

SCHOOL SELF-EVALUATION AND ORGANISATIONAL LEARNING APPROACHES TO IMPROVING THE QUALITY OF PROFESSIONAL LEARNING OF TEACHERS IN SCHOOL

Thesis submitted for the degree of Doctor of Philosophy at the University of Leicester

Ву

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School Self-Evaluation and Organisational Learning Approaches to Improving the Quality of Professional Learning of Teachers in School

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Abstract

This research involved 712 teachers and school leaders from 43 high schools in West Kalimantan Province, Indonesia, which spread from urban to rural areas. With adequate transportation and communication facilities, urban schools have advantageous in terms of learning resources, in contrast, school in rural areas tend to find access to such learning resources challenging. To promote teachers' professional learning (PL) and, hence the pupils' learning, school in both contexts, tended to face different challenge. Therefore, each school needed to be supported to develop more localised, contextualised learning and supports for learning.

This thesis aimed at describing the potential and power of school self-evaluation (SSE) and organisational learning (OL) strategies for improving teachers' professional learning (PL) in school and the nature of school supports that can be built in for improving PL in each school contexts. Particular detailed qualitative attention and a school evaluation intervention was implemented and studied at two schools following an initial survey study of teachers' values and practices at 43 schools in both urban and rural schools in West Kalimantan province of Indonesia.

The analysis of my quantitative data suggests that teachers assigned a high level of values and practices to every factor underlying PL and OL. There is no statistical evidence that teachers and school leaders, with different characteristics, were significantly different in terms of values and practices for each factor of PL and OL. The qualitative data analysis shows that the values-practice alignment data acted as a catalyst to provoke teachers and leaders to start thinking about making changes in their policies and practices in relation to PL and OL in their respective schools, though, due to a number of obstacles, made not all desires for such changes can be transformed into more concrete school improvements.

The findings of this research provided more evidence for future researchers that feeding back data regarding values practice alignment, as an intervention stage in the school self-evaluation process, can be a powerful catalyst in facilitating new forms of critical whole-school communication, which lie at the heart of double-loop learning concept. Furthermore, for school policy and practice, the finding of this research can be the basis for school stakeholders to develop more differentiated professional learning policies and strategies, in their respective schools.

Key Words: Professional Learning, School Self-Evaluation, Organisational Learning

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CHAPTER 1. SCHOOLS IN INDONESIA: CONTEXT AND QUALITY IMPROVEMENT OVERVIEW

Growing up in an isolated rural school, I experienced the negative effect of having to learn with teachers and students who did not always present due to the inappropriate infrastructures. The damaged roads to school had made it a challenging trip to reach school. Such infrastructure condition made me having to leave home early to school every day. Coming to class, I found myself being unable to focus on learning due to the lack of proper teaching media and other supporting facilities. Teachers tended to teach using traditional approaches, such as using textbook or writing on blackboard. Moreover, teachers also unable to develop during learning and could not sustain curriculum challenges and their own professional development because they did not have proper access to teaching and professional learning development resources. These experiences really shaped how I thought about education in rural schools in west Kalimantan province, Indonesia.

Through a number of occasions, I met other students from urban schools, from them I found out how they experiencing learning in different ways, with proper teaching and learning resources and infrastructures. The contrasting learning experiences made all questions about rural education interesting to me, particularly regarding how to improve the teaching and learning experiences in rural schools. Such curiosity led me deciding to pursue my bachelor and master degree in education faculties, which then made me familiar to various theories and researches in education. Out of all theories and researches I reviewed, in this research, I intended to find out the power and potential of school self-evaluation (SSE), in helping schools in both rural and urban areas in west Kalimantan province, Indonesia to learn how to improve their school by developing contextual professional and organisational learning strategies.

In more specific, this research aims to investigate how a school self-evaluation (SSE) and organisational learning (OL) approaches could improve the quality of professional learning (PL) of teachers in secondary schools in West Kalimantan Province, Indonesia. Before going further to discuss how and why this approach was implemented, I want to describe in more detailed the context of the schools in Indonesia, where this research was undertaken, in order to develop a common understanding about a number of issues in relation to the schools, including how they have developed currently and what challenges they face in developing improvement strategies, and how the government have supported them.

Indonesia is a developing country located in Southeast Asia. Even though it has been in its seventies, Indonesia is still dealing with low education quality. At the time the research I report here was underway, Indonesia was ranked 69th out of 76 countries in the OECD global school ranking¹(2015). Despite having huge natural resources and earning a great deal of financial capital from them, using such financial capital for improving the education system continues to prove a challenge, not least in ensuring equal access to high quality educational opportunities in schools across a large, ethnically and culturally diverse state. The huge areas that it has, became one of the main reasons that constrained the development of a number of sectors in this country, including the education (OECD, 2015). The geographical disparity regarding education quality was somewhat striking. West Kalimantan Province is one of those areas whose education quality is less well.

In this chapter (Chapter 1), I present a more detailed description with respect to the context of education in Indonesia generally and in West Kalimantan province in particular in which this research was conducted. Overall, this thesis includes eight chapters, a bibliographical list and appendices. This first chapter gives the background of the research by providing a contextual overview of the schools in Indonesia. This first chapter describes a number of topics with regard to the recent development in socioeconomic and education in Indonesia and West Kalimantan province. I describe the development of Indonesian socioeconomic and education respectively in section 1.1 and 1.2. In section 1.3 and 1.4, I describe the socioeconomic and educational development in West Kalimantan province context.

In chapter 2, I present a literature review of research which are underpinning this study. I organise it into seven parts; it starts with discussion about school effectiveness research (SER) approach (section 2.1), followed by the contribution of the SER to school improvement (section 2.2). I go on to discuss how to improve school effectiveness by promoting teacher professional learning (PL) in school, in section 2.3. In section 2.4, I

¹ OECD Global School Ranking is developed by OECD through OECD PISA global education survey, which evaluates the quality, equity and efficiency of school systems. The OECD's PISA 2015 tested around 540,000 15-year-old students in 72 countries and economies on science, reading, maths and collaborative problem-solving. The main focus was on science, an increasingly important part of today's economy and society (Source: OECD.org).

discuss the characteristics of effective organisational learning (OL) and leadership culture in supporting the PL. In section 2.5 and 2.6, I discuss the decision to undertake continuous school self-evaluation (SSE) in sustaining the OL and how values-practice data becoming starting point of the SSE. I conclude this chapter by presenting research questions in section 2.7.

The research methodology and technical strategies which I adopted to address the research questions are discussed in chapter 3. I begin the chapter by presenting an overview of the research design and research approach I employed in this research in section 3.1, and then, I introduce the strategic approach I implemented in section 3.2. In section 3.3, I introduce the participants and how I selected them. I summarise and discuss the research stages in section 3.4. In section 3.5, I describe the strategies I incorporated in order to maximise the quality of the data and hence the findings of this study. In section 3.6 I discuss the ethical issues in this research. Moreover, I describe the pilot study that I conducted in section 3.7, before going on to discuss the procedures for analysing the datasets I collected in section 3.8.

I report the outcomes of statistical analyses of teachers' and leaders' responses to School Self-evaluation (SSE) Survey in chapter 4, particularly regarding the alignment of teachers' values and practices as they relate to both PL and OL, in relation to research question one. In this regard, I report the results of factor analyses through which I developed the underlying dimensions of PL and OL in section 4.1. Then, in section 4.2, I report the values-practice comparisons across school and by teacher characteristics, for each factor of PL and OL.

In chapter 5, I report data collected regarding the interpretations of teachers and school leaders from participating schools as they made sense of the SSE survey data that I fed back to them, in relation to research questions two and three. In section 5.1, I discuss each area of practice in which professional significance were identified by teachers and school leaders, along with the range of challenges they reported on each of the professional significance, in relation to research question two. In section 5.2, I discuss the solutions suggested by teachers to address each challenge, in relation to research question three.

I develop chapter 6 and 7 to report data in relation to changes to policy and practice in school, resulting from implementation of the school strategic plans which teachers developed and recorded during the data interpretation and discussion meetings that were held in groups, regarding research question 4.

I conclude this research in chapter 8 in which I discuss and conclude the research finding, which I reported in chapters four to seven, respectively in section 8.1 and 8.2. In section 8.3, I draw research implications. In the last section, section 8.4, I discuss the strengths and weaknesses of this research.

1.1 Indonesian Development Overview

In this section, I present an overview of Indonesian development with particular attention to its geography, socioeconomic conditions, and quality of infrastructure.

1.1.1 Indonesian geographical background



Figure 1. 1 Indonesia Geographic Location (http://indahnesia.com/Images/Information/IND/IND indonesia map.png)

Indonesia is located in Southeast Asia between the Philippines to the north, Malaysia and Singapore to the west, Australia to the south and Papua New Guinea to the east (see: figure 1.1). It is the world's largest archipelago and consists of 17,508 islands. There are five major islands that make up the country: Sumatra with an area of 473,606 square km, Java with an area of 132,107 square km, Kalimantan (Borneo) (the third largest island in the world), which covers 539,460 square km, Sulawesi with an area of 189,216 square km and Papua, which covers 421,981 square km. Indonesia stretches for 3,977 miles from the Indian Ocean in the West to the Pacific Ocean in the East. If the waters and the islands were combined, Indonesia would extend across 1.9 million square miles. Indonesia is a republic with the House of Representatives and the president elected directly. The nation's capital is Jakarta.

Indonesia borders Malaysia on the island of Kalimantan (Borneo), Papua New Guinea on the island of Papua and East Timor on the island of Timor. Other neighbouring countries include Singapore, the Philippines, Australia, and the Andaman and Nicobar Islands, which belong to India. Indonesia is divided into provinces. Each province consists of regencies, and each regency comprises districts. Furthermore, the districts cover a number of villages (Law No. 23 of 2014, Chapter 2, Article 2, point 1). Nowadays, Indonesia includes 34 provinces, 416 regencies, 98 Municipalities, 7,094 districts, 8,412 Kelurahan (a type of village located in urban areas) and 74,093 rural villages (Regulation of the Ministry of Interior, No. 39 of 2015, attachment I). In 2015, the Indonesian Central Bureau of Statistics (BPS, 2015) reported that the population of Indonesia was 251,543,400 people. The vast and widespread expanse of the country contains an ethnically and linguistically diverse population that is spread across different geographical locations in both urban and rural areas. The rural areas tend to be isolated in terms of transportation and communication infrastructure. According to the Indonesian Central Bureau of Statistics, BPS (2015), 45.82% of the population of Indonesia reside in rural areas.

1.1.2 Socioeconomic development

In this subsection, I found it necessary to discuss about socioeconomic development in Indonesia, since it was found that socioeconomic status of pupils' parents in Indonesia correlated with pupils' opportunity to access more effective schools (see: Nakajima, et al. 2019: p. 22), by which, as their research finding suggested, 'the sequence of these pathways is important for the pupils' future learning'.

Overall, with regards to the economic sector, Indonesia is a developing country. In 2017, its Gross National Income (GNI) was only US\$11,900, which was far lower than that of its neighbouring country Singapore with US\$90,570 (World Bank, 2017). The OECD (2015: p. 24) reported that one of the principal challenges that the Indonesian government faces is dealing with its vast geographical spread and rapid urbanisation. The immense geographical spread creates unequal development across the different geographical locations (OECD, 2015: p. 24). Most poor people in Indonesia tend to congregate in the under-developed regencies, principally around rural villages. Additionally, the Indonesian Government via the Indonesian Central Bureau of Statistics - BPS (2018) reported that there are currently 25.67 million people (9.66%) living in poverty. Of the current 25.67 million poor people, 65.18% of them reside in the underdeveloped regencies, while the remainder live in the large cities and urban areas (the Indonesian Central Bureau of Statistics - BPS (2018). Poverty was measured by

using concept measure of meeting basic needs (the Basic Needs Approach). Furthermore, basic needs are also recognised as the 'poverty line'. The poverty line is defined rather vaguely as the minimum income that is considered necessary to obtain adequate living standards. Indonesian Central Bureau of Statistics - BPS (2016) explains that to obtain adequate living standards, people need to have a minimum level of income to cover their basic food and non-food needs. The non-food basic needs include housing, clothing, educations and health. In order to determine the number of people living below, on and above the poverty line, Indonesian Government regularly conduct a socioeconomic survey. In September 2015, the poverty line was 401, 220 in Indonesian Rupiah (IDR), or equal to USD28.23 per capita per month (converted on 11th January 2019) (the Indonesian Central Bureau of Statistics - BPS, 2018).

As described above, in 2014, there were 416 regencies in Indonesia (Ministry of Interior, 2015); of the number, approximately 45% of them (183 regencies) were classified as under-developed (Indonesian Ministry of Villages, Underdeveloped Regions and Transmigration, 2014). Generally, the underdeveloped regencies were located on several islands, such as Papua & Maluku, Nusa Tenggara, Java, Kalimantan, Sulawesi and Sumatra, whereas the developed areas are predominantly located on the islands of Java and Bali (OECD, 2015: p. 72). According to the regulation of the Ministry of the village, the development of underdeveloped areas and transmigration of Republic of Indonesia No. 3 of 2016, about the technical guidelines on the determination of indicators in determining the underdeveloped areas, the underdeveloped areas are defined by means of the lack quality of education, human resources, economic development, infrastructure, natural resources and the risk of disaster.

1.1.3 Infrastructure quality across provinces in Indonesia



Figure 1. 2: An elementary school student, on her way to school, watching people attempting to remove a brokendown lorry on a damaged road

It is apparent that there is a striking gap in the development of infrastructure between developed and underdeveloped areas in Indonesia. This can be seen in at least three types of infrastructure; transportation, communication and education (Hakim, 2015; Ministry of Communication and Information, 2016; and BPS, 2015). Figure 1.3 below describes the development gaps between Java and Bali that tend to be more developed,

compared to underdeveloped provinces in Kalimantan and Papua. As can be noted from

figure 1.3, there is an unmistakable gap between developed and underdeveloped areas with regards to transportation and communication infrastructure. Less than 7% of the roads on Java and Bali are completely damaged, compared to approximately 50% on Papua. Furthermore, only 2.8% of areas in Papua connected to landline telephone compared to more than 50% in Java and Bali. Similar gaps also exist in the mobile phone network coverage area. Currently, only 18% of Papua is covered by a strong, mobile phone network signal, in contrast to nearly 90% on Java and Bali.

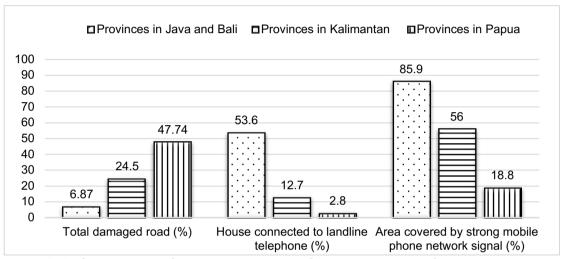


Figure 1. 3: Comparison of Transportation and Communications Infrastructure between Developed and Under-Developed Areas in 2015 in Indonesia (Hakim, 2015)

1.2 Education Development in Indonesia

In this section, I specifically discuss educational development in Indonesia at the time this research was conducted. In the first subsection I discuss the education quality across geographical locations in Indonesia. In subsection 1.2.2 I discuss about education System in Indonesia. In addition, in subsections 1.2.3, 1.2.4, and 1.2.5, respectively, I discuss about the role of schools and teachers in Indonesian education system, the role of schools and teachers in the Indonesian education system, and the challenge for educational development in Indonesia. In the last subsection, I discuss the national educational programmes developed by Indonesian central Government in improving education quality in the country.

