it does not happen in reality (Bausmith & Barry, 2011; Guskey, 2002). Hence, it is regarded as ineffective practice.

Apple (2009) argued that top-down teacher PD in schools often aligns with hierarchical structures that de-skill teachers from their intellectual work by treating them as passive recipients of mandates. In addition, Kennedy (2016) argued that traditional PD initiatives rarely are designed based on how teachers learn but are instead built on the premise that highly effective teaching results from mastering a set of technical skills. Therefore, traditional efforts at PD have also failed to respect the agency and needs of classroom teachers (Trust, Krutka, & Carpenter, 2016). This was further affirmed by Darling-Hammond, Wei, Andree, Richardson and Orphanos (2009) who contended that many teachers believe that the PD available to them is not useful or does not meet their professional needs. Traditional PD has been characterised by narrow aims that are disconnected from broad, complex, and disparate needs of teachers (Opfer & Pedder, 2011). It often includes short workshops or seminars that feature outside experts and that occur

away from teachers' work station (Trust, Krutka, & Carpenter, 2016).

Although such PD can introduce teachers to essential knowledge and skills, it can also often lack depth and tends to focus mostly on content knowledge (Kennedy, 2016). In contrast quality PD experiences are believed by many scholars to be central to the improvement of teaching and student learning and which are long-term, ongoing, social, constructivist, and job-embedded (Desimone, 2009; Garet, Porter, Desimone, Birman, & Yoon, 2001; Timperly & Alton-Lee, 2008).

Job-Embedded PD

In job-embedded PD teachers' learning is grounded in their day-to-day teaching practice with the intent of improving student learning (Darling-Hammond & McLaughlin, 1995; Hirsh, 2009). Hunzicker (2010) argued that for relevant and authentic PD, it needs to be job-embedded. Teachers consider PD to be relevant when it is connected to the learning experience and their daily responsibilities (Flores, 2005; Tale, 2009). PD within the school promotes active learning and builds consistency more than traditional learning sites (Quick, Holtzman, & Chaney, 2009), hence regarded more effective.

Darling-Hammond et al. (2009) had identified twelve job-embedded formats: action research, examining student work, lesson study, assessment development teams, case discussions, study groups, critical friends' group, implementing individual learning plans, mentoring, portfolios, professional learning communities and coaching. The format of professional learning does not matter as long as it is grounded in theoretical knowledge which is relevant, self-directed and significant to the teacher (Croft, Coggshall, Dolan, Powers, & Killion, 2010).

Providing teachers with openings to participate in collaboration and reciprocal learning that is initiated from the ground up, as opposed to being instigated from the top down, encourages and enables teachers to embrace learning opportunities, engage with colleagues to share ideas, brain storm and collaboratively learn (Borko, 2004). Therefore, PD in schools needs to be highly embedded in work (Doornbos, Bolhuis, & Simons, 2004; Pyhalto, Pietarinen, & Soini, 2015), thus is continuous and connected. According to Mansvelder-Longayroux, Beijaard and Verloop (2007), in-service teachers most frequently learn from colleagues through experimenting with ideas and reflection.

The Impact of PD on Learning and Teaching

Based on their research of teachers' perceptions of the impact of continuous PD, Powell, Terrell, Furey and Scott-Evans (2003, as cited in Aminudin, 2012) defined the word impact, as changes in professional knowledge, practices and effective response as perceived by the individual practitioner. They argued that measuring impact did not necessarily have to rely solely on quantifiable data. Instead, they proposed that the impact of PD on teaching practice could also be assessed from the teachers' insight into and on reflection of what constituted significance and value about their personal, academic and professional needs and development. Teachers' PD is a process aimed primarily at promoting learning and development of teachers' professional knowledge, skills and attitudes (Dean, 1991; Guskey, 2000).

The conceptual framework (Figure 1) of PD involves four important stages. The first is

when teachers experience PD, which increases their knowledge and skills. The second stage is when teachers use their new knowledge and skills to improve learning and teaching. The third stage is when changes to professional practices such as in the area of learning and teaching increase students' learning. The final stage is where quality learning and teaching is achieved.

