
Title	Empowerment through distributed leadership in reconciling tensions and dilemmas in teacher professional development
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Abstract

Continuous professional development is necessary for teachers to stay current with teaching and learning. However, teachers face tensions when they engage in such activities. From the sociocultural and distributed leadership perspectives, this case study investigates how a school, recognised for its excellence in staff well-being and development, reconcile such tensions. The systematic and efficient school administration and distributed leadership empower teachers to plan and chart their own professional development activities. It is evident that teachers from the school are empowered via open communication with their respective teacher coordinators to plan and chart their professional development. Relevance and practical use of content of professional development are most important to teachers. More time and resources have been devoted for better quality training for teachers. There is also a shift towards network learning communities where teachers learn from one another within the school and across schools, although teachers still attend courses.

Keywords: professional development, tensions, distributed leadership

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Conflict of interest

The authors declare that we have no conflict of interest.

Ethical Approval

All procedures performed in this study involving human participants were in accordance with the ethical standards of the institutional research committee. Nanyang Technological University, Institutional Review Board – IRB-2018-10-023.

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Abstract

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Keywords: professional development, tensions, distributed leadership

Introduction

Teachers are pivotal in the actualisation of educational changes and innovations (Borko 2004). Keeping up to date with theories and practices for any profession is an important endeavour and it is no different for teachers who are at the frontline of instruction in classrooms in teaching and educating our future generations. However, an important and influential study conducted by OECD (2009) on teachers reported issues and barriers in their attempts to engage in their professional development and learning. These included – conflicts with work schedules, no suitable professional development, family responsibilities, high cost, lack of employer or school support, and teachers not meeting the prerequisite.

The scheduling of the professional development programs is an important factor when teachers make their professional development choices. Teachers find it difficult to engage in professional development during school hours as it affects teaching time (Mohan, Lingam, and Chand 2017). The primary role of a teacher is to be with his or her pupils in the classroom for their learning and thus, leaving the classroom, even if it means to become a better teacher, is viewed as deleterious to both the education of the pupils in the classroom and the smooth operation of the school (Kelly and Williamson 2002). Structural obstacles preventing collaboration and large-scale hierarchical mandates are the most salient factors deterring professional development (Sprott 2019). This suggests that teachers need support and guidance, especially from the school, to be able to engage in professional development.

For teachers to effectively engage in professional development, appraisal and individual development planning must be encouraged rather than restricted. Teachers must be empowered to retain a high degree of control over the direction of their work and the confidentiality surrounding their contributions, whilst at the same time providing access to appropriate critical support (Day 1999). Furthermore, professional development would be more palatable to teachers when they are empowered with the authority to make their own

professional development choices (Kelly and Williamson 2002). When given the freedom to make choices about their own professional development, teachers construct programs which do indeed lead to changes in their thinking about teaching and learning (Bainer and Wright 1998). Principals need to recognise that the feelings and perceptions of teachers in their schools, and their desire to attain opportunities for professional growth, are beneficial to the organisation itself (Bogler and Somech 2004). To improve the quality and effectiveness of teacher professional development activities, educators and the policy community must undertake a focused effort to redefine professional development as integral to teacher quality and thus student achievement. Furthermore, it must be integrated into both the formal organisation of the school day and calendar, as well as integrated into the culture of schools as a critically important, on-going function of the faculty (Kelly and Williamson 2002).

Day (1999) emphasises a *learner-focused* perspective is much more important than a *training-focused* perspective in the successful planning and management of continuing professional development of teachers. A learner-focused perspective has to recognise the characteristics and roles of the individual learner, organisational culture and leadership as factors that contribute to the quality of professional learning and development.

Current approaches in teacher professional development

There has been a shift in the approach towards teaching and learning from *behavioural* to *cognitive* to *situative* and *constructivist*, with theories in teacher learning and professional development following in tandem. The more traditional instructivist orientations have been replaced by ideologies that are more associated with that of constructivist and situative theories and efforts (e.g., teacher professional development initiatives that are grounded in classroom practice and involved in the formation of professional learning communities) (Borko, Jacobs, and Koellner 2010).

In line with the constructivist paradigm, one of the key shifts is one of agency – from programs that aim to change teachers and their practices to one that encourage teachers to be active learners taking control of their own professional growth through reflective participation in professional development activities rather than being passive participants (Clarke and Hollingsworth 2002). From the situative perspective – lending thoughts and ideas from sociocultural and Vygotskian theories – teachers’ learning is viewed as contextual and this implies that learning actually takes place in the schools where teachers are working in (Warford 2011, Postholm 2012). Theories in situated learning also stress the importance of active participation in the learning processes (Shepel 1995), as well as being reflective and metacognitive (Postholm 2008). The learners’ thoughts, emotions and actions are closely linked to the context in which the learning takes place. In congruence with the constructivist paradigm, teacher co-operations and a positive atmosphere (i.e., the surroundings) are very important elements in the teachers’ learning and development (Prawat 1996). Likewise, the sociocultural perspective highlights and illuminates the reasons for teacher professional development efforts to be based on social interactions and the importance of support systems to sustain the effectiveness of teacher learning. Understanding teacher professional development within a sound theoretical framework with empirical research findings will result in better teacher professional development programs and effort (Eun 2008). Hence, allowing a better understanding of practice through theory and vice versa.

Eun (2008) proposed that effective teacher professional development should accurately assess the needs and goals of the teachers. Social interaction is a necessary element to bridge the gap between the current needs and future goals. Involvement of teachers in the planning stage of the professional development is a good way to be more assured of better outcomes, as teachers’ needs, and goals are considered and reflected in the activities and components of the program. Teachers would prefer to plan their own

professional development and are likely to choose topics and subjects that they could directly apply in their own classrooms and work areas (Trotter 2006). In addition, change in the school context would be necessary so that the environment could be made more compatible to support teachers in implementing what they have learned. A long-term professional development mindset would also be necessary as there will be times of progression and possible regression as well.

These current approaches in teacher professional development also suggest a shift or better balance between the two discourses of teacher professionalism – occupational and organisational.

The two discourses of teacher professionalism

There are two discourses of teacher professionalism – occupational and organisational (Evetts 2009, 2011). Occupational professionalism serves the interests of the teaching profession while the latter is from a top-down perspective. Occupational professionalism involves trust from both the organisation or authorities (i.e., government, ministry, and school organisation) and also its clients (e.g., students and parents) and is based on autonomy of teachers in how professional knowledge and judgement are enacted. In contrast, organisational professionalism is a discourse that incorporates rational legal forms of authority and hierarchical structures in decision making. This form of professionalism is associated with standardisation, work procedures, managerial controls, externalised regulation, accountability, target setting and performance review.