1.2.1 Education quality across geographical locations

Compared to the other countries, the education quality in Indonesia in general is still poor. It, at least, can be seen from the performance of its students in basic skills like mathematics and science. According to the Organisation for Economic Co-operation and Development – (OECD, 2015), Indonesia is ranked 69th out of 76 countries in the Global

Schools Ranking. This rank is based on an analysis of how well students in each country perform in mathematics and science. The OECD/Asian Development Bank (2015: p. 19) reports that Indonesian pupils are typically performing some three years behind the OECD average. Over 50% of Indonesian fifteen-year-olds have not mastered basic skills in reading or mathematics. Within Indonesia itself, students' performance shows a striking disparity among areas, which can be seen from the result of the national examination. The national examination is an examination that should be taken by students at the end of their year at each level or stage of schooling. This test is developed by the central government that should be taken by all students all over the country. The national examination measures pupils' mastery in a number of subjects. In junior high school level (aged 13 to 15) the national examination includes four subjects; Mathematic, Science, English and Indonesian language. Meanwhile, at senior high school level (aged 16 to 19) the national examination includes more subjects that are classified based on the major the pupils belong to. Recently, there are three majors that exist in senior high school namely Natural Science, Social Science, and Language.

The national examination for students majoring in science will include Mathematic, Biology, Chemistry, Physics, Indonesian Language and English; for those majoring in Social Science national exams are taken in Geography, Economics, Sociology, English, Indonesian Language and Mathematic. Meanwhile, pupils majoring in Language are tested in Indonesian language, Indonesian literature, Mathematics, Anthropology, English and Foreign language. The result of the national examinations that were administered in 2015 showed quite striking variation between rural and urban areas nationwide. Most of schools in urban areas were at the top rank, while those in rural areas were mostly at the bottom rank (Indonesian Ministry of Education and Culture, 2015). In general, schools in urban areas attain better than those in rural areas. In 2013 national examinations for example, junior high school pupils in Bali (a well-developed province), achieved an average score of 80%, compared to pupils in several areas in Kalimantan island (less-developed areas), who only attained an average score of less than 60% (Al-Samarrai, 2013). In the 2015 national examination, the distribution of national examination scores in all subjects that were examined among provinces also demonstrated a relatively typical pattern (Indonesian Ministry of Education and Culture, 2015; OECD, 2015). The average score pertaining to junior high schools in Jakarta (the capital of Indonesia, and a developed area) was more than 70%, in contrast to that of junior high schools in most provinces in Papua, Kalimantan and Maluku, which had an average of less than 60%. Overall, the average score in relation to all junior high schools

in Indonesia, in the national examinations in 2015 was 61.80%, while in senior high school it was 58.27%.

With respect to mastery in basic skills in reading and mathematics, the OECD/Asian Development Bank (2015: p. 19) reported that pupils' performance on reading and mathematics correlate with the high number of pupils at this age who drop out or do not enrol at school. The Indonesian Ministry of Education and Culture (2014) reported that more children of junior high school age did not enrol in schools, in comparison to those of elementary school age. Figure 1.4 below describes the improvement of school participation rates over the period of 2005-2015, across school age groups. The age groups are 7-12 years old for Elementary School (ES), 13-15 years old for Junior High School (JHS), 16-18 years old for Senior High School (SHS) and 19 to 24 years old for Higher Education (HE). The improvement scores presented in the following figure represents the increase of the school participation within the period of the last ten years, which is calculated by subtracting school participation rate in 2005 from that in 2015.

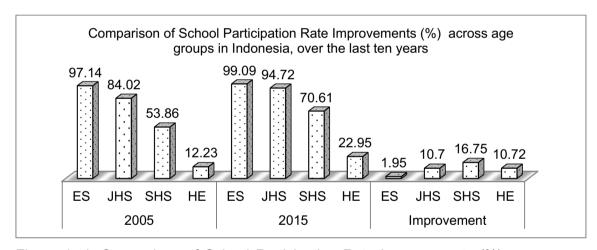


Figure 1. 4: Comparison of School Participation Rate Improvements (%) across age groups from 2005 to 2015 (BPS, 2015).

From figure 1.4, it can be observed that the participation rate among age groups increased gradually over the decade, 2005-2015. Of all the age groups, the higher education group demonstrates the most significant improvement, a twofold improvement, from 12.23% in 2005 to 22.95% in 2015. Meanwhile, the highest improvement was in the senior high school age group, where school participation increased by 16.75% over the last decade. In general, the percentage in connection with children's school participation tends to be influenced by geographical location.

It is important to note that the OECD (2016: p. 163) reported that the rate of school participation in rural areas was lower than in urban areas, indicating that access to

education remains a problem for young people in rural areas. The OECD argues that challenges of providing access to education in remote areas compound the problem regarding young people's participation in schooling, particularly among communities with traditionally low educational aspirations. Overall, the age group which experiences the highest percentage, in relation to participation is at junior high school level (12 to 15-year olds). The Indonesian Ministry of Education and Culture (2014) stated that 23.4% of children at this age had not enrolled in schools. Furthermore, the OECD (2015: p 107) explains that national data also note serious variations between and within the provinces. At elementary school level, the school enrolment rate ranges from 94.7% in Bali to only 83.1% in West Papua. With respect to junior high school enrolment, the provincial disparity in net enrolment rates is wider, from 94.7% in the Special Capital Region (DKI) of Jakarta to 31.6% in Papua. The provinces with lower enrolment rates are predominantly located in the eastern part of Indonesia and include Papua and Kalimantan. Within each provinces of Indonesia, the chances of children enrolling in basic education is influenced by the geographical context (urban/rural). The OECD (2015: p. 108) reported that the net enrolment rate for elementary school in urban areas in Indonesia was 98.5%, while the rate in rural areas was 96.8%. The geographical disparity becomes wider in senior high schools; 85.7% of senior high school aged children attend schools in urban areas, whereas only 74.4% attend in rural areas, a gap of more than 10 percentage points (UNICEF, 2013).

1.2.2 Education system in Indonesia

In Indonesia, the education sector has been identified as a priority in the national development strategic plan. According to Indonesian law No. 20 Chapter VI, part 1, article 14, in general, education in Indonesia aims to develop Indonesian students in terms of intellect, religion and character. As stated in the Indonesia Statistics Book (2015: p. 11), the Indonesian Ministry of Education and Culture divided the education system into streams, levels and types of education. Educational streaming consists of formal education, non-formal education, and informal education, which can complement and enrich each other. Education can be provided in an open system via face-to-face and/or distance learning. There are four levels of education in Indonesia, specifically Early Childhood Education, Basic Education, Secondary Education and Higher Education. Early childhood education is for 4 to 6 year olds; basic education consists of elementary school for seven to twelve year olds, while junior high school is for 13 to 15 year olds.

A basic education is mandatory for this age group. A secondary education consists of senior high school and the equivalent level of schooling. This level of education is for students aged 16 to 18 years old. Additionally, higher education consists of diplomas, bachelors, masters, specialised postgraduate and doctorate programmes administered by higher education. There is no specific age range for this level of education. In this research, in terms of school level, I involved secondary schools, which include 375 junior high schools (52.9%) and 335 senior high schools (47.1%).

Table 1. 1: Shared Responsibility for Central, Provincial and Regional Government on Education Administration (from Indonesian Law No. 23 of 2014, Attachment I, point A)

Education	Responsibility			
Components	Central Government	Provincial Government	Regional Government	
Education Management	Setting the national education standard	Administering Secondary Education	Administering Basic Education	
Curriculum	Determining the national curriculum for secondary education, elementary education, early childhood education and non-formal education	Determining the local content of secondary and special needs education curricula	Determining the local content of basic education, early education and non-formal education curricula.	
School Accreditation	Conducting accreditation of higher, secondary, basic and early child education	None	None	
Teachers and Education Personnel	Controlling the formation and displacement of teachers and education personnel and to develop their career	Controlling the displacement of teachers and education personnel across regencies within a certain province	Controlling the displacement of teachers and education personnel within a regency	
Education Licensing	Issuing the permit for private and foreign higher education institutions.	Issuing the permit for secondary or special needs education administered by people / society.	Issuing the permit for basic or early child education administered by people / society.	

In Indonesia, education is fully controlled by the government. In general, according to Law No. 23 of 2014, the responsibility to administer and manage education is shared by three levels of government; central, provincial and regional. The responsibility for each level of government with regard to the education administration is described in Attachment I point 'a' of the law, as summarised in table 1.1 above.

1.2.3 The role of school and teacher in the Indonesian education system

As previously explained, the objectives of the national education set forth in Law Number 20, 2003 regarding the National Education System, Article 3 are to support development of pupils' intellect, and also their social, emotional and spiritual characteristics. To reach

this objective, the government makes school the focal point. In Indonesia, a school is led and managed by a head teacher and vice-head teacher who are in turn supported by classroom coordinators, subject coordinators, teachers with no or a little leadership responsibility, administrative staff and a school committee (an independent forum for parents to support and supervise schools). According to the Regulation of the Minister of Education and Culture No. 19 (2007) concerning the standard of school management, a head teacher is responsible for (1) planning teaching-learning programmes, (2) implementing teaching-learning, (3) monitoring and evaluating the implementation of teaching-learning, (4) school leadership, and (5) administering school information systems, in order to provide accurate information required by the school, so as to develop or to provide information for external parties that need particular information concerning the school. In fulfilling their duties, a head teacher is typically assisted by a vice-head teacher (s). Usually, each vice-head teacher is responsible for one aspect of a school's mission, such as curriculum development, pupils' welfare or public relations.

The principal responsibility of teachers is to support pupils' learning in the subject that they teach. Government law no 74, 2008 in relation to teachers and lecturers, defines teachers as professional educators with the primary task of educating, teaching, guiding, directing, training, assessing, and evaluating pupils on early childhood education, and moreover, primary and secondary education. To conduct the tasks properly, Government Law No 19, 2005 requires teachers of all school levels to have at least four competencies; specifically, pedagogic, personality, social and professional competence and academically, where their education level should at least be a bachelor's degree (S1) in subject relevant to the subject they teach in class. In terms of career status, teachers are classified into four categories; (1) Civil Servant Teachers -permanent teachers paid by central government, (2) auxiliary teachers paid by government, (3) auxiliary teachers paid by school.

1.2.4 The challenge for educational development in Indonesia

Raising performance in education in Indonesia is crucial with regards to meeting the multiple challenges of social and economic development. However, it is not a straightforward task to perform. In developing the quality of education, the government has to deal with a number of constraints, such as access to adequate teaching-learning facilities, the supply of qualified teachers, and the national curriculum and examination system.

School access to adequate teaching-learning facilities throughout Indonesia

In providing appropriate school access for children, the government is still concerned with improving the quantity and quality of teaching-learning facilities such as adequate supply and appropriate quality of classrooms, libraries, laboratories, and teaching media. Even as recently as 2014, a significant number of villages had no schools either at every level or just at a particular level of education, as Figure 1.5 illustrates.

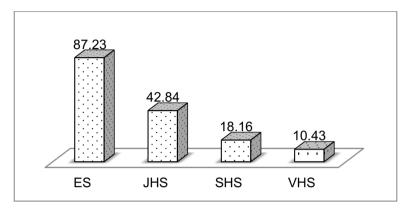


Figure 1. 5: Percentage of Villages with each level of schooling in 2014 (from the Indonesian Central Bureau of Statistics – BPS, 2014)

The chart illustrates that whereas 90% of villages had an elementary school, only 50% of villages had high schools. Of the 50% of high schools in villages, more than 50 percent classrooms in damaged condition. According to the Indonesian Ministry of Education and Culture, as stated in Indonesian Education Statistics in Brief (2015), the poor condition of classrooms was mostly in elementary and junior high schools. Figure 1.6 compares classroom conditions across school levels.

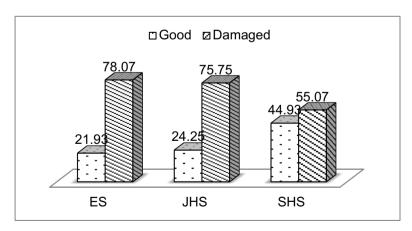


Figure 1. 6: Percentage of Classrooms based on Condition in 2015 (Indonesian Education Statistics in Brief, 2015)

Figure 1.6 above depicts that less than a quarter of classrooms in elementary and junior high schools in Indonesia were in a poor condition. According to the Indonesian Ministry

of Education and Culture, as stated in Indonesian Education Statistics in Brief (2015), the damaged classrooms varied from slightly to completely damaged. In addition, the OECD (2015: p. 123) reports that 75% of schools in Indonesia do not meet the minimum service standard set by the government. The minimum service standard here refers to the school minimum service standard stated in regulation No. 15 of 2010, which includes providing suitable classrooms, qualified competent teachers who are supported by principals and supervisors, high-quality lesson plans, effective assessment practices, sufficient books and equipment, and a range of additional requirements.

Supply of qualified teachers

A further challenge that the government faces in ensuring an equal distribution of quality education throughout the nation is related to the unequal distribution of qualified teachers. As explained previously, Law No 19 of 2005 required all teachers from all school levels to have at least four competencies; principally pedagogic, personality, social and professional competence; and academically, teachers should at least have a bachelor's degree (S1). In terms of quantity, in general, the number of qualified teachers has increased significantly in certain levels of education. The figure below describes the improvement in the numbers of qualified teachers from 2008/2009 to 2013/2014.

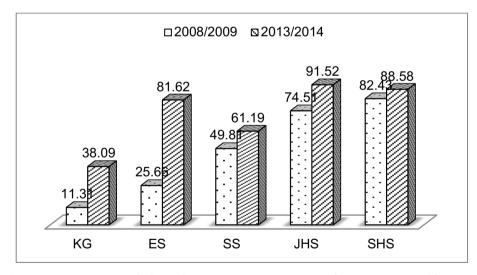


Figure 1. 7: Percentage of Qualified teachers in Each School Level (*Statistik Guru*-Teacher Statistics- 2015, p. 48).

As presented in figure 1.7, between 2008/9 and 2013/14, the proportion of qualified teachers at every level of schooling increased dramatically, especially at the elementary school level. It appears that this was due to the effect of the implementation of Law No. 14 of 2005. The Law obliged teachers at every level of education to at least have a bachelor's degree. In addition, this law also gave teachers the opportunity to earn professional incentives through a certification programme. This certificate will only be

given to those who have fulfilled all the standards established by the government, including the requirement for the teacher to have a bachelor's degree or higher. The implementation of this law has also affected the percentage of teacher's education levels. Figure 1.8 reveals that in 2015, 70% of teachers had a bachelor's degree.