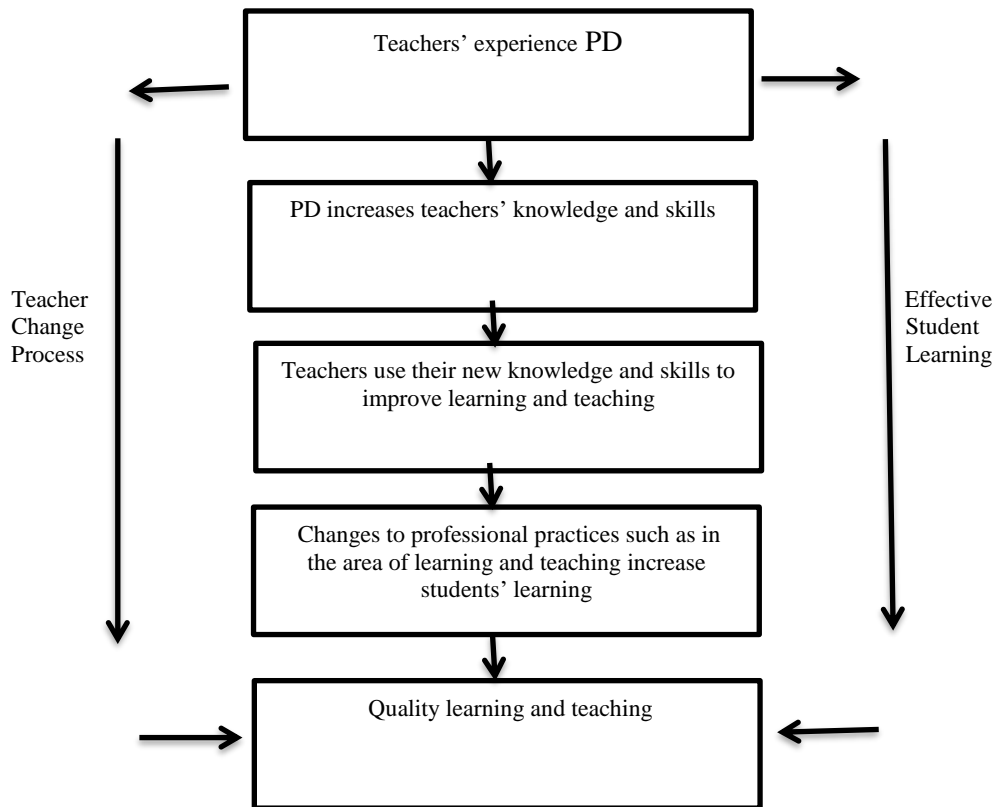


Figure 1: Conceptual framework

Statement of Need and Research Questions

Due to its islandness and scattered geographical structure, Fiji has its challenges in regards to teachers' PD activities. As stated by Tuimavana, (2010), for centralised PD programmes, the rural and remote teachers have to travel long distances. This is accentuated by some teachers having to spend almost a week waiting for return transport. Meanwhile, research has affirmed that traditionally organised professional learning programmes are not meeting teacher needs because of the top-down approach (Sharma, 2012) which is avowed by international literature.

Internationally, Archibald, Coggshall, Croft, and Goe (2011) argued that teachers' sense of being isolated when PD programmes are planned is the major barrier to teachers' professional growth. This is because the standard practice is that the PD is planned by Ministry of Education or school heads (Archibald et al., 2011). Therefore, Rivero (2006) affirmed that most PD initiatives 'one size fits all' approach which is traditionally short-term and unconnected.

Gates and Gates (2014), and Ravhuhali, Kutame and Mutshaeni (2015) indicated that much of the PD initiatives are not working to benefit teachers. Teachers often view such PD offerings as irrelevant, ineffective, and unconnected to their everyday work of helping students

learn (Ravhuhali et al., 2015). Similar sentiments were shared by Darling-Hammond, Wei, Andree, Richardson, and Orphanos (2009) that many teachers PD is not useful since it does not meet all of their professional needs. Reeves (2006) stated that another reason for teachers' hesitation is the poor history of PD. In addition, he asserted that teachers contemplate that they are being offered once-off PD and schools and the Ministry are failing to provide essential support to make educational change sustainable.

Research shows that PD involving colleagues exploring new ideas, linking previous knowledge with new understandings, reflecting on the classroom practices, and mutually sharing and discussing educational practice is the best model (DuFour, DuFour, Eaker, & Many, 2010; Mitchell & Sackney, 2000; Owen, 2014). This process is embedded in school work, where self-initiated teacher learning teams are evolving (Owen, 2005; Stoll, Bolam, McMahon, Wallace, & Thomas, 2006; Webster-Wright, 2009). This is argued by Darling-Hammond and McLaughlin, (1995) and Owen, (2005), who believed school to be the best place for teacher PD. As international studies in developed countries (US, UK, Australia) have advocated the benefits and the necessity of establishing collaborative approaches to supporting teachers' PD and to sustaining teachers' commitments (Borko, 2004; Makopoulou & Armour, 2014), this study intends to look at a developing country, like Fiji.