Occupational professionalism aligns with what Sachs (2003) describes as democratic professionalism focusing on collegial relations and collaborative work practices, while organisational professionalism mirrors managerial professionalism focusing on performance and accountability. These types of professionalism could be on both ends of the continuum

and in practice, it may not be as clear-cut as suggested. However, there is a gap between what is desired and expected of teachers and governments. Governments are for organisational or managerial professionalism and teachers are more likely to favour occupational or democratic professionalism. “In the current environment, the development of teacher standards, which are characterised by increased surveillance and measurement of teacher performance, reinforces the development of performance cultures. In these cultures, reporting of student outcomes represents the intention and requirement of government to achieve demonstrated improvement and accountability. This, in turn, impacts on the autonomy of teachers, in particular, how they enact their professional knowledge and judgement” (Sachs 2016, 418). “In the current external environment where accountability and transparency stand at the core political discourse and practice – it would be foolhardy to speak against regulatory standards” (p. 422). Hence, Sachs (2016) calls for a ‘mature profession’, which takes a transformative view of teacher professionalism that seeks to develop teachers to be consumers and producers of research, and also creative designers of curriculum. In addition, there is also a need for teachers to establish and gain trust among its various stakeholders and constituencies.

The paradox of teacher autonomy

Despite the many documented advantages of teacher-directed professional development, there are a small number of literatures that discuss why teachers may not participate in such form of learning activities. Time, motivation, school factors, and a lack of awareness were cited reasons (Artman, Danner, and Crow 2020).

It is often argued that self-directed professional development would provide participants with opportunities to engage in specific learning in areas of interest, at their own pace and convenience. However, this flexible and accessible form of professional

development might not reap its full potential impact due to lack of ongoing support and limited knowledge and information (Fraser-Seeto, Howard, and Woodcock 2015). Hence, it is probably clear that by merely shifting the power structure of change may not guarantee success, and that an appropriate environment need to be established so that the individual teacher could be empowered to determine the goals and processes of change (Ellefson 1994); we cannot assume such a transition to happen organically. At times, the school administration who is supportive of authentic professional development might send unintentional messages against change and experimentation and could result in contradictory responsibility of requesting teachers to be innovative while still having to satisfy the conservative expectations of some stakeholders in the system. Following this line of argument, it points to the importance of the school administration or in most cases, the school leadership or the principal to facilitate this shift of power and enable more teacher autonomy.

Importance of school leadership

The above discussion on the shift from organisational to occupational professionalism and giving teachers the autonomy requires rules and customs surrounding professional development to be changed. However, it is also clear that higher level actors (e.g., the school principals) in the hierarchy of the system have control over such teacher activities. Principals and school leadership not only act as important brokers between higher administrative levels and the teachers, they also could modify and possibly change existing rules or norms to effect any changes in the school system and teacher activity (Rose 2020). In other words, the leadership of the school plays an important role in effecting changes and in this case, teacher professional development.

Teacher professional development in Singapore

Generally, teachers find professional development important. In the study conducted by Tan, Chang, and Teng (2015a) on Singapore teachers, the authors cited the following reasons for teachers to engage in their professional development – (1) keeping their discipline knowledge current, (2) staying abreast of the latest changes in educational landscape through networking, (3) role modelling life-long learning, (4) motivating themselves to stay passionate in teaching and (5) fulfilling their responsibility of being professional. However, “teacher professional development is a complex process, which requires cognitive and emotional involvement of teachers individually and collectively, the capacity and willingness to examine where each one stands in terms of convictions and beliefs and the perusal and enactment of appropriate alternatives for improvement or change” (Avalos 2011, 10).

Although it is widely known that Singapore teachers are all entitled to 100 hours of professional learning, teachers face other tensions and dilemmas in making decisions on their professional development. In a local study conducted about two decades ago on teacher professional development, Yip (1998) reported that there was a lack of a systematic identification process of the professional development needs of teachers and a lack of guidance for teachers’ self-assessment. Teachers felt that there was inadequate teacher participation in the planning for professional development and that the priority of programs in their schools’ professional development plans was not clearly communicated to them. Generally, teachers perceived that resources in terms of time, manpower (i.e., relief/substitute teachers) and funding to support professional development were inadequate. A lack of time, poor timing and insufficient relevant professional development programs were reported to be the crucial obstacles to their professional development. Similar findings were also reported by (Foo 1999) and he suggested that teachers’ needs should be analysed regularly within the

department and that teachers should be given more scope to make their professional development choices.

In another more recent research study conducted in Singapore, Tan, Chang, and Teng (2015a, 2015b) reported that teachers still face certain issues with their professional development endeavours, namely: (1) balancing between individual versus organisational needs, (2) juggling the responsibility to stay current versus being there for students' learning and (3) choosing between compulsory professional development versus voluntary as-needed basis. Thus, it appears that teachers face issues that inhibits their engagement in professional development activities.

Purpose

This study was prompted by the teacher professional development issues as mentioned by Yip (1998), Foo (1999) and especially the most recent Tan, Chang, and Teng (2015a, 2015b) study. The main purpose of this case study is to identify, describe and analyse the manner and extent to which the above-mentioned issues are manifested and possibly dealt with within a Singapore government school. More specifically, this case study looks into how the above-mentioned issues and barriers are reconciled among the stakeholders (i.e., the Principal, teacher coordinators and teachers) within the school community (*see* Table 1) from a sociocultural and distributed leadership perspective.

<Insert Table 1>

Conceptual framework

A sociocultural perspective (Engeström 1999a, 2000) is adopted to examine how school teachers make decisions with regard to their professional development choices. Engeström (2001) stresses the importance of explicit identification of the contradictions (i.e., the tensions and dilemmas) in the activity system. This helps practitioners to focus their

efforts on the root causes of the problems, the multi-voicedness of activity systems, historicity and the possibility of expansive transformations in an activity system.

Contradictions are perceived as sources of changes and development. The teachers' decisions are likely to be influenced by other stakeholders within the school community (*see* Table 1 in above subsection), especially the school administration that is made up of the principal, vice-principals and teacher coordinators. That being the case, the third generation of Activity Theory as proposed by Engeström is adopted as the conceptual framework for this study.