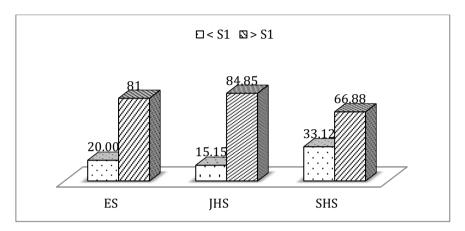


Figure 1. 8: Teachers' Education Levels in Indonesia in 2015 (Indonesia Education Statistics in Brief, 2015).

The figure above illustrates the number of teachers in elementary and junior high school that have bachelor's degree was approximately 80%. The percentage in senior high school was lower at almost 70%. Unfortunately, the rapid development pertaining to teacher education levels could not be followed by an improvement in teacher competency. Each year the Indonesian Government conducts Teacher Competency Tests (UKG), in order to measure the proficiency of teachers with respect to the subject that they teach. The UKG test takes the form of 100 multiple-choice questions, 70 percent of which measure teachers' professional competency while the rest measure their pedagogic competency. The teacher is given two hours to complete the test.

In 2015, the Indonesian Ministry of Education and Culture set the pass mark required for the test to be 5.5 out of 10 (Research and development department – Litbang, Ministry of Education and Culture, 2015). This was an increase in the pass mark established in 2012, which was set at 4.7. The government intends to improve the pass mark gradually until it achieves 8.00 out of 10.00 by 2019. The UKG that was administered in 2012 to roughly 1.6 million teachers revealed disappointing results, with more than 80% of the teachers attaining scores of 50% or less. The test was only used by the government to map teacher's competency. Its result had no further consequence for the participating teachers.

Furthermore, the supply of qualified teachers tends to be affected by geographical location (rural-urban). Consequently, there is still a conspicuous gap between the quality of teachers in both urban and rural areas. The OECD (2015: pp. 123-124) reported that teachers in rural schools have a tendency to be less qualified than those in urban schools. In addition, teachers in rural schools also have lower academic levels than those in urban areas. Over half of elementary and junior high school teachers, in urban schools have university degrees which are equivalent to four years compared with only 20% in rural areas (OECD 2015: p. 276). Related to this issue, the OECD (2015: p. 271) explained that one of the reasons for this issue is because the majority of schools in rural areas have fewer pupils in contrast to urban areas. Most schools in rural areas have less than a hundred pupils, which produces an inefficient and expensive staffing pattern. However, the OECD (2015) argued that the staffing problem for rural schools is not a lack of teachers but a lack of qualified teachers. Moreover, the OECD (2015) added that staffing classes of ten pupils or less with one qualified teacher per class is neither feasible nor efficient in rural areas.

The frequent reform on national education policy

In addition to the range of significant challenges and constraints which schools in Indonesia face, teachers and school leadership teams in all regions of the country have to deal with constant national reform, with particular emphasis on frequent changes to the national curriculum and national examination system. Reforms to curricula are rarely accompanied by professional development support for teachers or the development of materials that reflect the newly introduced curricular changes. For example, following the implementation of the 2013 curriculum, the OECD (2015) reported that teachers lacked effective support in the form of training in subject content knowledge, interactive teaching methods, and thematic approaches to teaching the curriculum. Therefore, since it was implemented, only a few teachers have received the training they require to enable them to effectively adapt classroom practice to the 2013 curriculum framework. In more detailed, I discuss the national education reform in the following subsection.

1.2.5 National educational improvement programmes

With the signing of Law No. 20 of 2003 concerned with the national education system, national and regional governments have been undertaking many more policy initiatives directed at improving the quality of education in Indonesia. In general, policy initiatives have focused on school funding, the National Curriculum, the National Examination System and teacher capacity.

Budgeting policy

Reflecting commitment to and belief in the strategic importance of education in national development, the Indonesian constitution requires successive governments to set the national education budget to a level of 20% of the national expenditure (APBN). This statutory provision is contained in the 1945 Constitution, Article 31, Paragraphs 2, 3 and 4. National education funds are distributed to finance development of an extensive range of facets with respect to national education policy, including teacher capacity development, school facilities, teaching and learning processes, leadership development, library stocks and facilities, and the national assessment of pupils' attainment systems.

Revising education standards in Indonesia

In addition to increases in national education expenditure, the central government has also introduced changes in national education standards by amending Law No. 19 of 2005 into Law No. 32 of 2013 regarding National Education Standards. Article 1, point 1 of the Law stated that National Education Standards are the minimum criteria regarding the education system in Indonesia. The standards were established for each school level, starting from basic education to secondary school. In general, the law set standards on eight aspects of the education system, as presented in table 1.2.

In implementing all the standards, the school is supervised and evaluated by the government through the Ministry of Education and Culture. All practices related to teachers are evaluated through several programmes. One of the most comprehensive evaluation programmes toward the implementation of those standards is the School Accreditation Programme. According to the regulation issued by the Education and Culture Ministry No 29 of 2005, Article 1, Point 5; school accreditation is defined as an assessment of the feasibility of a School / Madrasah (Islamic School) based on criteria established and carried out by the National Accreditation Board (BAN) that results in the form of recognition of the level of the school's ability to meet the minimum school operational standards.

In addition to the School Accreditation Programme, the government also conducted an evaluation and assessment with regards to the implementation of the Education Standards, specifically for teachers. For this purpose, there are a number of other evaluation programmes that the government administers, such as Teacher Performance Assessment (PKG) to assess teacher performance and professionalism (Minister of State for Administrative and Bureaucratic Reform No. 16 of 2009), Teachers'

Competency Test (UKG) to measure teachers' proficiency of the subjects they teach (Regulation of the Education and Culture Minister No 57 of 2013, Article 1, Point 1).

Table 1. 2: Aspects and Purposes of Education Standard (from Law No. 32 of 2013

regarding National Education Standards)

No	Aspects	Purpose		
1	Graduates' Competency Standards	Setting the minimum criteria for a pupil to be able to graduate from a level of education, including the development of their intelligence, knowledge, personality, attitude, skills, and		
2	Content Standards	motivation to continue to the next level of education Setting the minimum scope for teaching material and level of competence on every subject taught in school, in order to achieve Graduate Standard Competencies at certain levels and types of education		
3	Process Standards	Setting the minimum criteria and procedures for planning, implementing, evaluating and supervising, reporting and following up the teaching-learning process at school.		
4	Teachers and Education Personnel Standards	Setting the minimum criteria for teachers and education personnel, in terms of educational qualifications, health, pedagogic competence as a learning agent, attitude, social and professional competence, and any other related aspects.		
5	Education Infrastructure Standards	Setting the minimum criteria for school infrastructures including its area, building, and the availability of additional teaching – learning facilities including study rooms, gyms, places of worship, libraries, laboratories, workshops, playgrounds, and any other facilities needed to support the learning process, for instance the use of information and communication technology.		
6	Education Management Standards	Setting the minimum criteria and procedures to administer all school processes, including the minimum criteria for school vision and mission, annual school work plans, the implementation of school work plans, school management structure, school evaluation and supervision, leadership and information system management.		
7	School financing Standards	Setting the minimum criteria and procedures in several aspects related to school funds, including estimating annual budgets for schools and allocating school expenditure on personnel development, school operations, and any issue related to transparency and accountability.		
8	Education Assessment Standards	Setting the minimum criteria on the mechanisms, procedures and instruments of assessment related to pupils' learning outcomes, at all levels. The assessment level here refers to the required assessment levels, including the assessment of teachers, schools and the central government.		

Furthermore, as well as the assessment of teachers, the government also conducted an evaluation and assessment of the implementation of the Education Standard on pupils. In relation to this focus, pupils had to pass three levels of assessments - (a) teacher assessments by the class or subject teacher, (b) school level exams, and (c) the National Examination. The total score attained by pupils in the three levels of assessment determine whether or not a pupil passes a certain level of education. Each level of

assessment predominantly assesses the pupils' mastery of all subjects taught at school. In addition to the mastery assessment, pupils are also assessed with reference to their attitude. Measuring attitude is the responsibility of the teachers. The pupils need to obtain at least a grade B in attitude, in order to be able to graduate from their current level of education to the next.

Revising the national curriculum

Besides its policy regarding budgeting and education standards, the government also regularly develops and makes changes to the national curriculum. The purpose of this is to improve the quality of learning in schools and Madrasah (Islamic school) throughout Indonesia. Since independence in 1945, the national curriculum of Indonesia has undergone several changes, notably in 1947, 1952, 1964, 1968, 1975, 1984, 1994, 2004 and 2006, whilst the most recent was in 2013. The 2013 curriculum was developed on the basis of Standards-Based Education and the Competency-Based Curriculum theory (attachment of Regulation of Education and Culture Minister No. 70 of 2013). The standards of education here refer to the eight standards of National education stated in Law No. 32 of 2013 related to National Education Standards. As explained previously, the 2013 curriculum was developed specifically to focus on achieving an optimal balance between cognitive development skills, particularly critical-thinking and problem-solving, and moreover, character development and behaviour of pupils. As well as pupils' attitudes and behaviour, this curriculum also increases the proportion of religious and character education.

It was believed that the 2013 curriculum would be able to move the Indonesian education system several steps forward; however, regarding the complexity of the structure of this curriculum, it appears that this curriculum was introduced far too swiftly. It should have been given more time to prepare, principally in training teachers, with the aim of developing their skills and knowledge in implementing this particular curriculum. As a result, the OECD (2015: p. 113) reported that by the time the curriculum was initiated, the teachers were not adequately prepared in both subject and pedagogic content knowledge, and so they required further professional development and practice in implementing the curriculum. One of the skills that teachers need in implementing the 2013 curriculum is the skill of assessing pupils' achievement. In contrast to the previous curriculum, in the 2013 curriculum the teacher needed to assess students' knowledge, skills and attitude and were unable to do so at scale due to lack of professional development support opportunities. In addition, the curriculum was launched without the central government providing the necessary text books and other teaching materials

required for its successful implementation. Consequently, the newly-elected government in 2014 discontinued the implementation of the curriculum in most schools. Furthermore, the government ordered the reinstatement of the 2006 Curriculum, while waiting for a further review of and adjustments to be made to the 2013 curriculum. This demonstrates the central importance of professional development to programmes of national curriculum and assessment reform.

Revising the national examination system

The national examination, as stated in Law No. 13 of 2015, Article 66, Point 1, is an assessment conducted by the government, in order to assess students' competency levels at each educational level, in all subjects. Beside this primary purpose, in Article 66, point 1, points 'a' to 'd', another important purpose of the national examination is to measure and compare the quality of teaching and learning in schools throughout the education system in Indonesia. On the basis of a school's place in this national school ranking, the government decides the amount and proportion of assistance to be given to the particular school. In addition, passing this examination can also be considered a requirement for entering the next level of education.

As Fatchiati (2015) reports, changes to the national examination system have occurred in seven main periods; however, these changes were mainly superficial in nature, predominantly involving a change to the name of the exam, its function (whether for graduation requirements or for performance mapping), and changes in the personnel or institution that was in charge of developing the examination question (whether schools, or local or central government). Table 1.3 below summarises the changes in each period.

Table 1. 3: Revision of the National Education system from the 1950s to present

Period	Name of the Exam	Function	Test Maker
1950 to the	<i>Ujian Penghabisan</i> (Final		Central
1960s	Examination)		government
1965 to 1971	Hijan Nagara (Stato Evam)	Graduation	Central
1905 10 1971	Ujian Negara (State Exam)	requirement	government
1972 to 1979	Ujian Sekolah (School Exam)	Graduation	Schools
1972 10 1979	Ojian Sekolan (School Exam)	requirement	3010015
1980 to 2002	Final Stage Learning Evaluation (EBTA) and National Final Stage Learning Evaluation (EBTANAS)	Graduation requirement	Schools and Central Government
2002 to 2003	National Final Examination (UAN)	For quality education. Monitoring only	Central government
2005 to 2014	National Examination (UN)	Graduation requirement	Central government

2015 to present	National Examination (UN)	Graduation requirement	Schools and Central Government
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Source: Fatchiati (2015)

Promoting teachers' professional development

In addition to the strategic policies that the government has developed in relation to improving the national education quality, the national government also identified the importance of the professional development of teachers to its national educational reform initiatives and established a number of professional development (PD) programs. Since 2012, the central government has conducted a number of programmes with the aim of improving teachers' capacity, including various types of training, internships, short courses or even providing teachers with scholarships to continue further education (see: Marsunah, 2012: p.19) and, in addition, a series of other PD opportunities such as academic discussions, seminars and workshops. The activities predominantly focus on conducting research, developing teaching modules and instruments, or developing innovation in arts, sport or technology. To facilitate professional development at national scale, the government initiated 'Teacher Working Groups' (KKG) throughout Indonesia to bring elementary school teachers together from different schools in the same area regularly. The Government also introduced 'Subject Teacher Meetings' (MGMP) for junior and senior high school teachers of particular subjects to meet together regularly in a shared location. KKG and MGMP are nationwide professional forums for teachers that are structurally formed by the teachers in a local region. These forums are expected to 'provide a medium for the mutual exchange of professional experience and ideas with the purpose of improving the knowledge and practice of teachers and the quality of pupils' learning' (Trimo, 2007: p. 12).

In addition to the promotion of teachers' professional development in these ways, the government is also committed to improving teachers' welfare by offering a professional incentive as an addition to their monthly salary. To be able to claim this incentive, a teacher should have a professional certificate (known as the Educator Certificate) that can be obtained via the teacher certification programme. The Teacher Certification Programme is administered based on the instruction of Law No. 14 of 2005 on teachers and lecturers (UUGD). This law requires teachers to have academic quality, competence, a teaching certificate, spiritual and physical health, as well as having the ability to achieve national education goals. However, even with all these programmes, the quality of teachers in Indonesia continues to need improvement and further support. The Teacher Competence Test (UKG) in 2015 revealed the average score in relation to

teacher competence was only 5.5 out of 10, although it had increased from 4.7 in 2012. This performance is generally worse in rural areas, where schools have poorer access to high quality transportation, communication and education infrastructure.

1.3 West Kalimantan Development Overview

This research was undertaken in West Kalimantan province, Indonesia. I decide to choose this province because it provided me with a good opportunity to explore and compare the quality of schooling and teachers' learning in both rural and urban contexts. In this section, I present the overview of developments in a number of sector in the province, which were believed to have shaped its educational development. In the first subsection I discuss about its geographical Context, in subsection 1.3.2 I discuss about its economic context, and in subsection 1.3.3, I present discussion regarding its infrastructures and public facilities.

1.3.1 Geographical context

West Kalimantan Province is located in the western part of the island of Borneo (locally referred to as Kalimantan Island). Its capital city is Pontianak City. Located on the equator, the climate of this province is hot and humid. West Kalimantan is the fourth largest province in Indonesia, after Papua (421,891 km2), East Kalimantan Province (202,440 km2) and Central Kalimantan (152,600 km2). It covers an area of 146,807 km2, or approximately 7.53% of Indonesia (BPS, 2014). Furthermore, West Kalimantan consists of 14 regencies and 2109 villages (West Kalimantan Government, 2015). Given the size of the province, it has a low population density. According to BPS (2015), the population of West Kalimantan is 4,695,200, with 66.36% of the population living in rural areas. The rural areas are spread over the majority of the regencies. Figure 1.9 describes the population distribution based on geographical location in the regencies of West Kalimantan.