Fiji has made it mandatory for each teacher to undergo at least 20 hours of PD each year. To the author's knowledge, there is no prior research in a Fijian context that directly investigates teachers' perceptions of the impact of PD on learning and teaching. Fishman, Marx, Best and Tal (2003) claim that continuous research on PD will help to create an empirical knowledge base that links various forms of PD to effective teacher learning. However, having the knowledge of effective forms of teachers' PD alone is insufficient to ensure successful PD (Aminudin, 2012). Thus, this study was considered to be significant.

The study addresses a gap in research about teacher's perceptions regarding PD in secondary schools in Fiji. By investigating the current state of PD in the school and enquiring about teachers' perceptions on this, one can gain an understanding of the problems and recognise solutions to these problems. Thus, the purpose of the study was to investigate: 1) what impact PD has on learning and teaching? 2) what makes PD successful (or ineffective); and, 3) what are the challenges in regards to teachers' PD?

Research Methodology

This study was deliberately designed to collect qualitative data, for qualitative analysis. Focusing on the phenomenological aspect of qualitative research allowed the study to incorporate teachers' perceptions, both emotional and intellectual, about the impact of PD on learning and teaching. For the purpose of this study, open-ended semi-structured interviews and document analysis were considered appropriate.

The interviews were recorded on a digital recorder and later transcribed. The transcribed data were subjected to qualitative analysis through the process of coding, which allowed categories and themes to be derived from the actual data. According to McMillan (2004), triangulation is necessary in qualitative research as it enhances the credibility of the data. Thus as well as interviews, documents associated with school PD were also examined, which included consulting the Fiji Education Management Information System (FEMIS) and the Fiji Education Staffing Appointment (FESA) databases.

This study involved the population of teachers from two secondary schools employed in Fiji in 2014. Two schools were selected to provide data to the study, with variation in school population, demographics and funding. Teachers chosen for this study included male and female, experienced and novice teachers. The demographic information of the participants are summarised in Table 1.

Research participant number	Teacher code used for this research	Gender	Experience (Years)	Highest qualification
Urban Case Study School				
1.	T 1U	Female	10	Degree
2.	T 2U	Male	19	Degree
3.	T 3U	Female	6	Degree
4.	T 4U	Female	11	Diploma
5.	T 5U	Female	9	Degree
6.	T 6U	Female	17	Degree
7.	T 7U	Male	10	Degree
8.	T 8U	Female	3	Degree
9.	T 9U	Female	9	Degree
10.	T 10U	Male	16	Diploma
11.	T 11U	Female	7	Degree
12.	T 12U	Female	3	Diploma
13.	T 13U	Female	12	Degree
14.	T 14U	Male	1	Diploma
15.	T 15U	Male	9	Diploma
Rural Case Study School				
16.	T 1R	Female	2	Degree
17.	T 2R	Female	9	Diploma
18.	T 3R	Male	1	Diploma
19.	T 4R	Female	5	Postgraduate Certificate
20.	T 5R	Male	11	Diploma
21.	T 6R	Female	1	Degree
22.	T 7R	Male	9	Diploma
23.	T 8R	Male	3	Degree
24.	T 9R	Male	7	Degree
25.	T 10R	Female	4	Diploma
26.	T 11R	Female	15	Diploma
27.	T 12R	Female	3	Degree
28.	T 13R	Male	9	Degree
29.	T 14R	Male	3	Diploma
30.	T 15R	Male	12	Diploma

Table 1: Demographic information and code of the 30 participants

Findings

The primary data collection tool was the interview. Thirty teachers were interviewed from the two case study schools. The interviews have been analysed using the identified themes with relevant responses of the participants used to highlight the main findings.

Effective PD

When the participants were asked to share their views of effective PD, the majority (87%) had views similar to the ones below:

The group discussion, it made it easier for us to share ideas with each other and whatever we had discussed we tried to implement it in the teaching and learning in the classroom. In this way, we improved our teaching. (T3R)

Effective PDs are those which give me new knowledge. I learnt various strategies on how to deal with students from my colleagues. (T3U)

According to the participants, the factors for deciding whether the PD was effective or not was its contribution towards improving students' learning. When PD had a positive impact on student learning, participants felt it was effective.