“The third generation of Activity Theory as proposed by Engeström intends to develop conceptual tools to understand dialogues, multiple perspectives, and networks of interacting activity systems” (Daniels 2001, 91). Daniels (2001) pointed out that Engeström argued that the subject in a collective activity may not be the same person. He elaborated that typically an individual would occupy the subject person in any given action but in the next actions, it may be a different individual member who would be the subject.

Goals are associated with actions and thus with individuals and they are not attached to the activity as a whole. According to Engeström (1999b), activity is achieved through constant negotiation, orchestration and struggle between different goals and perspectives of its participants and in this case, between the teachers and the school administrators (e.g., school principal). The object and motive of a collective activity are like a constantly evolving pattern that is never fully completed. The idea of networks of activity within which contradictions and struggles take place in the definition of the motives and object of the activity calls for an analysis of power and control with developing activity systems as shown in Figure 1 depicting two interacting activity systems as a minimal model for third generation Activity Theory by Engeström (2001).

Distributed leadership from the sociocultural perspective

The responsibility of leadership functions can be distributed in various ways and studies have revealed that this responsibility can be undertaken by multiple leaders or players within the activity system – not just principal or the vice-principals – who work in a collaborative fashion at times and in parallel at others (Heller and Firestone 1995).

The most noticeable feature of distributed leadership is that leadership practice is viewed as the product of the interactions of the school administration, the teaching staff and the situation (Spillane 2005). Spillane (2005) and Halverson, Diamond, and Spillane (2004), building on Activity Theory and distributed cognition theories, proposed that leadership practice is constituted in the interaction of school leaders, followers and the situation. In essence, leadership practice should not be seen as residing with just one individual, based on his or her ability, skill, charisma, and/or cognition. Rather, they argued that it can be best understood as a practice distributed over leaders, followers and their situation. As such, a situation is more than just a backdrop. Halverson, Diamond, and Spillane (2004) consider the sociocultural context as an element of leadership practice and an integral part of that activity. The consideration of tools, rules and the community within the Activity Theory system enables a better appreciation of the situation and sociocultural context. Ho, Victor Chen, and Ng (2016) also used Activity Theory as an interpretive lens to examine distributed leadership in a Singapore school. Activity Theory embraces the concept of division of labour which is aligned to the concept of distributed leadership with individuals or groups with different roles and motives.

Distributed leadership from a sociocultural perspective is adopted in the analysis of the activity systems of the two main groups of players, the school administrators and teaching staff, with the aim of better reconciliation of the tensions and dilemmas faced by teachers when they engage in their continuous professional development. The actions and the voices

of these two groups are described in detail for a more in-depth understanding of the tasks carried out by them. This is depicted in Figure 1, showing the interacting activity systems as described by the third generation of Activity Theory.

Figure 1 illustrates the interacting activity system (Engeström 2001) of the teachers as well as the school administrators. The object moves from an initial state of object 1 to a collectively more meaningful object constructed by the activity system (i.e., object 2) and to a potentially shared or jointly constructed object (i.e., object 3). The two parties started off with relatively different objects but with the mediation by the social mediators, object 3 could be forged.

Research design and methodology

A case study approach (Stake 1995) is used to examine how the stakeholders (*see* Table 1 in above subsection) of a local primary school reconcile the above-mentioned tensions faced due to their engagement in teacher professional development throughout the course of their work. This study also looks into understanding the contextual structures and leverages that facilitate the teachers' professional development, hence, the incorporation of the sociocultural perspective in the case study approach.

A case study approach of teacher professional development enactment is appropriate because we attempt to identify a case (i.e., a school) in facilitating teacher professional development. The interest is on the commonalities, uniqueness and richness of this case. Most importantly, it is on what we can learn from and share about this case. The cases of interest in education are people and programs. Each one is similar and yet unique to the other in many ways (Stake 1995). The most important objective of a case study as a research method is to maximise what we can learn. Certainly, this instance of how the stakeholders within a school community facilitate teachers' engagement in professional development

could be used to inform educational practitioners about future teacher professional development efforts and initiatives, while considering the contexts and boundaries.

Interview and focus group discussion (FGD) questions for the various participants were generated according to the research questions, *How do teachers make decisions about their professional development choices, what factors determine and influence teachers' professional development choices in a particular school context, and how is it facilitated by the various stakeholders in a school community*”, and also adapted from the study by (Chang et al. 2014). The stakeholders (i.e., principal, vice-principal, teacher coordinators, lead/senior teachers and teachers) within a school community were interviewed. The interview sessions involved a semi-structured interview on their practices, views and observations with regards to the research questions. All the interviews and FGDs were digitally recorded and transcribed.

The transcripts were first analysed and coded by identifying concepts or key ideas within the data which were potentially related to the purpose and interest of the study, that is, the research questions. Four broad themes: (1) management of tension or dilemma, (2) factors that determine and influence teachers' professional development choices, (3) changes in professional development over the years, and (4) facilitation of professional development at the school level were identified from this initial analysis of the data.

These themes were derived grounds up with the research questions in mind. The transcripts were coded, and the codes were classified into initial sub-themes and themes, and subsequently the four themes were derived. Upon further analysis, the data for each of these themes was then further categorised into sub themes using the NVIVO based on similarities among the lines of thoughts mentioned. The number of mentions of each sub theme in the data is as shown in Appendix 1.

Triangulation

A constant theme that appears in the literature of case study research is triangulation, the use of multiple sources of evidence in data collection (Stake 1995; Merriam 1998). The most important advantage presented by using multiple sources of evidence is the development of converging lines of inquiry. In this case study, triangulation addresses the problems of validity and reliability. Triangulation was done among the 15 interviews and 3 FGDs; it was also done among the teachers, lead/senior teachers, teacher coordinators and the school administrators (i.e., principal and vice-principal). With multiple perspectives from the above-mentioned stakeholders or members of the school community, it is likely to illuminate or nullify some extraneous influences. Excerpts that show triangulation of voices from interviews and focus group discussions are presented in Appendix 1.

Triangulation was used to show the convergence and complementarity of the findings from the various interviews and FGDs. Findings were triangulated to synthesise the analysis of the discourse of the stakeholders (i.e., principal, vice principal, teacher coordinators, lead/senior teachers, and teachers) within the school community. This in-depth analysis of the discourse of the stakeholders illuminated the less visible but very important social mediators; the relations between the subjects (i.e., school administrator and teachers) and object are mediated by these social mediators (i.e., rules, community and division of labour). Metaphorically speaking, these factors are like a web on the wind – highly structured but difficult to detect unless one looks carefully (Nardi and Engeström 1999).