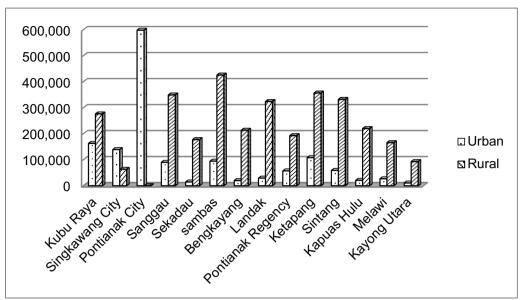


Figure 1. 9: Population of West Kalimantan Regencies According to Geographical Locations (Kalbar Dalam Angka - West Kalimantan Province in numbers, 2014).

It can be observed in figure 1.9 above that the majority of West Kalimantan's inhabitants live in the rural areas. The majority of the population are concentrated in two regencies and most of these people live in the urban areas of Pontianak City and Singkawang City. The entire population of Pontianak City live in the urban neighbourhoods; none live in the rural areas. Meanwhile, in Singkawang City, less than 50% of its population resides in rural areas, whilst the remainder inhabit the urban parts. In contrast, in the other regencies, more than 50% of the population reside in rural areas.

1.3.2 Socioeconomics context

Economically, West Kalimantan is an underdeveloped province with the majority of its people employed in the agricultural sector (West Kalimantan Province, Government Development Planning Department, 2016). West Kalimantan is the poorest province among the other provinces on Kalimantan Island. This claim is based on the number of people living in poverty and based on the poverty line per capita per month. The percentage of people living in poverty in West Kalimantan fluctuates year on year. According to the BPS (2018), in 2018, 7.37% of the population were poor people; Of the percentage, about 21% live in urban areas, while the reminders live in rural areas in West Kalimantan Province. As explained previously, poverty is measured by the ability of each family to meet the poverty line each month. The poverty line is the minimum income that a family should earn a month. In 2018, the average of the poverty line in West Kalimantan Province was IDR 420 831 (USD29,65). This indicates that by 2018, 7.37% of West Kalimantan inhabitants was living on less than USD29,65 a month. Poverty has spread extensively from developed to underdeveloped regencies in West

Kalimantan. The government via regulation No. 131 of 2015 classified eight of the fourteen regencies in West Kalimantan as underdeveloped. Figure 1.10 below compares the poverty percentage among regencies in West Kalimantan. The first six regencies in the figure are developed regencies, while the rest are underdeveloped.

It can be noted in figure, the developed regencies (the first six regencies in the figure) confirmed that the percentage of people living in poverty was not more than 6%. Meanwhile, in the other regencies, the poverty percentage ranges from approximately 7 to 14%. Within each regency, the poverty distribution appeals to be associated with the geographical locations (rural/urban). The BPS Kalbar (2018) reported that the majority of poor people live in rural locations.

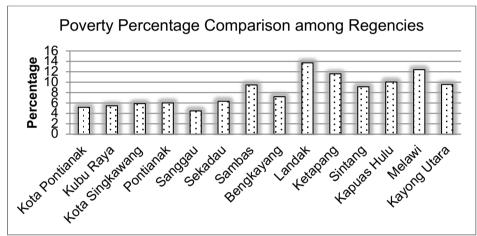


Figure 1. 10: Comparison of the percentage of people living in poverty among regencies in West Kalimantan (BPS-Kalbar, 2015).

1.3.3 Infrastructure and public facilities

It is important to note that regarding infrastructure development, most of the areas in West Kalimantan are categorised as underdeveloped. As described in the previous section, eight out of fourteen regencies in West Kalimantan province were categorised as underdeveloped by the Central Government. Overall, infrastructural development, especially transportation and communication in West Kalimantan (and moreover, in other provinces on Kalimantan Island) remain behind that of provinces in Java and Bali, which economically were more developed. Transportation infrastructure mainly refers to the adequate quality of roads, while communication infrastructure refers to the availability of landline telephone and cellular networks. Hakim (2015) explains that infrastructural development in provinces on Java and Bali islands tends to reflect much better progress than that of other regions in Indonesia, such as regions in Kalimantan. Figure 1.11 describes the development gap with regards to transportation and communication infrastructure in the provinces of Java and Bali, to those on Kalimantan Island.

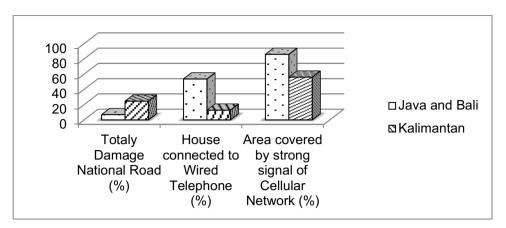


Figure 1. 11: Comparison of the Transportation and Communication Infrastructure in the provinces of Java and Bali, to those on Kalimantan Island (Hakim, 2015).

With respect to the three types of infrastructure shown in figure 1.11 above, there is a striking difference between the levels of development in the provinces of Java and Bali, and those on Kalimantan Island. Infrastructures on Java and Bali tend to be much better than those in provinces on Kalimantan Island. The gap between improvements in the developed and underdeveloped provinces in Indonesia also reflects the development pattern related to regencies in West Kalimantan. There are 'quite' significant differences regarding infrastructure development in the developed regencies, in contrast to the underdeveloped regencies. Figure 1.12 below presents the comparison of the percentage of damaged roads and areas covered by public electricity providers among regencies in West Kalimantan.

From figure 1.12, it can be noted that the developed-regencies (the first six in the figure), such as Pontianak City, Singkawang City, Kubu Raya and Pontianak Regency show greater development pertaining to both types of infrastructure compared to those in the underdeveloped regencies.

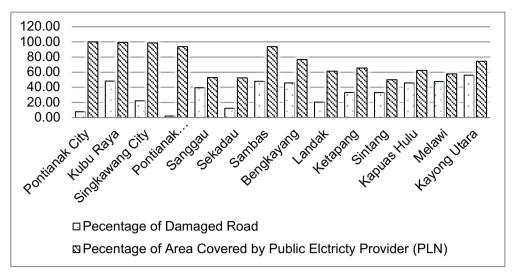


Figure 1. 12: Comparison of Communication and Electricity Infrastructure Development in regencies in West Kalimantan (West Kalimantan Province Government, 2014; and the BPS, 2014).

Having better access to such infrastructures makes the students and teacher in developed regencies being able to have better access to learning recourses such as proper library, professional development activities including seminars and workshops and make them easier to access the electronic resources for learning such as the internet and other kind of electronic based teaching media. In contrast to the students and teachers in developed regencies, those in the underdeveloped regencies, whose areas are mostly rural or isolated, get poorer access to those learning resources. Having electricity only in the evening for example, makes the use of electronic-based teaching media in classroom become more difficult to do. The following section will describe how the educational practices and school performance in West Kalimantan province in more detailed.

1.4 Educational Development in West Kalimantan Province

A number of topics relating to educational development in West Kalimantan province taking place at the time this research was conducted are discussed in this section. I begin by discussing its School Performance (subsection 1.4.1), and then discussing the quality and quantity of school facilities and teachers in the province (subsection 1.4.2 and 1.4.3), school participation percentage (subsection 1.4.4), and the pupils' performance on attainment tests across regencies in the province (subsection 1.4.5). Now I go on to the first subsection, discussing about the overview of school performance in the province.

1.4.1 School performance in West Kalimantan Province

In West Kalimantan province, education sector is no better than the other provinces on Kalimantan Island. The disparity between urban and rural areas in terms of socio-economic status and access to numerous types of public facilities, as explained previously, appears to be reflected in the quality of education in different locations in West Kalimantan. In general, the performance of schools in West Kalimantan province is still poor as can be seen from schools' average performance in the national examination. In 2015 national examination for example, from four subjects that were examined, the junior high schools in West Kalimantan province only gained averagely 228.25 out of 400. This score is far lower than that of Jakarta Province, as the province with the highest score on the examination with 295.52 and even lower than that of the national average with 247.23. This score ranks West Kalimantan province 26th out of all 34 provinces in Indonesia.

Within West Kalimantan province itself, there is a great deal of variation among school attainment scores among different regencies. As I presented in Figure 1.13 below, schools in the developed regencies, the first six regencies in the figure, tend to perform slightly better in the 2015 national examination than those in underdeveloped regencies, even though, there are also some rural schools performing better than some urban schools, such as the case of Sintang and Kapuas Hulu. Overall, junior high schools in Pontianak City, Sekadau Regency and Sanggau Regency for example, which were located in urban school, obtained the average score of around 260 out of 400 in 2015 national examination. The scores were higher than those of a number of underdeveloped regencies in this province, such as Landak regency which only obtained around 160 out of 400. The examination involved four subjects, English, Mathematics, Natural Science and Indonesian Language with a maximum score of 400 for each subject. The first six regencies in the figure are classified as 'developed regency' by the Indonesian Government (Indonesian Ministry of Villages, Underdeveloped Regions and Transmigration, 2016).

From figure 1.13, it can be noted that, based on the school performance in the 2015 national examination, more developed regencies only perform, on average, slightly better than underdeveloped regencies and so schooling and teachers' learning needs to improve and to be supported to improve in all these regencies.

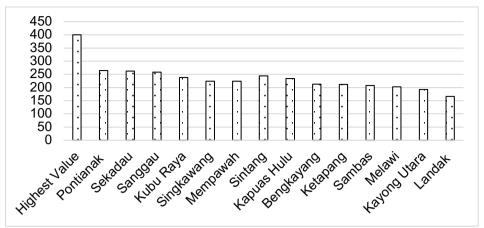


Figure 1. 13: School Average Performance in Each Regeny in West Kalimantan Province, based on National Examination Achievement

In general, there are a number of issues that the schools in West Kalimantan province tend to deal with, such as: the quality and quantity of school facilities, the Quality and quantity of teachers, Pupils' performance on attainment tests across regencies, and the School participation percentage. The following section will explain those issues in more detailed.

1.4.2 Quality and quantity of school facilities



In terms of teaching and learning facilities, West Kalimantan is still experiencing a shortage in terms of the quantity and quality of school facilities. Concerning quantity, the government appears to be undertaking more improvements to a number of schools, particularly at junior and vocational high school levels. Until 2015, there was only one junior high school in every 6 villages, while a vocational high school was only available in every 15 villages. For the people living in rural villages, this is an enormous challenge

to deal with, seeing as the villages in rural areas tend to be isolated from one another (Bunu, 2014). Therefore, if the schools are located outside their village, children and young people are reluctant to attend school.

In addition, the consequence of being in this situation did not only affect the students but also the teachers. The lack of communication and transportation infrastructure causes the inhabitants to have limited access to a number of professional development programmes. This is likely to signify that the government programme, especially a Figure 1. 14: Teacher in West Kalimantan number of trainings or workshops with Province going to work via a badly regard to the teachers' professional development does not work well across

different geographical locations, which subsequently causes schools to have problems with improving their professional learning (Hasbullah, 2006; Bunu, 2014). Such infrastructural problems act as barriers to teachers in rural areas wanting to access government continuing development programmes, which predominantly take place in cities (capital city of regency or province) compared to teachers in urban areas. The lack of schools in West Kalimantan means that there is a lack of high quality educational facilities, such as classrooms, libraries, laboratories, computer rooms and Internet access. To summarise, both teachers and pupils in rural areas are less able than their peers in urban areas to access high quality learning opportunities.

• Classroom Conditions

Ordinarily, classrooms in West Kalimantan remain in poor condition. The Education and Culture Office of West Kalimantan province (2015) reported that more than 50% of the classrooms in elementary and junior high schools were in a substandard condition. The classrooms in senior high schools are most likely to be of a superior quality with only around 25% in poor condition.

School Library

In a school, the library is one of the important facilities to support the teaching and learning process. In West Kalimantan, similar to classroom conditions, the quantity and quality of libraries remain problematic. Education and Culture Office, West Kalimantan Province, (2015) and West Kalimantan in Numbers – KDA (2015: p.51) reported that approximately 25% of elementary schools in West Kalimantan do not have a library. In contrast to elementary schools, the figure above demonstrates that each junior and senior high school had at least one library room. However, according to the Education and Culture Office, West Kalimantan Province (2015) the quality of libraries still requires improvement. The percentage of damaged libraries was still high in elementary school, junior high school and senior high school, with 34.57%, 40.15% and 22.12% respectively. The lack of quantity and quality in relation to libraries tends to be worse in rural areas (Darmadi, 2013). The office added that most of the libraries in rural areas had a limited number of old books, and moreover, that this situation tends to be worse given

that most rural villages do not have a public library. In 2013, more than a half of villages in West Kalimantan did not have a public library and no other alternatives were available in the area for teachers and students (Library, Archive and Documentation Office of West Kalimantan Province, 2013).

Technology facilities in enhancing learning

Nowadays, in more advanced countries technology enhanced learning is becoming more prevalent in schools, as can be seen from the existence of a number of support facilities, for instance school labs, computer rooms and Internet access. In West Kalimantan in general, the introduction of technology in the teaching-learning process requires more time. One of the problems is the availability of electricity in schools. The state electricity company (PLN) - the sole provider of electricity in Indonesia- still cannot cover all the rural areas in West Kalimantan. According to BPS Kalbar (2015), only 1,380 villages were covered by this company's network; however, 1,239 villages did not have any form of coverage from any supplier. Figure 1.15 below summarises the comparison of villages covered by PLN, in regencies in West Kalimantan.

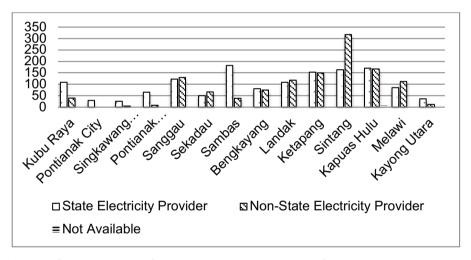


Figure 1. 15: Comparison of Numbers and Types of Electricity Providers across Regencies in West Kalimantan (BPS-Kalbar, 2015).

Figure 1.15 above reveals that almost half the villages in West Kalimantan use a non-state electricity company. The villages that use this type of electricity provider tend to have electricity only at night. Therefore, during the day, when schools are in operation, village-life proceeds without electricity. This situation forces students and teachers to engage in teaching-learning processes without electricity-powered devices, such as LCD projectors, laptops, and even the Internet. For schools in rural locations, applying Internet-based or Internet enhanced learning appears to be a long way off.

With respect to communication infrastructure and connectivity, the Communication and Information Ministry (2013) reported that only 4% of villages in West Kalimantan were connected to landline telephones. In addition, 30.02% of the villages were not connected to the mobile telephone network and only 17.40% of the villages were able to access the strong mobile telephone network. The network with a strong signal is usually located in urban areas. As a consequence of these conditions, the quality and quantity of facilities for teaching and learning in the rural parts of West Kalimantan lag a considerable way behind those in urban areas.