Impact of PD on Student Learning

When the participants were asked how the knowledge and skills gained from the PD had impacted their students' learning, almost all (93%) of the participants' responses were similar to the ones exemplified below:

We have seen a vast improvement in students, especially when we group them, give them extra worksheets, addition tasks, and then taking up and marking, it is seen that their performance has improved. (T8R)

For me, professional development has given me professional guidance. It has provided a positive learning experience, and it has helped me learn to motivate the students positively. This keeps students motivated. Therefore, they learn better. (T13U)

According to the responses, PD sessions increase teachers' knowledge and skills which contribute towards better student learning.

Factors to Consider for a Successful PD Session

When the participants were asked what makes the PD sessions successful, almost all (93%) of the participants talked about factors similar to the ones demonstrated in the following responses:

The session on the preparation of exam papers, the best thing was that it was interactive. It also reminded us of what we had lost track of over time. It helped our students because sometimes we pick questions just from the external papers which use strong words and students are unable to understand. (T6R)

PD is successful when we are given a chance to discuss with colleagues and share ideas. As new teachers, we need collegial support. For me, I need PD on classroom management, effective teaching methods, and exam preparation to mention a few. Therefore, I want PD to be relevant to my interest. (T14U)

According to the participants, there are some important factors to consider for successful PD. They include its relevance to the context, the ability to improve student learning, it must be practical, give new knowledge, be needs-based and encourage participation through sharing ideas.

Factors that Affect the Effectiveness of PD

When the participants were asked what makes a PD session ineffective, it was found that most (87%) of the participants' responses were similar to the ones presented below:

If topics can be identified, so that appropriate PDs are undertaken. All schools should have a plan which should be prepared in consultation with the teachers. We should have our suggestions as to what PDs we require to upskill ourselves. (T14R)

First of all, we are taking PD in the morning sessions, during recess and in our staff briefing. One thing I must say, it is affecting our class time because sometimes we are late to go into the class. Other things which affect are the type of presentation, continues for long and too much talking only makes it boring. (T6U)

According to the responses, some of the factors that make PD sessions ineffective include content, timing and selection of PD and improper planning.

PD Needs

When the participants were asked about their PD needs, almost all (93%) of the participants' responses were similar to the ones exemplified below:

We need PD based on students' needs. Our students need extra support due to the background of students and lack of resources. I need PD on effective teaching strategies. I am informally learning from the experienced colleagues since there were no such PD sessions. (T1R)

I feel that we should have more PD on how to tackle in-discipline of students, use of technology in teaching, more of developing students' holistically. For me, I am an experienced teacher, but I feel I need PD on use of technology in teaching. So far there were no sessions on that, so I am learning from a fresh graduate who is very good at IT. (T2U)

According to the participants, there are some important factors to consider while planning PD's for schools. They include its relevance to teachers' needs and the context.

Challenges for PD Provision

When the participants were asked what challenges they face concerning PD, all (100%) of the participants' responses were similar to the ones demonstrated below:

I am told to do the PD, but we cannot do it properly because recess time is very short for PD and we don't have proper resources. Another problem is that we are unable to get experts to take PD because we are very far from them. (T13R)
Ministry doesn't allow PD during school hours so PD needs to be done after school hours and we all need to rush home because we have to travel far. Finding time for PD is the major challenge. (T13U)

According to the participants, the challenges faced by teachers in their school included lack of resources, shortage of time during school hours and the difficulty of bringing experts to the schools for PD sessions due to the distance that has to be travelled.

Discussion

The education system in the past focused on basic education, but the twenty-first-century system demands quality and holistic education; thus, quality teachers are needed (Fullan, 2007). Regardless of place and time, educational service delivery depends on the quality of teachers. As recognised by Smith and Gillespie (2007), the productivity of teachers comes from not only pre-service training but also continuous PD activities.

In regards to the first research question *what impact PD has on learning and teaching*, the analysis of the data illustrates that teachers PD made a significant difference to student learning. Teachers were emphatic that increasing knowledge and skills through sharing "success stories" with their colleagues and experimenting with the new practices themselves had enabled teachers to see changes in their students' learning. This is primarily grounded in the fundamental doctrines of social constructivist theory (Vygotsky, 1978). It was also revealed that whenever teachers believed that the new strategies learnt would enhance student learning, they incorporate them into their teaching. Similar sentiments were shared by Desimone (2009) who asserted that if teachers recognise the importance of the PD as it applied to the curriculum and their classrooms, they are much more likely to implement these new techniques.

In addition, the teachers interviewed in this study stated that PD has also indirectly impacted their students' learning. PDs have built confidence in their teaching and also helped in decision making in the classroom which is supported by Harris et al. (2011) who stated that as teachers develop better content knowledge through participation in PD programmes, they become more confident in their practice. The findings also supported Gabriel et al. (2011) who stated that teachers should have a variety of content knowledge that allows them to teach all students effectively. Teachers need to understand subject matter deeply so that they can help students create useful cognitive maps, relate ideas to one another, and address misconceptions. This understanding will help teachers to connect ideas across fields and to everyday life.