Participants

This case study research is situated in a primary school, for students aged 7 years to 12 years old, in the western part of Singapore. The school has more than 80 years of history and has also been recognised by the Ministry of Education, Singapore in 2014 for *its*

excellence in teaching and learning, student all-round development and staff well-being and development.

The participants of this case study are the school administrators (i.e., principal and vice-principal), teacher coordinators (i.e., school staff developer for teacher professional development and heads of departments), lead teacher, senior teacher, experienced and beginning teachers. A brief description of their roles can be found in Table 1 in the above subsection.

There was a total of 15 interviews and 3 FGDs. The details of the interviews are given in Table 2 below. The first 10 interviewees were selected based on their appointments and roles. The remaining 5 interviewees were selected based on their years of experience and also the number of years working in the school. The details of the focus group discussions are given in Table 3. A good spread of teachers from lower and upper primary with both experienced and beginning teachers participated in the focus group discussions for the different groups. For both interviews and FGDs, they were all one-off.

<Insert Table 2>

<Insert Table 3>

Findings

The findings are presented according to the research questions (with themes and sub-themes) and also from the perspectives and voices of the school administrators and teaching staff according to the third generation Activity Theory as mentioned above (see Figure 1). Research questions one and two capture the perspectives and voices of the teaching staff (i.e., the teachers) and research question three presents the perspectives and voices of the school administrators and teacher coordinators. The summary of the findings is listed in Table 4.

<Insert Table 4>

Teachers' perspectives and voices

Teachers' decisions about their professional development choices

The first research question looks into how teachers make decisions about their professional development choices, considering their other duties and responsibilities in the school, other than teaching their students and also as an individual person. *Theme 1 (i.e., management of tensions and dilemmas)*, emerging from the findings, illuminate how teachers navigate decision-making. Teachers manage their tensions and dilemmas by prioritising and rationalising their training needs and by having open communication with their teacher coordinator (or reporting officer).

One very important person whom teachers refer to when making decisions about their professional development choices is their immediate reporting teacher coordinator (i.e., in most cases, they are the heads of departments of the school and also one of the members in the community as shown in Figure 2). Teachers openly share the obstacles, dilemmas and tensions they face when making decisions to engage in professional development with their teacher coordinators and seek their views and advice. This helps them to make better decisions about their professional development choices.

The teachers also consider and indicate the areas in which they want to build up knowledge by setting their targets and strategies and then discuss them with their respective teacher coordinator. The advice and suggestions given by the teacher coordinator who also takes the school's needs into consideration helps the teacher to engage in the most appropriate professional development. These dialogues between the teachers and their teacher coordinators provide opportunities for both players or parties in the community to negotiate for better understanding and forge for consensus.

Teachers also feel empowered when making decisions about their professional development choice as they can choose to go for the courses they want to attend and also

decline courses that they are nominated to attend as long as they have a valid reason. A teacher can also justify with good reasons to his or her corresponding teacher coordinator for not attending a course.

Teachers often have to prioritise and rationalise among the many professional development demands and opportunities. Most teachers give priority to national needs first, followed by school needs and then individual needs. When making decisions about their professional development choices, teachers also try to minimise class disruptions, so they usually choose courses that are after lessons in the afternoons or during the holidays, and some only go for the most important sessions of the course and not be present for the whole course. Although it takes away the contact time with their students, teachers rationalise that their students will eventually benefit when they apply the learning in their classroom practice. Teachers also trust that the school has a reason for nominating them for compulsory courses and teachers also believe that there will be some form of learning in all courses and professional learning activities.

Factors that determine and influence teachers' professional development choices

The second research question looks at the factors that determine and influence teachers' professional development choices in a school context. Theme 2 (i.e., Factors that determine and influence teachers' professional development choices) highlights the following factors: (1) gain and share knowledge; (2) content of the professional development; (3) attitude and mindset of teachers; (4) timing, duration and distance; (5) time-related issues with non-teaching school duties and personal commitments; and (6) organiser of the professional development.

Gain and share knowledge. Teachers choose to engage in professional development activities that help them close teaching gaps due to changes in the ministry's policies, local

and global trends and changes in portfolio (e.g., a teacher who has just assumed a leadership position, music or physical education teachers who do not have prior training in the specialised areas). The above-mentioned reasons for teachers' engagement in their professional development activities are often influenced by the larger global, local and school contexts and developments.

It also helps them to keep up to date with current trends and engage in lifelong learning. Where possible, teachers also value opportunities for more collaborative type of learning where they can learn from each other to address certain similar issues they face in their teaching practices (i.e., to share with and learn from others). Teachers also pursue higher education (e.g., degree or master) to upgrade themselves especially for teachers who do not hold a bachelor's degree.

Content of professional development. Needless to say, teachers are highly motivated to attend courses with content related to their own interests. Teachers also look out for the relevance and learning that can be applied or translated into their classroom practices. Teachers do not see the value of professional development with content that is too theoretical or not practical in producing effective outcomes in their classroom practices.

Attitude and mindset of teachers. The attitude and mindset of the teachers is another important factor. The intrinsic motivation of some teachers enables them to engage in self-directed learning and adopt the lifelong learning approach towards their professional development. Teachers usually adopt an open mindset especially when they are nominated for courses that they may not be interested in attending; they try to make the best out of it as there are often useful tips and strategies that they can learn from such instances.

Timing, duration and distance. As for the timing regarding professional development, different teachers have different preferences. Some prefer to have professional development during curriculum hours so that they can effectively learn as they feel tired in the afternoon

and thus it would not be an optimum timing to learn effectively. Whereas some do prefer to have theirs in the afternoon to minimise disruptions to class lessons. Some prefer to have their professional development during the school holidays as they might be also involved in other school activities like supplementary classes in the afternoon. Most teachers prefer to have short, one-off, and concise sessions for professional development courses to minimise class disruptions rather than recurring sessions, spreading over a number of days. Although teachers prefer the venues to be nearer to their school to cut down on travelling time and fatigue, distance has never seemed to stop them from going for the necessary, relevant and own interest related courses.

Non-teaching school duties and personal commitment. The lack of time due to other non-teaching duties (e.g., co-curricular activities and organisation of school events) and personal commitments are common reasons cited by teachers for their reluctance to engage in professional development related activities. For instance, personal commitments such as having a child and taking care of their own young children constrain their pursuit in professional development, especially those with a longer duration.