One example of a village in a rural location that suffers from a lack of learning facilities was a junior high school in Tembawang village. According to the West Kalimantan Education Board (2013), Tembawang village is located in the District of Entikong in Sanggau Regency. At the time, the school had 73 pupils, who were learning the theory of information and communication technologies. However, the pupils have never seen a computer, and electricity was unavailable. The school had only one map of Kalimantan Island and a globe (as a teaching media), in addition to the books in the old library. The percentage of schools in West Kalimantan that have a computer room and laboratory can be seen in figure 1.16. As can be observed from such figure, approximately 10% of elementary schools had computer rooms, although none of them had a laboratory. At junior high school level, nearly all the schools had laboratories, while just less than 50% had computer rooms. In relation to senior high schools, as presented in the figure above, each school had a laboratory and computer room at least. However, the laboratories and computer rooms were only available at schools that were connected to the electricity, while most of the schools in rural areas were not connected to the electricity during the teaching and learning process. Additionally, for those schools that have a laboratory and computer room, they still have to contend with the low quality of both facilities. The Education and Culture Office of West Kalimantan Province (2015) reported that more than half of the laboratories in junior high schools were damaged. Furthermore, the same occurred in computer rooms in elementary and junior high schools, with almost a half noted to be in poor condition.

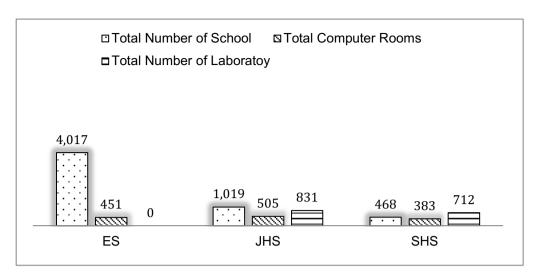


Figure 1. 16: Comparison of the Number of schools and the total number of Computer Rooms and Laboratories in schools in West Kalimantan (The Education and Culture Office, West Kalimantan Province, 2015; *West Kalimantan in Numbers*-KDA, 2015: p.51).

1.4.3 Quantity and quality of teachers

By 2015, according to Education Quality Assurance Office of West Kalimantan Province - LPMP Kalbar, 2014, roughly 62,000 teachers were distributed amongst 14 regencies and four separate school levels; specifically, Kindergarten, Elementary School, Junior High School, and furthermore, Senior High School and Vocational High School. Figure 1.17 describes the average number of teachers at every school level, in 2014.

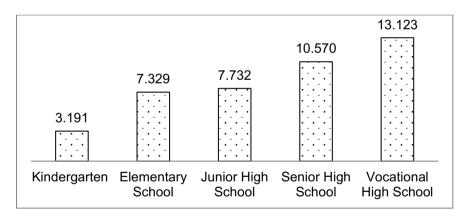


Figure 1. 17: Average Number of Teachers per School in West Kalimantan in 2014 (Education Quality Assurance Office of West Kalimantan Province - LPMP Kalbar, 2014).

The Education and Culture office (2015) stated that in the 2015/2016 period, even with the average number of teachers per school, as described in figure 1.17, West Kalimantan still required approximately 80.000 more teachers. That figure consists of 5,400 in elementary schools, 2,713 in junior high schools and 1,472 in senior high schools. Additionally, they also require 92 more teachers for vocational high schools, 290 for Islamic junior high schools and 123 teachers for Islamic senior high schools. Besides the

shortage, of teachers, another problem that the government of West Kalimantan face is related to the quality of teachers. As mandated by Law No 19, 2005, teachers of all school levels are required to have at least four competencies namely pedagogic, personality, social and professional competence, whereas academically, their educational level should at least be a bachelor's degree (S1). The Education and Culture Office of West Kalimantan Province (2015) reported that quite a significant number of teachers at all school levels were not qualified to teach. Figure 1.18 below describes the comparison of the number of unqualified teachers across all school levels.

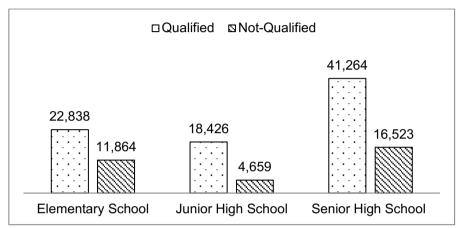


Figure 1. 18: Comparison of Qualified teachers at different school levels (Education and Culture Office, West Kalimantan Province, 2015; *West Kalimantan in Numbers*-KDA, 2015: p.51).

As can be seen from figure 1.18, in the region of 50% of teachers in elementary schools were not qualified. The primary reason that teachers were not able to meet the qualification was that there are several minimum standards that a teacher should achieve, in order to be a qualified teacher; one of them is to have a bachelor's degree. Nevertheless, up until now, there are still a vast number of unqualified teachers. Most of the unqualified teachers are classified as 'unqualified' because their level of education is less than a bachelor's degree. According to the Education and Culture Office of West Kalimantan Province (2015), 52.7% of teachers had a qualification that is inferior to a bachelor's degree. Moreover, BPS-Kalbar (2014) reported that 39.42% of teachers had a diploma, while 36% only graduated from senior high school.

1.4.4 School participation percentage

In developing the quality of education in West Kalimantan, the government has also focused on improving school participation at all levels. However, from 2011 to 2013, participation in elementary and junior high school appeared to be stagnant. Figure 1.19

below describes school participation at Elementary School (ES), Junior High School (JHS) and Senior High School (SHS) from 2011 to 2013.

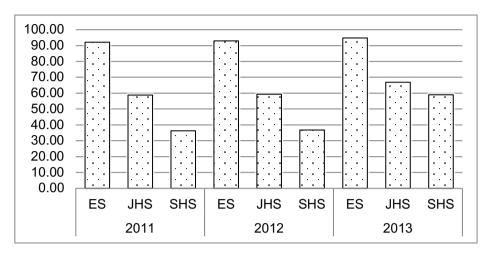


Figure 1. 19: Percentage of School Participation in West Kalimantan Province in 2011-2013 (BPS Kalbar, 2015).

As summarised in chart 1.19, the highest school participation rate was at elementary school level. Within the period of 2011 to 2013, as shown above, the participation rate reached over 90%. The second highest rate was at junior high school level with roughly 60%. In general, there was no significant improvement in participation with respect to both school levels during the period. In contrast, participation at senior high school from 2012 to 2013 demonstrated a significant improvement. In 2012, school participation was less than 40%; however, in 2013, it increased to nearly 60%.

Overall, the Government of Indonesia continues to evaluate its effort in developing the quality of education in West Kalimantan. As explained previously, for decades, a number of programs have been launched by government in improving the education quality in Indonesia, particularly in promoting teachers' professional learning in school, however, the quality of education, principally the performance of teachers and pupils, remains poor. In this respect, there were limits to how far national programs of teachers' professional learning and development could be responsive to local conditions that influenced scope for teachers to improve their classroom practice in ways which improve students' learning. There were also limits to how far standards-based national policy reform involving curriculum and assessment reform and comparison of schools nationwide by their pupils' performance on national examinations.

These national strategies were directed towards the improvement of schools and improvement in the quality of support they provide for teachers' and pupils' learning, and

as such they provided an important framework for improving a national education system and the quality of learning that could be achieved by pupils. Nevertheless, more contextualised forms of support were also necessary, and the Government of Indonesia had rightly identified the need for these more locally responsive approaches by setting up local cross-school communities of practice for elementary teachers and subject teachers in junior and senior high schools across Indonesia. Given the size, scale and diversity of the Indonesian education and school system this was no small achievement. Although variable in the ways they function, these communities of practice, in principle at least, provided teachers working at schools in similar local contexts across the nation invaluable opportunities to meet together regularly in order to plan teaching collaboratively and to exchange and develop new classroom ideas and practices appropriate to the school and classroom contexts in which they work. The research that I report in this thesis aims to build further on the notion of localised, contextualised learning and supports for learning (as exemplified in Indonesia by the national program of professional communities of practice) by investigating how local school-based approaches based on school self-evaluation and organisational learning can improve teachers' professional learning.

In this context, schools can play a more significant role in improving the quantity and quality of support they provide for the learning of teachers and the pupils whom they serve. They could attempt something different in order to promote and support change, improvement and development in teachers' and pupils' learning. In this case, schools have the potential to initiate such change in their own local contexts. But schools can only be expected realistically to undertake effective change strategies if they in turn are properly financed and supported in facing up to the deep-rooted barriers to learning discussed so far in this chapter. Properly supported, schools have an important role in addressing the problems associated with improving teachers' professional development and student learning in rural and urban areas. In this research, school self-evaluation (SSE) and organisational learning (OL) approaches were chosen as ways for supporting schools to make improvements in their own context of development and circumstance. Theoretical and empirical insights related to school self-evaluation and organisational learning are discussed in the following chapter.

CHAPTER 2. LITERATURE REVIEW

A key strand of the argument developed in chapter 1 was the need, alongside Government programs of reform and professional development support, for localised, school-based approaches to improving the quality of classroom teaching and hence the quality of pupils' learning. At the heart of such processes is teachers' professional learning. Without continuous and locally relevant modes of teachers' professional learning it is difficult to envisage locally appropriate and sustainable improvements in the quality of teachers' classroom practices and pupils' learning. An important premise here is that, compared to the more generalised programs of professional development support administered by national and regional government and their agencies, school-based approaches are more likely to be cognisant of and responsive to the local constraints, limitations, challenges as well as opportunities that influence teachers' professional learning and, more broadly, the learning and school and classroom experiences of both pupils and teachers.

In particular, I introduced the idea that school self-evaluation and organisational learning approaches might inform effective, localised and contextualised approaches to improving the quality and local relevance of teachers' professional learning. Little or no research has been carried out into such school-based approaches to improving teachers' professional learning in Indonesia and in West Kalimantan in particular. Understanding how school self-evaluation (SSE) and organisational learning (OL) approaches can be developed by schools, especially schools facing the challenges outlined in chapter 1, will, I hope, help us understand more fully how school-based approaches can add to improvements alongside and in conjunction with government policy reform and teacher support programs on a national, regional and local scale.

Consistent with this argument, in chapter 2 I aim to consider and review research about school-based approaches to improving teachers' professional learning. In section 2.1, I discuss school effectiveness research; how it has been defined, how this type of research is relevant and contributes to an understanding of the research I carried out; how school effectiveness research has been conducted and what critiques have been developed in relation to it. In section 2.2, I discuss school improvement approaches to enhancing leadership and the quality of teaching and learning in schools. In section 2.3 I develop the argument that the quality of school experience and the quality of classroom teaching and learning is sustained and improved through promoting teachers' professional learning (PL), especially PL in schools. I discuss what school conditions and

leadership are needed in order to promote and embed locally appropriate and responsive forms of teachers' PL in section 2.4. In section 2.5, I discuss the potential of undertaking school self-evaluation as a form of organisational learning strategy for establishing improved PL in schools. In section 2.6, I discuss the rationale for attending to and examining teachers' values and practices as a powerful starting point for school self-evaluation processes aimed at improving PL in school. I conclude this chapter by presenting the research questions that have shaped development of the research I report in this thesis.

Overall, in developing the literature in this chapter, I began by searching for prior landmark works that have been central or pivotal to the topics I discussed in this research (see: Lau and Kuziemsky, 2017: p. 13), particularly in regard to school effectiveness research, school improvement research, teachers professional learning, school organisational learning and school self-evaluation survey. To do so, I considered the empirical studies or conceptual research findings, which initiated researches on the topics, framed research problems and questions differently, introduced new methods or concepts, or generated further discussion or debate. To search for the relevant studies and theories, I used both online and offline databases. The offline databases in this respect referred to accessible libraries both inside and outside of university of Leicester, while the offline ones referred to reputable journal databases and publishers' websites.

After collecting the landmark studies and theories, I then searched for further researches or projects which followed up, modified, used in different context and adopted each of the landmark studies. In addition, I also searched for further researches which compared or contrasted the landmark studies with other theories or studies. To make my review more comprehensive, I also considered the theories and researches which criticised and synthesised the landmark theories and researches. Furthermore, after gathering the related researches and theories, I then considered the ages of them. When applicable, I only involved the latest version which were accessible. Now I turn to discuss school effectiveness culture in the following section.

2.1 The School Effectiveness Research (SER) Approach

SER is concerned with identifying the variable effectiveness of schools within a sample for influencing pupil attainment, attitude and behaviour outcomes, and the in-school factors responsible for such variation. Scheerens (2015: p. 80) describes SER as 'the scientific approach to determine the causal influence of malleable conditions of schooling'. Researchers in this tradition have tended to use an input-process-output

model, where inputs are student characteristics (e.g. gender, ethnicity, prior attainment); processes are school-level factors (e.g. student organisation, teaching or leadership practices); and outputs are academic attainment and (less often) non-cognitive outcomes, such as behaviour (e.g. Rutter et al. 1979; Mortimore et al. 1988). Scheerens (2015: p. 80) explain that school effects are usually, assessed in a comparative way, e.g., by comparing average achievement scores between schools. He continued that in order to determine the 'net' effect of malleable conditions, like the use of different teaching methods or a particular form of school management, achievement measures have to be adjusted for intake differences between schools. Eventually, he summed up that for this purpose student background characteristics like socioeconomic status, general scholastic aptitudes, or initial achievement in a subject are used as control variables. By measuring a school's outputs and correcting for input characteristics, SE researchers are able to calculate the extent to which a school 'adds value' to students' attainments (Reynolds et al. 1996). In this regard, Scheerens (2015: p. 80) added:

In the most general sense 'school effectiveness' refers to the level of goal attainment of a school. Although average achievement scores in core subjects, established at the end of a fixed program, are the most probable 'school effects,' alternative criteria like the responsiveness of the school to the community and the satisfaction of the teachers may also be considered (Scheerens, 2015: p. 80).

Overall, Sammons et al. (1997: 160), describe that an effective school is 'one in which students progress more than might be expected on the basis of their intake characteristics'. The identification of in-school factors associated with effectiveness might involves qualitative research in a subsample of schools, and the use of surveys to generalise across the wider population (e.g. MacBeath & Mortimore 2001). SER operates on the assumption that effective schools share observable characteristics which, once identified, can be used to improve the performance of less effective schools (Teddlie & Reynolds 2000). SER's largely quantitative approach, and use of large datasets, reflects this aspiration of generalising a model of school effectiveness and between-school variation across a range of contexts at scale (Reynolds et al. 1996). In this section, I present a number of discussions regarding the SER approach, including the finding of SE (section 2.1.1), critical discussion of the SER tradition (section 2.1.2), factors making school effective (section 2.1.3), and criticisms to SER (section 2.1.4).

2.1.1 Findings from SER

Summarising learning from three decades of SER, MacBeath and Mortimore (2001) identify a broad consensus that there *is* a 'school effect' which accounts for something

in the range of 5-15% of variation in students' academic attainment. Lest this seem insignificant, in the UK context this translates into the difference between seven grade Cs at GCSE or six grade Es for the average student. This point can be elaborated with reference to *School Matters* (Mortimore et al. 1988), the first major SER study of primary schools in England. This landmark longitudinal study followed two thousand 7-year-olds from 50 schools over a four-year period and aimed to establish whether schools were differentially effective in promoting students' academic, affective and behavioural outcomes, and if so, which factors contributed to a positive effect. The team found that schools had a variable effect on cognitive and non-cognitive outcomes (see Table 2.1).