For the second research question, *what makes PD successful (or ineffective)*, the data analysis revealed that there were several factors to consider to make PD a success. These factors include time, content, context and active participation. The literature provides support for the importance of time (Guskey & Sparks 1996; Sharma, 2012) stating that lack of time allocation for the presentation of PD programmes made it useless and unworthy. The factors content and context agree with the assertion made by Guskey (2000) that one of the most significant factors that contribute to the effectiveness of any teacher's PD is the strong focus on student learning. These factors are also echoed by Fullan (2007) who asserted that if there is no evidence of teachers using what was learnt in the PD to link to their own work in the classroom context then it can only be termed ineffective.

The study found that rural teachers were more in need of PD relating to student learning and teaching, community partnership, school culture and how to manage with minimum teaching resources. In contrast, urban teachers needed PD on student behaviour management and extra-curricular activities for holistic development of students. The findings highlighted that the teachers perceived that PD based on students and school-specific needs, was more effective in changing teaching practice than standardised or pre-planned PD without consultation. These findings were consistent with Guskey (2002) who affirmed that PD should be based on meeting student needs. Also, teachers' needs are to be considered as the findings revealed that novice teachers had different PD priorities compared to the experienced teachers which supported the claim made by Mohan (2016).

For the fourth factor of active participation, the teachers' responses provided practical confirmation of the literature on sharing of "best practices". The literature has acknowledged that professional learning communities are an effective approach to enable teachers to engage in collaborative learning to improve practice in work (McLaughlan & Talbert, 2001; Lieberman & Mace, 2008). Professional learning communities allow for collaboration where teacher colleagues come together to actively learn and reflect on their practice (Mitchell & Sackney, 2009).

For the final research question, *what are the challenges in regards to teachers' PD*, the analysis of the data illustrates that the rural and urban teachers' PD needs are slightly different, therefore have different challenges. The major contributing factors to the difference are the school resources, and most importantly the student needs. In Fiji, due to the geographical locations of schools, rural schools are vulnerable to lack of resources. Availability of resources for learning and teaching is recognised as vital in providing more and better learning opportunities to children (Lingam & Lingam, 2013). Without suitable resources, it is difficult for teachers to implement the curriculum effectively to improve students' learning and teaching. On the other hand, the urban schools have mostly adequate resources for students' self-learning, extra tuition and access to the internet. Therefore students' needs are different. Urban students need extra-curricular activities to prepare them holistically for the future. Therefore appropriate PD is necessary to apprehend the challenge.

New practices can be reinforced through professional learning communities where the teachers could be encouraged to share their knowledge and experiences with each other and to support their professional learning experience which very much favours what teachers had perceived in this study (DuFour et al., 2010). This finding also concurs with the work of Desimone (2009) in which the participants in their research expressed the importance of participation by stating that collegial learning strategies give teachers more opportunities to participate in active learning, thus promoting lifelong learning. The findings imply that effective PD for teachers in Fiji will help to embrace the vision of the Ministry of Education, which is "Quality Education for Change, Peace and Progress." In general, teachers' PD is viewed as a platform for professional learning. These findings affirm that PD for teachers should address their specific needs so that the experience becomes more meaningful and not seen as a burden.

Conclusion

This study has established three major findings. Firstly, whether teachers are a novice or experienced, PD is needed to sustain the changes made to their teaching practice, though their needs may differ. Secondly, the PD needs of rural teachers are slightly different from urban teachers. The main contributing factors to the difference are the school resources, and most importantly the student needs. Thirdly, the opportunity for teachers to collaborate to share ideas forms the foundation of PD for teachers.

Overall, the teachers' perceptions had validated that teachers engaged in productive PD tend to work together with their colleagues to improve student learning which is a good sign for a developing nation like Fiji, even though a lot more needs to be done. There had been strong international calls for teachers to undertake collaborative professional learning where they need to take responsibility for their learning to contribute high-quality student learning through collegial collaboration (DuFour, 2004; McLaughlin & Talbert, 2007; Stoll et al., 2006). Finally,

teachers' PD experience allows them to keep up with the changes taking place in the education system and as a result ensures their teaching practice remains relevant to their students' needs (Aminudin, 2012).