Organiser of the professional development. Generally, teachers are not too concerned over the organiser of their professional development courses as it might also not be transparent to them, but they are more concerned with whether the instructor of the course has the practical hands-on knowledge. This could be the reason they favour courses conducted by the Academy of Singapore Teachers (AST), an in-service training institution, since one factor that influences their decision is the practicality of the content of the course to their teaching practices. Generally, teachers find courses from the AST very practical, useful and applicable to their work. Comparatively, they find that courses offered by the National Institute of Education (NIE), Singapore, the pre-service and in-service educational institution, are rigorous and theoretical but lacking in practical knowledge. Teachers also tend to relate to

and gravitate towards the courses organised by the relevant associations or organisations for the subject they teach, such as Physical Education and Sports Teacher Academy (PESTA) for Physical Education teachers, Singapore Teachers Academy for the Arts (STAR) for Music and Art teachers, Singapore Centre for Chinese Language (SCCL) for Chinese Language teachers and English Language Institute of Singapore (ELIS) for English teachers.

Perspectives and voices of the school administrators and teacher coordinators

Facilitation of teacher professional development by stakeholders (e.g., school administration and administrators) in the school

The third and last research question looks at how stakeholders within the school community facilitate teacher professional development efforts. Themes 3 and 4 (i.e., changes in professional development over the years and the facilitation of professional development at the school level) are the themes that surfaced to answer this research question. The facilitation of professional development efforts by stakeholders within the school community provides teachers with the support and guidance for them to make prudent decisions about their professional development choices.

Changes in professional development over the years. There have been changes in professional development over the years. At the national level, there is no longer a requirement for teachers to fulfil the 100 hours of professional development per year. This requirement has already achieved its intended objective of getting teachers to engage in professional development. Currently, teachers choose their professional development that are relevant and useful for themselves rather than for the sake of accumulating the hours required. More time and importance are dedicated and there is also more encouragement by school administrators and teacher coordinators for teachers to engage in professional learning according to their specific needs. With these changes, teachers find it easier to sign up for

courses that are during curriculum hours as there will be relief support provided by the school. The nature and structure of the types of professional development activities have also changed over time. There are more collaborative and on-the-job types of training with teachers engaging in professional learning communities within and beyond the school. This has provided informal professional development opportunities for teachers through which they share and learn from each other and manage similar difficulties faced. The emotions of the teachers are also taken care of as they feel more empowered to decide for themselves on the professional development they wish to or not to engage in with reasonable justifications.

Facilitation of professional development at the school level. The school administrators believe strongly in the need for teachers to engage in professional development for continuous learning and to impact their students positively. The school administrator, (i.e., school principal), believes in giving teachers opportunities to explore beyond boundaries and gain learning from the environment, culture and teaching practices in overseas schools, so, two to three teachers are sent every year to Association for Supervision and Curriculum Development (ASCD) with no impositions on the teachers that they must bring back some learning to share. The school administrator (i.e., school principal) believes the whole school approach need not be such that all teachers engage in the same type of professional development and changed the rules to allow for empowerment of teachers in their professional development choices and cater professional development to the individual needs of the teacher. The empowerment enables teachers to truly value their professional development and help in their professional development choices. The school administrators and teacher coordinators do not always put the school needs first but also look into the teachers' needs and see how they can also be fulfilled. Ample opportunities both in and outside school are provided for the teachers. There is also a structured system to separate time for administrative and teaching and learning matters. Thus, they have two 1-hour dedicated

time slots, one for administrative matters and the other for teaching and learning matters within the curriculum hours. The school also engages two to three ‘permanent’ relief teachers to take over classes when teachers are absent from school for professional development related or personal matters. The school also has a system of going through with the relief teachers on the systematic way of doing things and taking care of the class before they are given their assignments. The teachers in the same department, if available, help to take over their colleagues’ classes while they are away. The teacher coordinator for professional development not only recommends and tracks the training of the teachers through their respective teacher coordinators, he also looks into boosting the morale of the teachers.

Discussion

Contradictions and tensions may be inevitable in many human activities and endeavours, including that of professional development for teachers and other professions as well. Opportunity cost seems to be an inherent ‘trade-off’ with any course of action that is chosen. For instance, any time taken for the teacher to be away from the class, school or work for professional development activities would mean that the teacher would be absent from his or her job (or time with students). Even if teachers choose to engage in such activities after school hours, this would mean lesser leisure time or time with their families. However, the importance of professional development is necessary and also crucial for practitioners to be up to date with the skills and knowledge.

Figure 2 shows the elements of the teacher professional development activity system. These elements are made up of the tools, subjects, object, outcome, rules, community and division of labour. In this instance, the *tools* refer to the various teacher professional opportunities and activities available (e.g., courses, symposiums, conferences and within or beyond school sharing sessions); the *subjects* refer to the teachers of the school; the *object*

refers to the more effective teachers; the *outcome* refers to the students' learning; the *rules* refer to the protocols such as the compulsion for all teachers from the school to attend the same course and the need to be present in class to teach students in school during curriculum hours (see Figure 2 for more rules); the *community* is made up of the principals, teachers, parents and students; and as for the *division of labour*, it refers to how the facilitation of professional development is being distributed among members of this activity system.

<Insert Figure 2>

The main contradiction or tension is between the object and the rules as observed (or set up and formulated) by the community. Rules such as all teachers from the school to attend the same course stipulated by the school administrators, not to engage in professional development activities during curriculum hours so as not to forego teaching students and to attend courses nominated by the school are protocols that have been quite well accepted as it was 'how things have been operating' all this while. This contradiction or tension is depicted with the help of a two-headed lightning -shape arrow as shown in Figure 2. In this instance, the rules in the activity system are adjusted and changed through the division of labour with the principal setting the directions for professional development, working and authorising teachers in middle management levels (i.e., teacher coordinators) to work out professional development choices with teachers, having a teacher coordinator to look into teacher training matters, engaging 'permanent' relief teachers to help in manpower shortage when teachers are absent from school due to professional development commitments and encouraging more senior teachers to facilitate learning committees and groups among teachers to discuss teaching and learning issues. The changes are illustrated in Figure 3 with the changes highlighted in italics and two-headed arrows showing changes made to the rules and division of labour by the school administrators (i.e., principal and vice-principal).