Table 2. 1: Percentage gains and losses measured against average school in sample

	Least effective school	Most effective school
Reading	-19%	+28%
Math	-21%	+21%
Attendance	-4%	+5%

Sample size: 2000 students attending 50 primary schools. Math and reading data reflect attainment in researcher-administered tests over a three-year period (Source: Mortimore et al. 1988). The study found schools to be responsible for 9% of variance in students' attainment in reading at the end of the third year, and for 24% of variance in their progress over the three years. For mathematics, the figures were similar (11% and 23% respectively). So strong was the magnitude of variation that Mortimore et al. (1988: 217) concluded that 'disadvantaged children in the most effective schools can end up with higher achievements than their advantaged peers in less effective schools.'

Mortimore et al. (1988) used a variety of means for collecting evidence of schools' internal characteristics, including interviews with headteachers, teachers and parents on school and classroom policies and home support; systematic lesson observations; and questionnaires with teachers and students. Based on the analysis of these data alongside the statistical findings, the team identified 12 key characteristics of effective schools, including: purposeful leadership of the staff by the headteacher; the involvement of the deputy head and teachers in curriculum planning and decision-making; and a positive school climate. Two of the study's authors (Sammons et al. 1995) subsequently produced a similar list based on a wider review of SER (see Box 2.1).

1. Professional leadership - firm and purposeful - a participative approach 6. High expectation - high expectation all round - communicating expectation

- the leading professional

2. Shared vision and goals

- unity of purpose
- consistency of practice
- collegiality and collaboration

3. A learning environment

- an orderly atmosphere
- an attractive working environment

4. Concentration on teaching and learning

- maximisation of learning time
- academic emphasis
- focus on achievement

5. Purposeful teaching

- efficient organisation
- clarity of purpose
- structured lessons
- adaptive practice

- providing intellectual challenge

7. Positive reinforcement

- clear and fair discipline
- feedback

8. Monitoring progress

- monitoring pupils' performance
- evaluating school performance

9. Pupils right and responsibilities

- raising pupils' self-esteem
- positions of responsibility
- control of work

10. Home-school partnership

- parental involvement

11. Learning organisation

- School-based staff development

Box 2.1 Eleven characteristics of effective schools (Source: Sammons et al. 1995)

In similar vein to Mortimore et al. (1988), Sirisookslip, Ariratana and Ngang (2015: p. 1031), through their research involving 254 administrators and teachers from schools under the Office of Kalasin Primary Educational, found that there are two types of leadership styles of school administrators, namely supportive leadership and participative leadership styles which have significantly affecting teacher effectiveness. In addition, they added, both leadership styles have been jointly predicted teacher effectiveness at 56.80 percent at the significance level as 0.01. in this regard, they concluded that in order to increase teachers' working effectiveness, administrators should promote, practice, and improve these two leadership styles, namely supportive leadership and participative leadership styles regularly.

2.1.2 Critical discussion of the SER tradition

SER has contributed to our understanding of the variable impact on student attainment of different schools (Mortimore et al. 1988), departments (Sammons et al. 1997) and teachers (Day et al. 2007). SER has highlighted the significant impact that students' background characteristics such as age, gender and socioeconomic status have on their performance in school, and demonstrated that alongside this, schools have a significant and quantifiable effect across a range of cognitive and non-cognitive outcomes (MacBeath & Mortimore 2001). When it comes to students' academic attainment, schools *do* matter, especially in how they are organised and lead as social institutions.

SER is less successful in its aim to produce transferable, actionable knowledge for use in schools. Effectiveness characteristics do not in themselves lead a path to school improvement (Hallinger & Heck 2011). Furthermore, the characteristics listed in Box 2.1 are ambiguous, open to multiple interpretations (Wrigley 2004). For example, what is 'professional leadership' (Sammons et al. 1995) and how does it differ from 'purposeful leadership' (Mortimore et al. 1988)? Similarly, in describing 'an attractive working environment' Sammons et al. (1995) refer to the maintenance and repair of buildings as well as the display of students' work, combining what appear to be two quite separate issues, one aesthetic and the other pedagogical. Eliott (1996) has argued that the effectiveness characteristics comprise a mixture of *a priori* truths (e.g. 'concentration on teaching and learning') and value-based assertions which reflect a social control ideology (e.g. 'consistency of practice). While a school's effectiveness necessarily depends on its context and the agendas of its stakeholders, local and national, the effectiveness characteristics are presented context-free, as if transcending the particular phase, location, community or aims of a school.

School effectiveness research (SER) developed from concerns of researchers to understand whether family background or the school a child attended was the best predictor of students' learning attainment outcomes. The landmark 'Coleman Report' (Coleman et al. 1966) collected data on the literacy and numeracy attainment of over 600,000 students from a nationally representative sample of schools in the USA. He and his team were able to compare average student attainment at different schools and so measure variation between schools. They concluded that socio-economic background and family characteristics were far more influential on students' learning attainment outcomes than school factors a school's expenditure on each child, library size). Indeed, they reported that there was very little variation between schools in terms of their effects on students' learning attainments (Coleman et al., 1966).

In contrast to the Coleman report's conclusions which suggested it was the family rather than the school which determined a child's educational success, a relatively small-scale study in the UK drew different conclusions. *Fifteen Thousand Hours: Secondary schools and their effects on children* (Rutter et al. 1979) was the first SER study conducted in England. The study involved 12 secondary schools in London. Rutter and his colleagues wanted to measure school effects on students' academic and behavioural outcomes and identify the features of the school which might account for any between school differences in students' learning attainment outcomes. Rutter and his colleagues

developed their research into school effects by distinguishing between school inputs, processes and outcomes. School processes were school-level factors such as the social organisation of schools and the learning environment provided for students. Rutter et al. (1979) conducted fieldwork in three pilot schools to identify potentially important school-level factors. They collected data through informal observations and interviews with teachers and students. Preliminary fieldwork involved informal observations and interviews with teachers and pupils at three pilot schools and helped Rutter and his team identify possible school level factors which may account for variation between schools in students' learning attainment outcomes. On the basis of their preliminary work they designed survey instruments to a number of school variables which they theorised might influence pupil attainments including academic emphasis, teaching methods, rewards and punishments, students' working conditions, students' responsibilities and participation in school, the stability of class and friendship groups, and the organisation of staff (Rutter et al., 1979:107).

The conclusions from their study support the view that schools are important influences on children's learning outcomes. They were able to report considerable variation between schools in students' academic and behavioural outcomes and explained these in terms of differences in the processes of schooling which they had identified at the start of the study to be of potential importance. Through analysis of their survey data, they found that differing degrees of academic emphasis, kinds of teaching methods, systems of reward and punishments, and levels of students' responsibilities correlated systematically with student learning and behavioural outcomes. Rutter and his team concluded, in contrast to Coleman (1966) that 'children's behaviour and attitudes are shaped and influenced by their experiences at school, and, in particular, by the qualities of the school as a social institution' (Rutter et al., 1979: 179). This can be seen as a landmark development for research interested in exploring further the independent effects of the school on students' learning and behavioural outcomes and the tradition of SER began to grow from this question.

By the 1990s, Reynolds & Creemers (1990: 1) could confidently argue that, 'schools matter, that schools do have major effects upon children's development and that, to put it simply, schools do make a difference'. In this regard, an important achievement of school effectiveness research has been to develop an explicit evidence base supporting the claim that schools influence the learning attainments of pupils irrespective of their social background (e.g., Marks, 2010: p. 283; MacBeath and Mortimore, 2001; Coleman in Mortimore and MacBeath, 2001; and Sammons & Bakkum, 2011: p10). In further

detail, Sammons & Bakkum (2011: p10) describe that the heart of SER is concerned with questions of 'how we can try to measure the influence of schools, and by implication, of teachers, on their students?'. They added that school effectiveness research (SER) seeks to 'disentangle the complex links between the student's 'dowry' (the mix of abilities, prior attainments and personal and family attributes) which any young person brings to school, from those of their educational experiences at school'.

Another landmark study in England conducted by Mortimore et al., (1988) known as the 'School Matters longitudinal junior school study' reported that over a three-year period, disadvantaged pupils made greater progress in more effective schools than similar pupils in the least effective ones. More specifically, they reported that the influence of the school was approximately four times greater than the influence of the home in reading progress, and ten times greater with respect to mathematics. Furthermore, Sammons & Bakkum (2011: p11) describe that a number of studies have sought to quantify the size of school effects on student outcomes. They report that the effect sizes are generally found to be much greater in studies of developing countries and seem to reflect the greater influence of resources, and variability in the availability of trained teachers and textbooks and materials than in schools in developed country contexts. In this regard, they argue that, on average, schools account for around 5 -18% of the achievement differences between students after controlling for social and family background differences.

In West Kalimantan Province context, school roles in helping pupils' attainments is also significant, and even greater in rural areas, where parents' educational and socioeconomic level is lower (see: Supina, Syamsiati & Sabri, 2014; Renesius, Mashudi & Asriati, 2014; and Darmadi, 2006). In such an education context, schools in West Kalimantan, especially the competence of the teachers and the head teachers, played a significant role. For the last decades, there have been a number of researchers investigated about these issues in West Kalimantan such as Gidot, Mashudi & Matsum (2014); Sutomo, Rohendi & Putri (2011); Nuchiyah (2007); and Samion (2006). Gidot, Mashudi & Matsum (2014) investigated the relation between teacher professional competency in teaching toward the students learning interest. He found out that the professional competency of teachers affected the pupils' interest in learning; the interest then led them to the improvement of learning. Nuchiyah (2007) focused on investigating the headteacher leadership on the pupils learning. She found out that head teacher leadership affects 46% of student learning. Meanwhile, teacher performance affects 53%. The effect of those both factors all together will affect 67% of students learning. In general, as also concluded by Samion (2006), the leadership pattern that mostly

improved the pupils' learning was the one that promotes discipline for both teachers and the pupils. Considering the importance of schools' roles in promoting pupils' learning in West Kalimantan schools, as explained previously, developing effective school would give even greater positive impact on the pupils' learning improvement in the province. In this regard, researchers have proposed a number of factors which make schools effective, and I turn to discuss these characteristics of effective schools in the following subsection.

2.1.3 What make schools effective?

School effectiveness research points to the importance of the school by identifying independent school effects on the learning attainments of pupils. A summary of SER insights on the characteristics of schools that are associated with improvements in pupils' learning attainments is found in an influential review of SER research by Sammons and her colleagues (1995). Their review was based on research predominantly conducted in developed country contexts. They concluded that the following 11 factors characterised effective schools:

- professional leadership (firm and purposeful, a participative approach, the leading professional);
- 2. shared vision and goals (unity of purpose, consistency of practice, collegiality and collaboration);
- 3. learning environment (an orderly atmosphere, an attractive working environment);
- 4. concentration on teaching and learning (maximisation of learning time, academic emphasis, focus on achievement);
- 5. purposeful teaching (efficient organisation, clarity of purpose, structured lessons, adaptive practice);
- high expectations (high expectations all round, communicating expectations, providing intellectual challenge);
- 7. positive reinforcement (clear and fair discipline, feedback);
- 8. monitoring progress (monitoring pupil performance, evaluating school performance);
- pupil rights and responsibilities (raising pupil self-esteem, positions of responsibility, control of work);
- 10. home-school partnership (parental involvement);
- 11. learning organisation (school-based staff development).

MacBeath and Mortimore (2001: p. 9) summarised that there are at least three aspects regarding schools that are vital for school effectiveness, namely, teachers, departments and subjects. They remarked that the individual classroom and the individual teacher

provide useful starting points for examining effectiveness. Additionally, their research also confirmed that the effect of the teacher is powerful. In this regard, they remarked that most researchers appeared to agree with their assertion.

MacBeath and Mortimore (2001) believe that the capacity of teachers in all departments or subjects would matter the most in forming the effectiveness of the school. Therefore, the capacity of teachers, in this case, becomes crucial. This belief is also supported by Marks (2010: pp. 281-282). He conducted research in Australia by investigating the aspect of school that is important in improving students' performance. He indicated that schools, in which the teachers are viewed by students as knowing their subject well, are well-prepared and organised, good communicators, maintaining interest and discipline, tend to have higher levels of student performance.

In similar vein with MacBeath and Mortimore (2001), Marks (2010) and Sammons & Bakkum (2011: p11) summarise that teachers play a crucial role in forming an effective school. They explain that teacher effects emerge strongly in primary school studies, for example, in Australia; the percentage of variance in value added measures of achievement, controlling for intake differences in students' prior attainments and background characteristics, put the class contribution at 55% for mathematics and 45% in English at the primary level. The combined school and teacher effect may vary between 15% and 50%, depending on the outcome and sample studied. In an international review, Van Damme et al. (2006: 16) argue that school effects are 'moderately large'.

In addition to teachers' role, in a school system that is divided into departments or subjects, such as in junior or senior high school, 'subject departments make more difference to individual achievement and progress than the entire school level' (MacBeath and Mortimore, 2001: p. 10). They added that according to research conducted by Luyten (1994) there was a 40% variance with regard to the subject department level, with only 15% of the variance attributable to the whole-school effect. MacBeath and Mortimore (2001: p. 10) noted that this fact was also supported by a number of other researchers, for instance Smith and Tomlinson (1989) and Thomas (1995b), who established that there was a positive correlation among different subjects and between individual subject levels. This entire school level would then contribute in improving pupils' learning.

In addition to these factors, Sammons & Bakkum (2011: p15) report that school effectiveness research has drawn attention to the importance of school leadership for

contributing to the effectiveness of schools. They added that the leadership judged to be poor is a well-documented feature of ineffective schools according to inspection evidence in the UK. In their influential meta-analysis, Robinson and her colleagues (2008) conclude that transformational leadership is less likely to result in strong effects upon pupil learning and achievements compared with instructional leadership. They argue that because pedagogical/instructional leadership is focused on effective teaching and learning it is likely to have a larger impact on pupil outcomes. Sammons & Bakkum's (2011: p15) analysis showed that the impact of pedagogical leadership is nearly four times that of transformational leadership. Moreover, as Sammons & Bakkum (2011: p15) report, a great deal of research has highlighted the headteacher's role in introducing change and improvement to ineffective or failing schools and its importance for improving the quality of learning in schools in disadvantaged contexts. A major review for the National College of School Leadership highlights 'strong claims' about school leadership, including: (1) almost all successful leaders draw on the same repertoire of basic leadership practices, and (2) the ways in which leaders apply these basic leadership practices – not the practices themselves – demonstrate responsiveness to, rather than dictation by, the contexts in which they work. Overall, with regard to the role of leadership in school effectiveness, Sammons & Bakkum's (2011: p15) concluded that school leadership is second only to classroom teaching as an influence on pupil learning.

Despite the apparent clarity of school effectiveness findings, there remain difficult questions that have attracted sustained attention in the field. Myers (1994), cited in MacBeath and Mortimore (2001: p. 8) argue that it is not straightforward to decide which characteristics or combination of characteristics an ineffective school might lack which it would need to develop in order to become more effective. MacBeath and Mortimore (2001: p. 14), question the international reach and relevance of the term 'effective school' as conceptualised through research mainly undertaken in developed country contexts. They argue that factors that influence school effectiveness may differ from one country to another, and within countries, from one region to another.