In planning PD activities for teachers, things to consider could include, determining PD needs of novice, experienced, rural and urban teachers. In addition, collegial learning could be encouraged to sustain teachers' professional growth in developing nations and beyond. The study, though small in scale, has thrown up useful insights on some potentially relevant information about teachers' PD in a small island developing state in the Pacific. Since, this study just involved two single case study schools, more in-depth and large scale empirical inquiries are essential to generalise the findings. Undertaking such studies should help not only to generate useful information but also to provide deeper insights into teachers' PD. Such sound empirical evidence can then help influence policy and practice.

References

- Aminudin, N.A. (2012). *Teachers' perceptions of the impact of professional development on teaching practice: The case of one primary school*. MA thesis, Unitec Institute of Technology, Auckland.
- Apple, M. W. (2009). Controlling the work of teachers. *The Curriculum Studies Reader*, 3, 199-213.
- Archibald, S., Coggshall, J. G., Croft, A., & Goe, L. (2011). High-quality professional development for all teachers: Effectively allocating resources. Research & policy brief. *National Comprehensive Center for Teacher Quality*. Retrieved from <http://files.eric.ed.gov/fulltext/ED520732.pdf>
- Barnard, R. (2004). *A qualitative study of teachers' perceptions of staff development*. PhD thesis, East Tennessee State University, Johnson.
- Bausmith, J. M., & Barry, C. (2011). Revisiting professional learning communities to increase college readiness the importance of pedagogical content knowledge. *Educational Researcher*, 40(4), 175-178. <https://doi.org/10.3102/0013189X11409927>
- Borko, H. (2004). Professional development and teacher learning: Mapping the terrain. *Educational Researcher*, 33(8), 3-15. <https://doi.org/10.3102/0013189X033008003>
- Burke, K. (2000). Results-based professional development. *NASSP Bulletin*, 84, 29-37. <https://doi.org/10.1177/019263650008461805>
- Camburn, E. M., & Han, S. W. (2015). Infrastructure for teacher reflection and instructional change: An exploratory study. *Journal of Educational Change*, 16(4), 511-533. <https://doi.org/10.1007/s10833-015-9252-6>
- Croft, A., Coggshall, J. G., Dolan, M., & Powers, E. (2010). Job-embedded professional development: What it is, who is responsible, and how to get it done well. Issue brief. *National Comprehensive Center for Teacher Quality*. Retrieved from: <http://files.eric.ed.gov/fulltext/ED520830.pdf>
- Darling-Hammond, L., & McLaughlin, M. W. (1995). Policies that support professional development in an era of reform. *Phi Delta Kappan*, 76(8), 597.

- Darling-Hammond, L., Wei, R. C., Andree, A., Richardson, N., & Orphanos, S. (2009). *Professional learning in the learning profession: A status report on teacher development in the United States and abroad (Technical Report)*. Dallas, TX: Washington, DC: National Staff Development Council.
- Dean, J. (1991). *Professional development in school*. Buckingham, UK: Open University Press.
- Desimone, L. M. (2009). Improving impact studies of teachers' professional development: Towards better conceptualization and measures. *Educational Researcher*, 38(3), 181-199. <https://doi.org/10.3102/0013189X08331140>
- Doornbos, A. J., Bolhuis, S., & Simons, P. R. J. (2004). Modeling work-related learning on the basis of intentionality and developmental relatedness: A noneducational perspective. *Human Resource Development Review*, 3(3), 250-274. <https://doi.org/10.1177/1534484304268107>
- DuFour, R. (2004). Schools as Learning Communities Pages. *Educational Leadership*, 61(8), 6-11.
- DuFour, R., DuFour, R., Eaker, R., & Many, T. (2010). *Learning by doing: A handbook for professional communities at work*. Bloomington, IN: Solution Tree. *Education*, 124(3), 427.
- Fiji Bureau of Statistics. (2007). *Fiji census of population and housing: General tables*. Suva, Fiji: Bureau of Statistics.
- Fiji Islands Education Commission/Panel, & Fiji. Ministry of Education. (2000). *Learning together: Directions for education in the Fiji Islands*. Government of Fiji, Ministry of Education.
- Fishman, B. J., Marx, R.W., Best, S., & Tal, R. T. (2003). Linking teacher and student learning to improve professional development in systemic reform. *Teaching and Teacher Education*, 19(6), 643-658. [https://doi.org/10.1016/S0742-051X\(03\)00059-3](https://doi.org/10.1016/S0742-051X(03)00059-3)
- Flores, M. (2005). How do teachers learn in the workplace? Findings from an empirical study carried out in Portugal. *Journal of In-service Education*, 31(3), 485-508. <https://doi.org/10.1080/13674580500200491>
- Fullan, M. (2007). *The new meaning of educational change* (4th ed.). New York, NY: Teachers College, Columbia University.
- Gabriel, R., Day, J. P., & Allington, R. (2011). Exemplary teacher voices on their own development. *Phi Delta Kappan*, 92(8), 37-41. <https://doi.org/10.1177/003172171109200808>
- Garet, M. S., Porter, A. C., Desimone, L., Birman, B., & Yoon, K. S. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal*, 38, 915- 945. <https://doi.org/10.3102/00028312038004915>
- Gates, B., & Gates, M. (2014). *Teachers know best: Teachers' views on professional development*. Retrieved from: <https://s3.amazonaws.com/edtech-production/reports/Gates-PDMarketResearch-Dec5.pdf>
- Girvan, C., Conneely, C., & Tangney, B. (2016). Extending experiential learning in teacher professional development. *Teaching and Teacher Education*, 58, 129-139 <https://doi.org/10.1016/j.tate.2016.04.009>
- Guskey, T. R. (2002). Does it make a difference? *Educational Leadership*, 59(6), 45-51.
- Guskey, T. R., & Sparks, D. (1996). Exploring the relationship between staff development and improvements in student learning. *Journal of Staff Development*, 17(4), 34-38.