<Insert Figure 3>

Through the findings in this case study, the actions taken by the school administrator (i.e., school principal), especially the empowering of teachers which allows them to have a greater say in their choices of professional development is most salient. Teachers are encouraged and empowered to be in control and be the agent to decide what is necessary for themselves, that is, beyond being passive participants to active learners who take control of their own professional growth (Clarke and Hollingsworth 2002). Leadership is distributed and responsibilities are divided (as in division of labour) throughout the professional development activity system. In more simplistic words, the principal of the school ‘divides’ and ‘redistributes’ the responsibility of the teachers’ professional development to all who are involved – the principal provides resources as support and involves the teachers by allowing them to make their own informed decisions. The teachers do not just have a voice, responsibilities and decision making are also distributed and divided to the different stakeholders within the school system. The distribution of leadership to teacher coordinators to discuss, negotiate and help teachers make informed choices regarding their professional development plans have greatly empowered both the supervisors (i.e., the teacher coordinators) and supervisees (i.e., the teachers). For instance, the school also makes provision in terms of manpower resources by engaging ‘permanent’ relief teachers to alleviate teacher shortage when they are absent from school for professional development related matters. The school is also doing away with the ‘one-size-fits-all’ approach to teacher professional development activities where all teachers from the school have to attend similar professional development. Teachers are also given the autonomy not to attend nominated courses and engage in courses of their choice with justified reasons. The school administrators manage to foster a supportive and conducive environment for teachers to engage in professional development by adopting a more distributed style of leadership, where the middle level management (e.g., teacher coordinators) and teachers are given the

responsibility and liberty to manage and resolve professional development issues at their level.

This case study illuminated findings that are congruent with the earlier mentioned theory and approach in the field – that is, the shift in teacher agency and a situative and constructivist nature for more effective teacher professional development efforts. This is done and made possible through the redistribution of responsibilities, with teachers in the school having the autonomy to have a say in the professional development activities they engage in. Voices of the teachers indicated that they welcome this shift. In addition, apart from the conventional courses where teachers are passive participants, teachers also reflected the usefulness of discussions and reflective talks among themselves (both within the school and beyond the school with other schools). It reflects that teachers prefer practical tips and skills that would work well in their classrooms and this is made possible through the sharing by practitioners (e.g., experienced teachers within and beyond their school) who work in similar contextual settings. In addition to the above, the school administrators or leadership also act as brokers (Rose 2020) to balance the expectations and demands from both occupational (or democratic) and organisational professionalism (Sachs 2003, 2016).

In essence, the contradictions and tensions experienced by teachers with their professional learning is better managed and reconciled through a distributed leadership approach adopted and a constructivist and situative learning environment enabled for the teachers that allows for greater teacher agency and subsequently results in greater teacher participation in teacher professional development activities.

Conclusion

This case study shows and acknowledges the presence of tensions and dilemmas faced by teachers in the school in their professional development pursuits. It may be inevitable that

teachers face such tensions and dilemmas as there will be some opportunity cost in the form of a loss of classroom contact time with their students or time for the marking of students' homework and assignments taken away. However, the supportive and encouraging school administrators have created structures and processes to facilitate teachers' engagement in their professional development. Teachers need to be treated like professionals, feel like professionals, and have the tools or means to succeed; when teachers feel in control of their professional lives and encourage others to be successful, they are exercising some forms of informal leadership (Dail, Goodsite, and Sanders 2018).

From the sociocultural perspective, the school community (as led by the school management – principal, vice-principal, teacher coordinators or heads of departments) has made changes to the rules and division of labour to facilitate teachers' engagement in their professional development activities. Changes in the rules in the form of empowerment of teachers to have a greater say in their training needs through open communication with their respective teacher coordinators helps in balancing the needs of the school as well as the teachers. This helps teachers to identify, plan and chart training needs and their career aspirations. In terms of division of labour, the school also engages relief teachers to take over classes of teachers who need to be absent from school. In addition, the teacher coordinator for professional development does not only look into the teachers' training needs but also their morale and welfare. In essence, the supportive culture, system, and administration of the school (i.e., the sociocultural context) play an important part in helping the teachers to manage their tensions and dilemmas. In addition, the distributed leadership that allows teachers' voices to be recognised facilitated the reconciliation of the tensions and dilemmas. Teachers' voices need to be heard, they need to have a say and also need to be actively involved in their professional development pursuits. This would make the process a rewarding and meaningful one.

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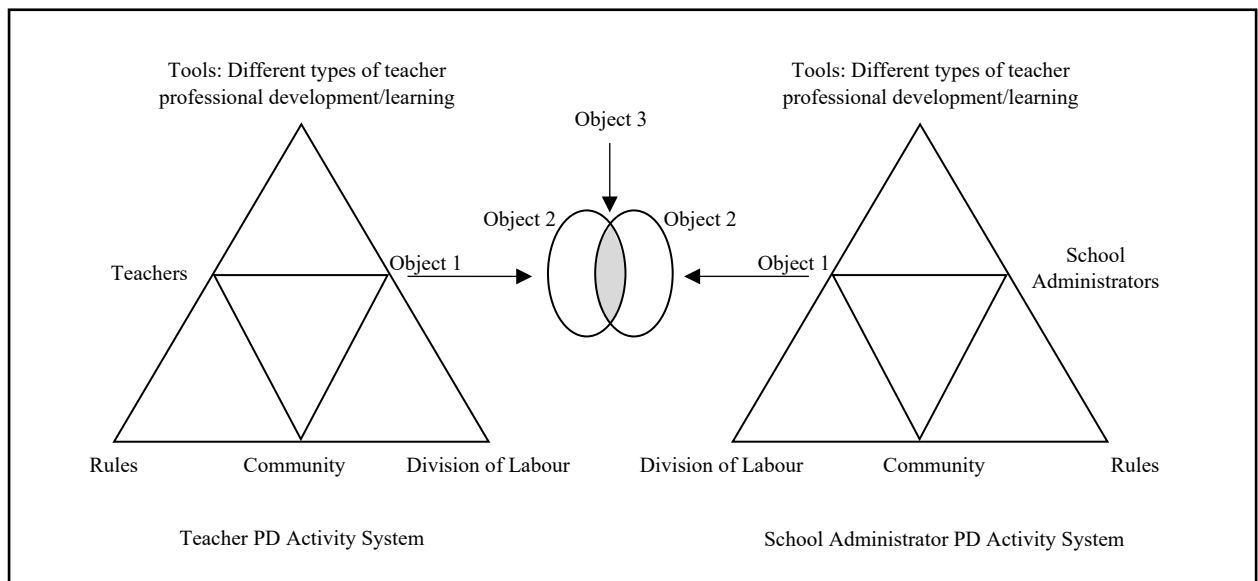