A number of cultural factors underline differences in school effectiveness from one country to another. MacBeath and Mortimore (2001: p. 14) noted that even within a single country, cultural context plays a significant role in school effectiveness. Reynolds and Farrell (1997) in MacBeath and Mortimore (2001: p. 15) noted several cultural factors that make each country different, for instance the high status of the teacher and the recruitment of high-achieving students into teaching, religious traditions and cultural aspirations that place a high value on learning and education. Out of all those differences

discussed above, Myers (1994), as cited in MacBeath and Mortimore (2001: p. 8) suggested that whatever factors are associated with school effectiveness, research needs to be clearer about how different factors combine to contribute to or detract from a school's effectiveness in improving pupils' learning.

2.1.4 Criticisms of School Effectiveness Research

Overall, over the last 20 years, there have been a number of researchers that have criticised school effectiveness research such as Thrupp (2001), Scheerens, Bosker and Creemers (2000), Teddlie and Reynolds (2000) and Ghilay (2002). Thrupp (2001: p. 17) for example, criticises at least two main features of school effectiveness research, namely the over-claiming of findings and the under-theorising of key school effectiveness processes and concepts. Thrupp (2001: p. 17) explains that most school effectiveness research that he reviewed were 'offering, or being seen to offer, too many answers to problems faced by schools and students'. In fact, Thrupp (2001: p. 17) along with Weindling (1999, p. 341), argue that school effectiveness research (SER) has neglected the effects of socio-economic status (SES) on student's achievement levels, particularly the so-called contextual effects. They argue that in low socio-economic status schools, the processes of schooling are markedly different to those in high socioeconomic status schools and so the characteristics of schools in these different contexts need to be different if the schools are to be effective. In similar vein, Weindling (1999, p. 214) argues that there cannot be a 'one size fits all' model' of school effectiveness guiding school practice and leadership in schools in different contexts.

Thrupp (2001: p. 22) goes on to explain that school effectiveness research tends also to be under-theorised processes and concepts. There is, she argues, lack of clarity about how school effectiveness research defines and characterises the 'school effect'. Thrupp (2001: p. 22) argues that school effectiveness research is most theoretically vulnerable when it privileges the effects of school organisation over the effects of school composition (e.g. pupils' SES) in order to establish an independent school effect. With regard to this case, Thrupp (2001: p. 22) explains that the roots of this problem go back to the British study of Rutter and colleagues (1979) and the US study of Brookover, Beady, Flood, Schweitzer, and Wisenbaker (1979). Rutter's study used the notion of school's 'ethos' to explain away processes which might have alternatively be understood as the result of school social composition or school mix. Rutter and colleagues hypothesised that the mean intake characteristics of a school, its 'balance of intake', could be one important variable determining ethos. The presence of a relatively high

concentration of pupils in the upper ability groups may work to the advantage not only of the pupils themselves but also of their peers. In a similar way, a largely disadvantaged intake might depress outcomes in some cumulative way over and above the effects of a disadvantaged background on an individual pupil's learning outcomes.

In addition to Thrupp (2001), Sheerens, Bosker and Creemers (2000: p. 140) argue that school effectiveness research has also often been criticised in terms of its 'foundation issues', which refers to the scope of the concept of the term school effectiveness itself. Sheerens (1993, in Sheerens, Bosker and Creemers (2000: p. 140) explains that one of the questions that arises in the school effectiveness concept is whether or not school effectiveness can be accurately measured with reference to examination results of just one or two school subjects; they ask whether all subject matter areas of the curriculum should be taken into account in order to generate valid measures of school, effectiveness. With regard to this issue, a study by Scheerens and Bosker (1997) concluded that, instead of involving only a certain number of subjects in a school, the school effectiveness research should address all subjects in order to describe the effectiveness of the school.

Moreover, Teddlie and Reynolds (2000 in Ghilay, 2002: p. 95) list a number of other deficiencies in school effectiveness research as follows.

- There are very few case studies of effective or ineffective schools that would show the interrelationships between school process variables and to paint a picture of improvement for practitioners in relation to the reality of school processes. The absence of rich case study explanations reduces the practitioner relevance of the effectiveness research and makes the transfer of knowledge to improvement programmes difficult.
- School effectiveness studies are very deficient at the level of the study of 'processes' rather than factors, since effectiveness researchers have considerably more experience at the level of school organisational factors. School processes defined in terms of attitudes, values, relationships and climate have been somewhat neglected, although school improvement needs data related to these factors within schools, because of their centrality to the process of improvement.
- Reynolds and Teddlie (2000 in lyer 2008: p. 55) argue that school effectiveness research has focused more on successful schools; hence the factors that have been identified to enhance school effectiveness may only apply to successful schools and less so or not at all to unsuccessful schools.
- School effectiveness studies usually present a picture of a school at a certain point

- in time instead of a process of effectiveness evolving over time. School improvement needs ideas about how schools came to be effective (or ineffective) over time in order to develop change and improvement strategies based on such processes.
- Schools effectiveness research has rarely been 'fine grained' enough to provide information that is useful to the challenges of school improvement. Schools need more than generalised patterns of data on relationships between school processes and outcomes for *all* schools. Schools and policy makers need to understand how different factors operate and combine to operate to lead to improvements in learning in particular schools in different socio-economic and cultural contexts.

Despite its limitations, school effectiveness research has usefully demonstrated that there is a school effect independent of social background factors of pupils. In other words, effective schools can improve the conditions and outcomes of pupils' learning irrespective of their social background. However, to unpick the processes through which schools in different contexts effectively promote such rich learning conditions, I needed to consider the more qualitative and mixed methods kinds of research that have been developed by teams working in the school improvement tradition. I turn to discuss this tradition of research in the following section.

2.2 School Improvement Research

School improvement has been defined as a systematic, sustained effort aimed at a change in learning conditions and other related internal conditions, in one or more schools, with the ultimate aim of accomplishing educational goals more effectively (see: Jamieson & Russ, 1996: p.15). This broad definition expresses a focus beyond pupils' performance on tests of learning attainment discussed in the previous section. Instead, school improvement research points towards the importance of sustainable change, school conditions of learning, teaching and educational goals; in other words, this tradition recognises the importance of understanding relations between processes and outcomes and how they support sustained growth and development at different levels of the school organisation. Harris, Jamieson & Russ (1996: p.15) recognise learning and teaching as a characteristic of school life and practice that stretches beyond the classroom to pervade all facets of school life; they define school improvement as a "systematic attempt to enhance teaching and learning which have focus both in the classroom and in the school".

From these definitions and the work of other researchers working within this framework (e.g., Raihani, 2008: p.488; Gur, Drysdale & Mulford 2005: p. 545; Drysdale, Goode &

Gurr, 2009: p. 701), understanding and promoting school improvement involves understanding and working with multiple processes. However, both school effectiveness and school improvement research traditions develop evidence in support of their claim that the school has an important influence both directly and indirectly on pupils' achievement. Schools have a crucial role to play in the 'lives and learning of their pupils now and as they inherit the daunting and exciting challenges that confront them as citizens in the twenty-first century' (MacGilchrist, Myers & Reed, 2004: p. 1).

In the context of school-based education in West Kalimantan, where a number of schools lack access to the government's professional learning programmes, the need for schools to initiate change and improve themselves, by, for example, developing programmes of teacher support and opportunities for teachers' learning becomes even more crucial (see also Yang, Secchi & Homberg 2018: p162). In order that schools fulfil their potential and capacity to develop pupils' and teachers' learning, schools themselves need to learn and develop locally appropriate ways of supporting improvements in the conditions of learning.

Durrant & Holden (2006: p.xi) recognise the importance of building internal capacity for improvement; they take it to mean the ability within schools to learn continuously, in order to respond creatively to rapidly changing and unpredictable socio-political environments and local variables and changes, while holding fast to shared principles and values. A number of researchers emphasise 'smart', 'intelligent' and 'learning' processes of school improvement. Perkins (1992) proposed the concept of 'Smart School" and MacGilchrist, Myers & Reed (2004) suggested the concept of 'Intelligent School". Common across these models of school improvement is the centrality of fostering processes and expectations of learning throughout the school organisation.

Smart School

According to Perkins, (1992), smart schools exhibit three characteristics: (1) they are informed: administrators, teachers, and pupils know a great deal about human thinking and learning and how to optimise them; they also have important insights into school structure and collaboration and how they work best to optimise learning; (2) they are energetic: positive energy is embedded in the school's structure, style of administration, and treatment of teachers and pupils; and (3) they are thoughtful places, in the double sense of being caring and mindful.

Intelligent School

MacGilchrist, Myers & Reed (2004) construe schools as 'Intelligent'. For MacGilchrist, Myers & Reed (2004: p.28) professional leadership and management is focused on learning and teaching and supported by staff development. The characteristics of the 'intelligent school' cover professional leadership, shared vision, and goals, a learning environment, concentration on teaching and learning, purposeful teaching, high expectations, positive reinforcement, monitoring progress, pupil rights, responsibilities, home-school partnership, and a learning organisation. MacGilchrist, Myers & Reed (2004: p. 28) believe that the intelligent school brings these core and related characteristics together to provide a coherent experience for pupils in each classroom, department and the school as a whole, as part of its vision related to improvement. The defining feature of schools that are 'Intelligent' is an explicit commitment to fostering continual learning opportunities and processes that involve all stakeholders. Davis and Daley (2008: p. 51) argue that schools with a healthy internal culture centred on continual learning is a key characteristic of an agile and responsive organisation.

Learning School

A third 'type' of school that is helpful in clarifying what can be understood by school improvement is Senge's (2000, p. 5) notion of the 'School that learns' or the 'Learning School'. Senge argued that a school can be re-created, made vital, and sustainably renewed not by fear or command from external agencies, and not merely by policy regulation, but by adopting the disciplines of school organisational learning. In this regard. Senge introduced five disciplines of a learning school, namely, (1) building a shared vision; in learning organizations, the vision is created through interaction with the employees in the enterprise, (2) systems thinking; systems thinking is cognisant of, understands and takes into account consequences and processes throughout the entire system of the school in decision making and activities, (3) mental models; employees develop a theory and asset of values and principles which shape practice and decisionmaking, (4) team learning; to accomplish excellent functional team dynamics, teamlearning is considered of primary importance. It is the discipline by which personal mastery and shared vision are brought together, and (5) personal mastery; occurs when an individual has a clear vision of a goal, combined with an accurate perception of reality. The gap between vision and reality drives the employee to develop and build practice, skills and knowledge towards realising the vision of the organisation.

A strength of the learning school concept is the emphasis it places on developing and paying explicit attention to its own internally rooted practices, values and understandings in relation to the purpose and key processes and outcomes of the school while, at the same time, attending to, adapting and constructively engaging with demands made by its external environment. This is believed to be much better than if a school works uncritically with an external concept without knowing whether or not the concept is suitable for its own context. Senge (2000: p.7) argues that a school that 'trains people to obey authority and follow the rules unquestioningly will have poorly prepared their pupils for the evolving world they will live in'. Instead of following others' concepts unquestioningly, the idea of the learning school involves everyone in the system in expressing their aspiration, building their awareness, and developing their capabilities together. The rich characteristics of schools making change discussed in this section provide a rich alternative to the aspiration of improving school effectiveness in schools located in various geographic locations in West Kalimantan province.

2.3 Promoting Teachers' Professional Learning (PL): a key component of improving school effectiveness

Professional learning (PL), or also known as continuing professional development (CPD), is understood as 'teachers need to keep updating their knowledge and skills continuously throughout their careers' (Cirocki & Farrel, 2019: p. 1). As discussed previously, schools that learn and are intelligent and smart recognise the importance of their roles in supporting teachers' professional learning and such schools take seriously the task of developing effective professional learning supports. These school create a culture that makes teachers' and pupils' learning a priority (Pedder, James & MacBeath, 2005: p.214). MacGilchrist et al., (2004: p. 94) in similar vein arque that the professional learning (PL) of teachers is an essential 'ingredient' in the culture of the intelligent school. With its vital and significant role in supporting and promoting enhanced pupils' learning, improving teachers' learning is developed through the building of a professional learning climate with rich opportunities in school. In addition, Liou and Canrinus (2020: p.2) argued 'Professional development goes hand in hand with professional learning when it comes to teacher practice', and they believed that such professional learning occurs when opportunities of learning are provided in professional development activities, be it formally structured or culturally cultivated (or so-called informal, school-based, or on-thejob).

MacBeath (1999, p. 150) describes a supportive professional learning climate as one in which teachers are encouraged to continue learning how to help students learn – arguably the pre-eminent purpose of professional learning. MacBeath (1999, p. 150) describes schools as 'places in which teachers learned how to teach and were enabled

to give of themselves to children to the degree that they themselves had opportunities to develop satisfying relationships and opportunities to learn'.

Given the importance of professional learning towards improved classroom practice in support of enhanced pupil learning opportunities as described above, a great deal of research attention has focused on the characteristics of effective professional learning. Pedder and Opfer (2013: pp. 541), for example, through factor analysis, identified four main dimensions of teachers' professional learning, namely, (1) internal orientation; the locus of control for changing practice in the light of learning is with the individual teacher, (2) external orientation; outward looking, drawing on a range of search strategies and resources that are external to the teacher's direct classroom teaching environment such as the web, feedback from managers and other col- leagues, and practice developed at other schools, (3) research orientation; reflect the importance of published research as an influence on teachers' practice and learning, and (4) collaborative orientation; the locus of control for changing practice in the light of learning is shared among teachers.

Furthermore, Pedder and Opfer (2013: pp. 541-542) summarise research concerning the characteristics of professional learning, such as Bolam et al., 2005; Cordingley et al., 2003; Horn and Little 2010; Huberman 1993; Hoyle 1972; Hoyle and John 1995; Lucas 1991; Stenhouse 1975; Stigler and Hiebert, 1999 Collinson and Cook, 2001; Day and Leitch, 2007; Garet et al., 2001; Day and Leitch, 2007; Garet et al., 2001; Loxley et al., 2007. From their review of research literature, Pedder and Opfer (2013) concluded that effective professional learning tends to: (1) involve teachers learning in collaboration, (2) be in contexts of classroom practice, (3) be informed by practice-focused research, enquiry-based learning and practice-based experimentation, (4) be sustained and intensive, (5) focus on subject matter (content learning) and involve 'hands-on' practice (active learning), and explicit integration with the daily life and priorities of schools and classrooms (coherent learning), and (6) involve the engagement of external programmes and partnership networks. Pedder and Opfer (2013: pp. 541) argue that enhancing understanding of the characteristics and processes of effective professional learning opportunities in schools with the characteristics explained above, is essential so that schools can develop effective strategies that are locally appropriate. They added that effective professional learning is a vital condition for school improvement through its positive influence on teachers' classroom practices and their students' learning.

Pedder and Opfer (2013: pp. 542) go on to explain that beyond the internal structures and cultures of schools, professional learning can be promoted through external

cooperation. External cooperation can take the form of teachers' participation in school-to-school and school-to-university networks and partnerships. Collaborating and coming in to contact with teachers and university researchers beyond the school enables teachers to access and engage with an expanded pool of practice ideas, resources and sources of support, increased opportunities for mutual problem solving, knowledge creation and transfer and a heightened sense of valuing professional achievement and accomplishment. To conclude, Pedder and Opfer (2013: pp. 542) argue that professional learning experiences that share all or most of the characteristics discussed above can have a positive influence on teachers' classroom practices and student learning and, as such, can be considered a key component within a school's repertoire of improvement processes.