- Harris, J., Cale, L., & Musson, H. (2011). The effects of a professional development programme on primary school teachers' perceptions of physical education. *Professional Development in Education*, 37(2), 291-305. <https://doi.org/10.1080/19415257.2010.531973>
- Hirsh, S. (2009). A new definition. *Journal of Staff Development*, 30(4), 10-16. <http://www.ncbe.gwu.edu/miscpubs/jeilms/vol15/staffdeve.htm>.
- Hunzicker, J. (2010). *Characteristics of effective professional development*. Bradley University, Peoria Illinois.
- Jones, E., & Lowe, J. (1990). Changing teacher behavior: effective staff development. *Adult Learning*, 1, 7-10. <https://doi.org/10.1177/104515959000100705>
- Kennedy, M. M. (2016). How does professional development improve teaching? *Review of Educational Research*, 20(10), 1-36. <https://doi.org/10.3102/0034654315626800>
- Kent, A. M. (2004). Improving teacher quality through professional development.
- Lieberman, A., & Mace, D. H. P. (2008). Teacher learning: The key to educational reform. *Journal of Teacher Education*, 59(3), 226-234. <https://doi.org/10.1177/0022487108317020>
- Lingam, G. I., & Lingam, N. (2013). Making learning and teaching a richer experience: A challenge for rural Fijian primary schools. *Educational Research and Reviews*, 8(21), 2160.
- Makopoulou, K., & Armour, K. (2014). Possibilities and challenges in teachers' collegial learning. *Educational Review*, 66(1), 75-95. <https://doi.org/10.1080/00131911.2013.768955>
- Mansvelder-Longayroux, D. D., Beijaard, D., & Verloop, N. (2007). The portfolio as a tool for stimulating reflection by student teachers. *Teaching and Teacher Education*, 23(1), 47-62. <https://doi.org/10.1016/j.tate.2006.04.033>
- McLaughlin, M. W., & Talbert, J. E. (2001). *Professional communities and the work of high school teaching*. London: University of Chicago Press.
- McMillan, H. J. (2004). *Educational research: Fundamentals for the consumer*. Boston, MA: Pearson Education.
- Ministry of Education. (2014a). *Annual Report*. Suva: Government Printery.
- Ministry of Education. (2014b). *Fiji EFA progress report 2000-2015*. Suva, Fiji: Government Printery.
- Ministry of Education. (2014c). *Fiji schools' teachers' competency framework*. Suva, Fiji: Government Printery.
- Ministry of National Planning. (2008). *People's charter for change, peace and progress*. Suva, Fiji: Ministry of Planning.
- Ministry of National Planning. (2009). *Roadmap for democracy and social-economic development*. Suva, Fiji: Ministry of Planning.
- Ministry of National Planning. (2009). *Strategic development plan*. Suva, Fiji: Ministry of Planning.
- Mitchell, C., & Sackney, L. (2009). Sustainable improvement. *Building learning communities that endure*. Rotterdam/Taipei: Sense.
- Mitchell, C., & Sackney, L. (2009). Sustainable improvement. *Building learning communities that endure*. Rotterdam/Taipei: Sense.
- Mohan, P. P. (2016). A study on novice and experienced teacher perceptions of professional development in Fiji. *Waikato Journal of Education*, 21(1), 167-174. <https://doi.org/10.15663/wje.v21i1.265>