Figure 1. Two interacting activity systems for teachers and school administrators

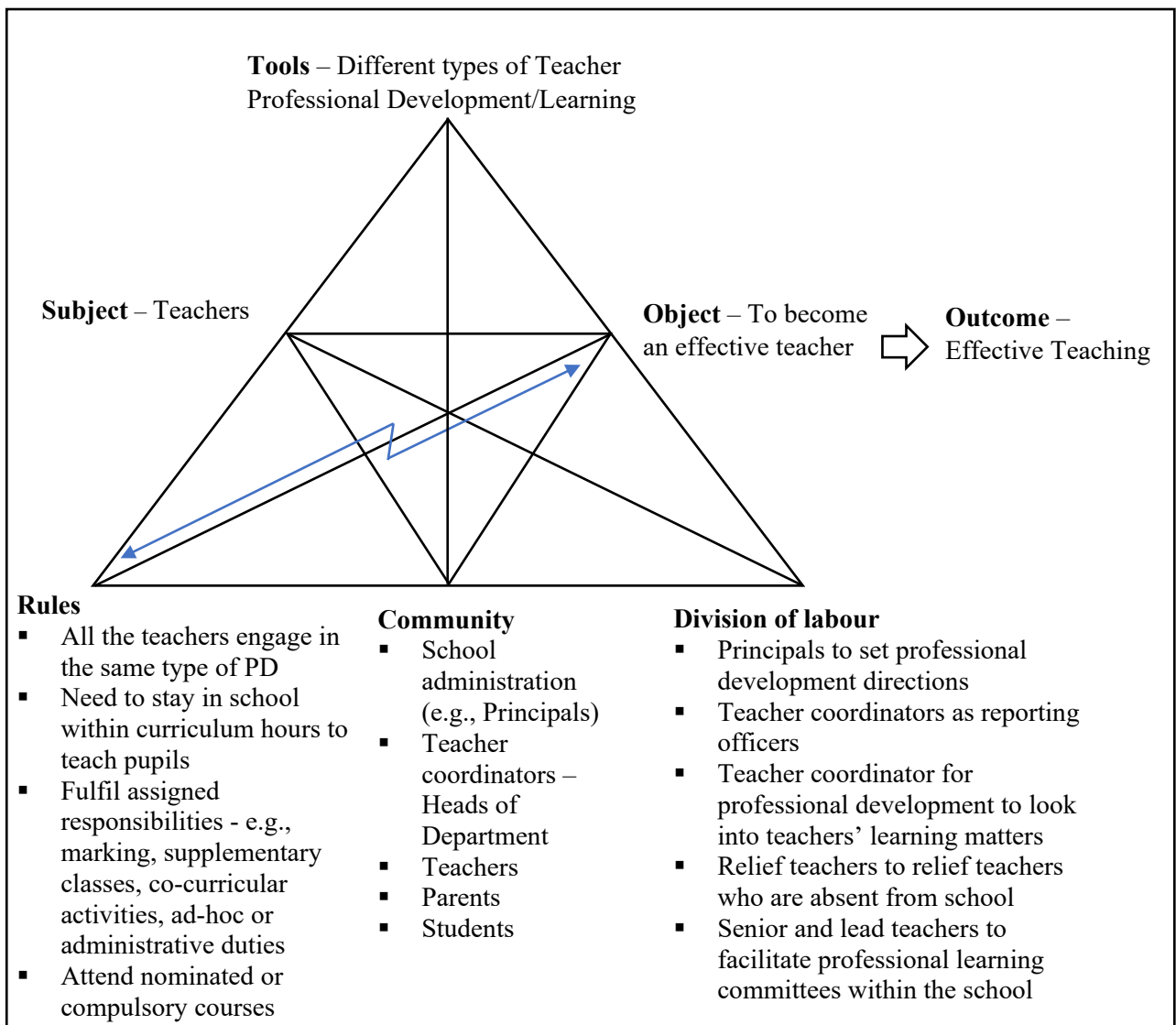


Figure 2. Teacher professional development activity system

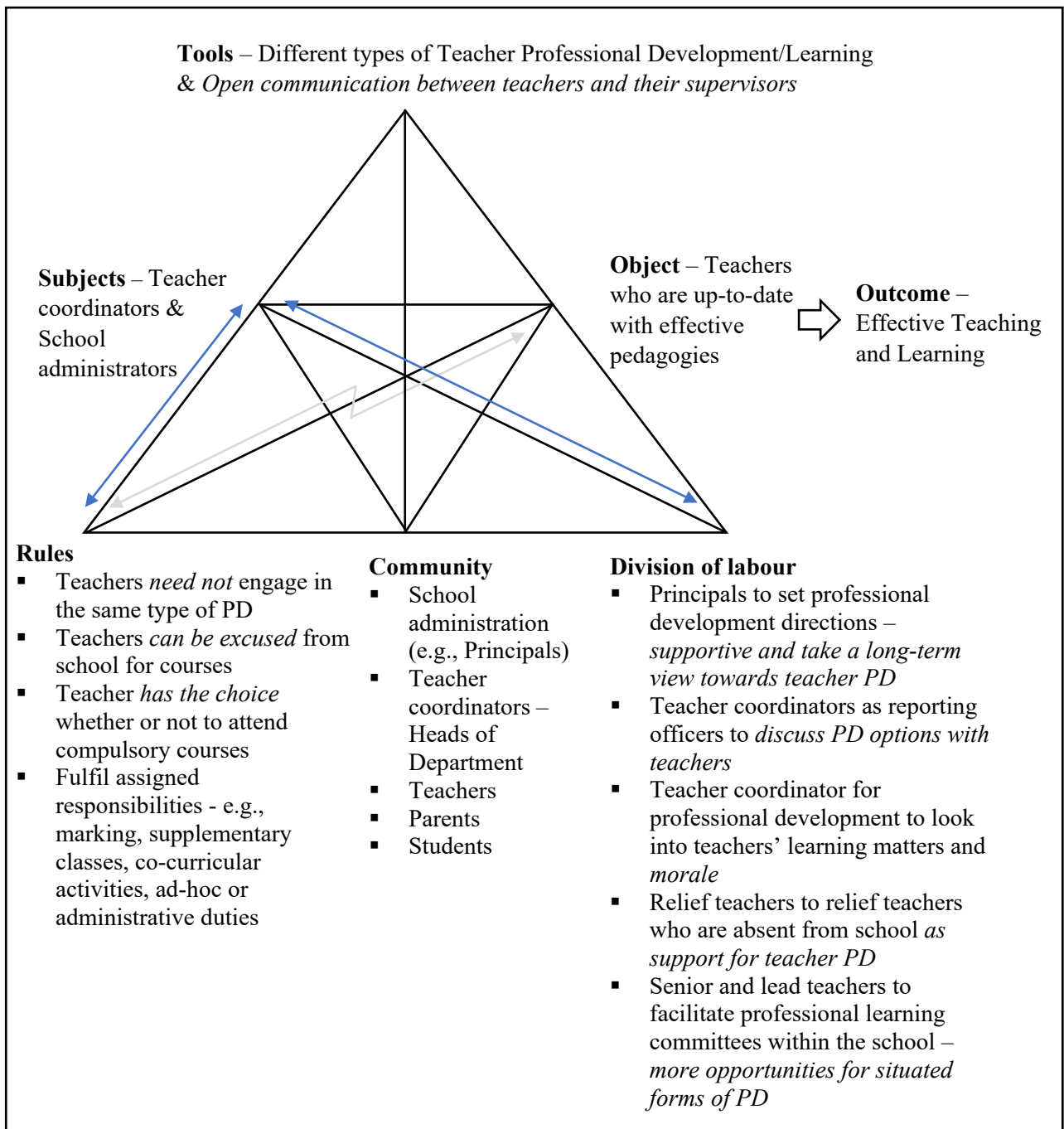


Figure 3. Teacher professional development activity system with a change in the rules and division of labour by the school administrators (i.e., principal and vice-principal)

Table 1. Descriptions of stakeholders within the school community

No	Stakeholder	Role
1	Principal	School administrator
2	Vice-Principal	School administrator
3	School Staff Developer – Professional Development <i>(has a supervisory role in the professional development of teachers, in addition to teaching)</i>	Teacher coordinator, Teacher
4	Head of Department <i>(has a supervisory role, in addition to teaching)</i>	Teacher coordinator, Teacher
5	Lead Teacher <i>(support a culture of teaching excellence and collaborative professionalism through their rich subject knowledge and pedagogical skills)</i>	Teacher
6	Senior Teacher <i>(serve as role models to raise the professional excellence and expertise within schools)</i>	Teacher
7	Experienced Teacher <i>(has many years of experience as a teacher)</i>	Teacher
8	Beginning Teacher <i>(recently started their career as a teacher)</i>	Teacher

Table 2. Details of interviewees with years of teaching experience and subjects they are teaching

No	Interviewee(s)	Years in teaching	Subjects teaching
1	Principal	-	-
2	Vice-Principal	-	-
3	Teacher Coordinator – Professional Development	35	Art
4	Teacher Coordinator – Physical Ed., Art & Music	15	Music
5	Teacher Coordinator – Science	8	English, Math, Science
6	Teacher Coordinator – Information Technology	6	Chinese
7	Teacher Coordinator – English	5	English, Science
8	Teacher Coordinator – Mathematics	5	Math, Physical Ed.
9	Senior Teacher	20	English, Science
10	Lead Teacher	11	Chinese
11	Experienced Teacher	14	English, Math
12	Experienced Teacher	12	English, Math, SS [^]
13	Experienced Teacher	11	Chinese
14	Beginning Teacher	3	Tamil
15	Beginning Teacher	1	Music

[^]SS – Social Studies

Teacher coordinators are teachers who are in-charge of the specific areas – they are known as heads of departments

Table 3. Focus group discussions and number of teachers involved

No	Department	Number of teachers
1	English	3
2	Mathematics and Science	5
3	Physical Ed., Art & Music	3

Table 4. Research questions (RQ), themes and sub-themes

RQ1:	How teachers make decisions about their professional development choices?
Theme 1:	<p>Management of tensions and dilemmas</p> <ul style="list-style-type: none"> a) Discussing and having open communication with the teacher coordinator <i>Open discussions with teacher coordinator to prioritise, plan and chart professional development needs of teacher</i> b) Prioritising and rationalising <i>Teachers give priority to national, followed by school and personal professional development needs; even for nominated or compulsory courses, teachers feel that there is always something that they could learn from such courses</i>
RQ2:	What factors determine and influence teachers' professional development choices?
Theme 2:	<p>Factors that determine and influence teachers' professional development choices</p> <ul style="list-style-type: none"> a) Gain and/or share knowledge <i>Keeping up-to-date; learning from and sharing similar issues and challenges faced with colleagues in the teaching community</i> b) Content of professional development <i>Relevance of content is most important to the teachers</i> c) Attitude and mindset of teachers <i>These are important attributes and account for the differences in teachers' outlook on professional development</i> d) Timing, duration and distance of course <i>In general, teachers do not wish to cause too much disruption to their classes; they prefer short one-off courses and although they hope that the venue of the course could be nearer to their school, distance does not deter their engagement if the course is relevant and useful</i> e) Time-related issues with non-teaching school duties and personal commitments <i>Non-teaching duties, such as, organising of school events and personal commitments, such as, having children do have an impact</i> f) Organiser of the professional development courses or training <i>(Teachers are not too concerned with the organiser of the courses but tend to gravitate towards their subject organisations, such as, ELIS for English teachers and SCCL for Chinese teachers)</i>
RQ3:	How other stakeholders within the school community facilitate teacher professional development efforts?
Theme 3:	<p>Changes in professional development over the years</p> <ul style="list-style-type: none"> a) No longer a requirement for teachers to fulfil 100 hours of professional development <i>Teachers and schools focus on the quality and not the quantity of professional development</i> b) More time and importance are given to professional development <i>More time and resources have been given by the ministry and school administration</i> c) The nature and structure of professional development has changed over the years <i>There is a shift towards professional and network learning communities where teachers learn from one another, although teachers still attend courses and conferences</i> d) Teachers are now more empowered to make their professional development choices

Teachers make decisions with regards to their professional development needs with their teacher coordinator

Theme 4: Facilitation of professional development at the school level

a) Supportive and encouraging school administration

The school administration encourages and support teachers to enhance their skills and knowledge

b) Structured system of processes adopted by the school

For instance, the setting up of relief system to help teachers who are out for professional development