- Opfer, V. D., & Pedder, D. (2011). Conceptualizing teacher professional learning. *Review of Educational Research*, 81(3), 376-407. <https://doi.org/10.3102/0034654311413609>
- Owen, S. (2005). The power of collegiality in school-based professional development. *Australian Journal of Teacher Education*, 30(1), 1. <https://doi.org/10.14221/ajte.2005v30n1.1>
- Pyhältö, K., Pietarinen, J., & Soini, T. (2015). Teachers' professional agency and learning—from adaption to active modification in the teacher community. *Teachers and Teaching*, 21(7), 811-830. <https://doi.org/10.1080/13540602.2014.995483>
- Quick, H., Holtzman, D. & Chaney, K. (2009). Professional development and instructional practice: Conceptions and evidence of effectiveness. *Journal of Education of Students Placed at Risk (JESPAR)*, 14(1), 45-71.
- Ravhuhali, F., Kutame, A. P., & Mutshaeni, H. N. (2015). Teachers' perceptions of the impact of continuing professional development on promoting quality teaching and learning. *International Journal of Education Sciences*, 10(1), 1-7.
- Reeves, J. R. (2006). Secondary teacher attitudes toward including English-language learners in mainstream classrooms. *The Journal of Educational Research*, 99(3), 131-143. <https://doi.org/10.3200/JOER.99.3.131-143>
- Rivero, V. (2006). Teaching your staff. *American School Board Journal*, 193(9), 54-55.
- Sharma, L. R. (2012). *Effectiveness of school teaching professional development programmes*. (Master's thesis). University of the South Pacific, Suva Fiji. Retrieved from <http://digilib.library.usp.ac.fj/gsd/collect/usplib1/index/assoc/HASH01b3.dir/doc.pdf>
- Smith, C., & Gillespie, M. (2007). *Research on professional development and teacher change: Implications for adult basic education*. Retrieved from <http://www.ed.gov/teachers/how/tools/initiative/factsheet.pdf>
- Stoll, L., Bolam, R., McMahon, A., Wallace, M., & Thomas, S. (2006). Professional learning communities: A review of the literature. *Journal of Educational Change*, 7(4), 221-258. <https://doi.org/10.1007/s10833-006-0001-8>
- Stout, R.T. (1996). Reform in teacher education: Fuzzy choices in an imperfect market. *Education Policy Analysis*, 4 (2), 317-322 Retrieved September 17, 2013, from <http://epaa.asu.edu/epaa/y4n2.html>.
- Tate, M.L. (2009). Workshops: Extend learning beyond your presentation with these brain-friendly strategies. *Journal of Staff Development*, 30(1), 44-46.
- Thakral, V. (2011). *Effectiveness of professional development at a primary school in Hong-Kong*. MA thesis, University of Hong-Kong, Hong-Kong.
- Timperley, H., & Alton-Lee, A. (2008). Reframing teacher professional learning: An alternative policy approach to strengthening valued outcomes for diverse learners. *Review of Research in Education*, 32(1), 328-369. <https://doi.org/10.3102/0091732X07308968>
- Trust, T., Krutka, D. G., & Carpenter, J. P. (2016). "Together we are better": Professional learning networks for teachers. *Computers and Education*, 102, 15-34. <https://doi.org/10.1016/j.compedu.2016.06.007>
- Tuimavana, R. W. R. (2010). *Developing and retaining quality teachers in rural Fiji primary schools*. (Unpublished Masters Dissertation). University of the South Pacific, Suva Fiji.
- UNESCO (2000). *The Dakar framework for action. The World Declaration on Education*. Paris, France: UNESCO
- UNESCO (2008). *Overcoming inequality: Why governance matters*. Education for All Global Monitoring Report 2008. Oxford, UK: UNESCO/Oxford University Press.

- Uranga, N. (1995). A staff development model for multicultural society. *The Journal of Educational Issue of Language Minority Students*, Retrieved March 18, 2013,
- Villegas- Remers, E. (2003). *Teacher professional development: An international review of literature*. UNESCO: International Institute for Educational Planning. (pp 1-176). Retrieved August 12, 2013 from www.cndwebzine.hcp.ma/cnd_sii/IMG/pdf/HTTP_~4.PDF.
- Vygotsky, L.S. (1978). *Mind in society. The development of higher psychological process*, Cambridge, MA: Harvard University Press.
- Webster-Wright, A. (2009). Reframing professional development through understanding authentic professional learning. *Review of Educational Research*, 79(2), 702-739. <https://doi.org/10.3102/0034654308330970>