Reporting these characteristics of effective professional learning in terms of these broad general principles is important. However further research is needed to elucidate the processes, relationships, expertise and perspectives which enable schools and teachers to embody them in their locally contextualised systems and practices. The particular focus of this research is concerned with how such principles of effective professional learning can be embodied in the systems and practices of high schools in West Kalimantan province.

2.4 Effective School Organisational Learning (OL) and Leadership Culture to Support Teachers' Professional Learning in School

A key argument that ran through my doctoral research was that asking teachers to develop effective approaches to professional learning, by, for example, combining the professional learning factors as described above, could be a significant professional and personal challenge. Teachers cannot be expected to undertake such developments on their own. Schools have a key role in supporting teachers to meet such challenge. One of the ways schools can support teachers is by adopting organisational learning strategies of improvement. Senge (2000: p. 5) argues that sustainable renewal of schools is achieved when they take an inclusive learning orientation at all levels of the organisation. In the context of the school, the learning process would need to involve leaders, teachers, administrative staff, as well as pupils. In similar vein, Pedder and MacBeath (2008: p. 208) argue that the adoption by schools of organisational learning strategies can promote successful change and embed strategies that support improved learning across teachers' classrooms throughout the school organisation. Pedder, James & MacBeath (2005: p.214) argue that if schools are to embody the conditions that optimise and sustain the quality of both teachers' and pupils' learning, they need to

develop the processes and practices of learning organisations. In similar vein, Liou and Canrinus (2020: p.2) proposed 'to take a closer look at the social practices related to teacher learning both theoretically and empirically', in developing sustainable professional learning in schools.

Davis and Daley (2008: p. 51) echoing Senge's (2000) analysis, explain that the concept of 'organisational learning' has emerged as an approach to help organisations build their learning capacity at every level of the organisation. Watkins and Marsick (in Davis and Daley, 2008: pp. 51-52) defined organisational learning as continuous, proactive and integrated in work settings. They believed that a learning organisation is dynamic. In continuous cycles, individuals' and groups' actions within the organisation are developed through interactions with the environment. Continuous reflection about such interactions are framed and interpreted within the organisation which can result in new knowledge. Gur et al., (2009: p. 701) argue that one of the key conditions to developing organisational learning is a flourishing professional learning community.

Yin, et al., (2019: p. 153) through their research, conducted in Hong Kong, involving 2106 teachers, found that 'professional learning communities positively mediated the effects of teachers' perceived faculty trust on their learning', which then lead them to an effective professional learning improvement. In their conclusion, they suggested that teachers should engage in professional learning (PL) through professional learning communities (PLCs), in order to develop and sustain the quality of their professional learning in school. Furthermore, Sutanto (2017: p. 128) conducted research in Universities in East Java, Indonesia, found that adopting organisational learning (OL), which 'provide opportunity to extend learning and creativity environment throughout university will increase many new ideas for improving its service quality'. He argues that the more people involve in the system, the more improvement of learning, creativity, and innovation process grow fast. Ell and Major (2019: p. 116) argue that methodologically, the idea of expansive learning and the structure of activity systems allows for an analysis that is partly chronological, but also recognises the interplay of key activity theory principles throughout the work of the PLC. In this way, they added, we can better recognize the significance of events and interactions.

A professional learning community is defined as educators committed to working collaboratively in an on-going process of collective inquiry and action research to achieve better results for the pupils they serve (DuFour et al., in Carpenter, 2015:18). Feger and Arruda (2008) and Bolam et al., (2005) explained that the characteristics of effective

professional learning communities also refer to organisational learning, which comprise supportive and shared leadership, shared purpose and values, a collaborative culture, problem-solving and collective inquiry on teaching, and learning and continuous improvement of the school. In addition, Bolam et al., (2005), Hidayah and Sugiarto (2015: p.44), and DuFour and Eaker (1998) agree that professional learning undertaken by teachers in collaboration and directed towards improvements in student learning, is a central characteristic of professional learning communities (PLCs). Schools develop as professional learning communities by developing shared values and a vision, shared and supportive leadership, norms of trust, respect, critical enquiry and collective learning (Bolam et al., 2005; Stoll et al, 2006). Professional learning communities aim to promote improvements in students' learning by supporting change through teachers' learning that is not individual and fragmented but collaborative and embedded in their day-to-day routine work and contexts of practice. Baan, et al., (2019: p. 74) found that teachers participating in a professional learning community appeared to stimulate them involving in more professional learning activities in school.

Considering the importance of the teachers' role in school improvement, schools need to develop appropriate professional learning supports for their teachers as a natural and central expression of the school as a and/or a school that takes its organisational learning seriously. In this case, head teachers and leadership teams play a significant role (see also: Brown and Flood, 2020, p. 1). School leaders of 'smart', 'intelligent', 'learning' schools have effective systems in place to support teachers to develop and grow in their knowledge, values and practice in order to become more skilful and professional as teachers. Durrant & Holden (2006 p. 13) argue that to improve performance, a school needs to design a leadership and management model and focus with learning for all members and stakeholders of the school community at its heart. Leadership teams also develop processes and systems for building the school's creative capacity to change and improve its learning culture.

In terms of the quality of leadership needed for managing, supporting and promoting such an organisational learning culture in school, I have found a number of models useful and persuasive. Due to constraints of space and the breadth of research I review in this chapter I provide a brief outline of the key characteristics of these leadership strategies and practices here.

Leithwood et al (2006) argue that, school leaders improve teaching and learning indirectly and most powerfully through their influence on staff motivation, commitment

and working conditions. Similarly, Phoom, et.al (2015: p. 1586), through their research, conducted in Thailand, found that school leadership as one factor to consider in improving internal professional learning quality in school. Yin and Zheng (2018; p. 140). also found that school leadership had significant effect on professional learning of teachers in China. Sammons et al. (2011: p.97) describe the importance of a model of leadership practice that promotes an orderly and favourable behavioural climate, positive learner motivation and a learning culture that predicts positive changes in pupil behaviour and attendance as intermediate outcomes that themselves promote improvement in attainment. MacBeath, (1998: p.63) through their research with school leaders in Denmark, Scotland, England and Australia reported the following core characteristics of effective leaders, (1) having a clear personal vision of what they want to achieve, (2) working alongside their colleagues, (3) respecting teachers' autonomy, protecting them from extraneous demands, (4) looking ahead, anticipating change and preparing people for it so that it doesn't surprise or disempower them. (5) being pragmatic; are able to grasp the realities of the political and economic context and they are able to negotiate and compromise', and (6) being informed by and communicate clear sets of personal and educational values which represent the moral purposes of the school. These findings align well with Leithwood et al., (1999, 2000 and 2003), Hallinger (1998), and Day et al., (2000) in terms of successful school leadership practices. They argued that the characteristics of good leadership are informed by, and communicate clear sets of personal and educational values, which represent their purposes for the school.

Leithwood et al. (in Raihani, 2008: p.482), after conducting a series of studies on school leadership, proposed a core set of basic leadership practices, namely, (1) setting directions includes building a shared vision, developing consensus about goals and priorities, and creating high-performance expectations; (2) developing people, comprises providing individualised support, offering intellectual stimulation, and modelling important values and practices; and (3) redesigning the organisation by building a collaborative culture, creating and maintaining shared decision-making structures and processes, and building relationships with parents and the wider community.

2.5 Undertaking Continuous Self – Evaluation in School: towards sustaining organisational learning

Building on the argument so far, teachers' professional learning needs to be supported by schools if it is to be sustained as an embedded feature of their work in schools and classrooms. I have also argued that in order to help teachers improve their practice through professional learning, effective and continuous organisational learning and leadership support needs to be sustained. School self-evaluation (SSE) (Macbeath, 2008) offers a powerful starting point for cultivating the quality of organisational learning and leadership required for school improvement (Pedder and MacBeath, 2008).

As part of an organisational learning strategy for school improvement, school self-evaluation plays a key role. Pedder, James and MacBeath (2005: p. 214) argue that support for deliberate and critical reflection on learning and teaching among staff, as the basis for planning future action and change lie at the heart of school self-evaluation. Merx-Chermin and Nijhof (2005: p. 139) remark that critical self-reflection of organisational processes is the essence of organisational learning. Such concepts reflect Argyris and Schon's (1978) distinction between single and double loop learning. At the single loop, a school considers its current mode of operation and practices. At the double loop, a school adopts a deeper critical stance and reflects the values and beliefs underpinning, not only current practices, but their vision and direction such practices might be serving. An additional layer of learning at the double loop raises the processes and methods of self-evaluation for critical reflection and deliberation. Merx-Chermin and Nijhof (2005: p. 84) described the differences between single- and double loop learning concept as below:

single-loop learning obtains when audit, or self- evaluation tools are used to give a picture of school culture at a given time. On the basis of this snapshot, steps are taken to address the issues raised. If attendance is low, initiatives are taken to raise attendance. If there is evidence of bullying, anti-bullying strategies are implemented. If standards are low, attainment targets are set... The second loop interrupts the linear sequence. It involves standing back and taking a critical stance on the nature and meaning of the evidence. It entails a more holistic view on how things are interlinked within the deep structure and how they manifest themselves in the surface structure. (Merx-Chermin and Nijhof, 2005: p. 84)

Merx-Chermin and Nijhof (2005: p. 84) added 'to qualify as 'double-loopers' schools need to be able to reflect on and use their experiences of evaluation, and self-evaluation, with a shared desire to learn. It requires a desire to learn, not just about the collective experience but also from our own individual responses to that experience'. In addition, they describe that if the single-loop question is 'How good is our school?' the second-loop question is 'How good is self-evaluation in our school?'. Pedder et al. (2005: p215) argue that the critical reflection involved helps replenish the learning practices, dispositions and orientations of students, teachers and the school as a community of learners. They believe that schools which best promote teachers' professional learning tend to be the ones which adopt the double loop learning mindset and practice:

'...schools best placed to support innovative practice in the classroom, and the teachers' learning that is a necessary accompaniment to it, tend to be schools that

engage in self-evaluation and have the capacity for double loop learning. These are schools willing and able to stand back from the process of self-evaluation to reflect more deeply on the experience, to consider the responsiveness of participants to the process, and to learn more about themselves, individually and collectively, through the activity they have participated in. (Pedder et al., 2005: p215)

In further detail, Pedder et al., (2005: p215) argue that critical self-evaluation involves a fundamental realignment of school management systems and processes with an orientation to learning at all levels of the school. They argue that such realignment is geared towards the development of the knowledge, practices and dispositions of teachers and their students with the aim of supporting and enhancing their own and each other's learning. Based on the researchers' explanation above, I assume that in order to be able to apply and sustain an organisational learning culture, a school needs to undertake self-evaluation by which the professional learning of teachers' and pupils can be enhanced (see: MacBeath & McGlynn, 2002: p. 1; MacBeath, 2006: p.2; and Pedder and MacBeath, 2008: p. 213). Pedder and MacBeath explain:

"In embracing self-evaluation as a form of deep, double-loop learning, a school comes to recognize at a more profound level what organisational learning means and how it helps to make the connections between individual learning, professional learning, and the school as a community of learners bound together by the institution, which they are not only "in" but actually "are". (Pedder and MacBeath, 2008: p. 213)

Meuret & Morlaix (2003, p. 2) argue that school self-evaluation is commonly seen as an internal process of school evaluation that includes representation by all the school's stakeholders – management, staff, pupils and parents. According to Hargreaves (2014: p. 5), school self-evaluation can use creative and imaginative approaches e.g., photography as well as investigative techniques e.g., questionnaires, interviews and numerical data. It can start from a spirit of curiosity as well as from an intention to improve or develop the school. Finally, it can provide greater insights into how things currently are from the perspectives of stakeholders as a basis for planning future action and change.

In the context of West Kalimantan province, where levels of OL and school-based PL of teachers is either low or non-existent, and where access to government PL opportunities are so limited, and in the light of my review and discussion of SSE literature, I considered SSE to carry rich potential as a starting point for helping schools develop more powerful OL and PL processes. School self-evaluation can be understood as a mode of organisational learning. Indeed, in this research my intervention promoted SSE (critical consideration of Values and Practice data) so that the teachers and leadership teams at each school could evaluate themselves as a school and in so doing learn more about

themselves as a school – organisational learning. In light of my 'organisational learning through SSE' intervention, each school had the opportunity at least to plan improvement strategies in light of the SSE/OL data I reported back to them.

MacGilchrist, Myers & Reed (2004: p. xvi) explain that numerous schools, because of their particular circumstances, are successful at improving themselves with limited external support. In addition, given that each school has its own set of unique conditions, school self-evaluation is a particularly well adapted strategy for enabling a school to identify its own challenges and the local solutions that work best (Raihani, 2008; Gur, Drysdale &Mulford, 2006; & Drysdale, Goode & Gurr, 2009). By resolving their own problems and obstacles to improvement, schools would be able to find the concept and strategies for improvement that works best for them.

In practice, a number of researchers have investigated the implication of the implementation of self-evaluation in schools. Hall & Noyes (2009) explain that one of the implications of their study determined that school self-evaluation does seem to be establishing new relationships within schools, although the nature of these emerging relationships is strongly mediated by cultural factors and the ethos of the particular school - which have, themselves, been transformed by the new audit technologies and emergence of the 'evaluative state' (2009: p. 21). In several other schools, they have enjoyed the intellectual challenge of working in a tightly defined new self-evaluation format in a data-rich environment and they have developed a clear sense of purpose and ownership of the interpretative process. In these schools, teachers have felt able to work collaboratively to interrogate different data sources, synthesise information and develop answers to questions they themselves have asked about their school. Other schools have focused more on systems for collecting data than on the interpretation of what it might mean (2009: p. 22). Eventually, the schools in the study were able to accommodate and debate a wider range of notions of professionalism, and in these schools, teachers appeared to find it more straightforward to make their own professional connections to the self-evaluation requirements, even if they held dissenting views (2009: p. 23).

In order to optimise the quality of internal participation of major stakeholders in SSE processes, there are a set of characteristics which a school should develop. Hargreaves (2014: p. 5) suggests that school self-evaluation should: (1) be 'democratic', i.e., promote democratic beliefs and practices through consultation & negotiation, (2) be 'responsible', i.e., have the learning, success and happiness of all pupils at its heart, (3) involve

stakeholders, e.g., teachers, pupils, parents, (4) allow for the participation of a 'critical friend', (5) be based on trust, teamwork, 'ownership' – and fun! – as well as on clear objectives and procedures (6) aim to understand people's real-life experiences, vested interests, etc., as well as to analyse data, and (7) be shared with participants, from setting out the aims to disseminating the outcomes.

2.6 Teacher Value and Practice; the starting point of School Self-evaluation

The purposes of school self-evaluation are driven and shaped by trust, professional friendliness and support (see: MacBeath, 2006: p.22). In the research I carried out, teachers' and leaders' professional learning practices, their perspectives on school organisational learning practices, the values they placed on the PL and OL activities at school, and the gaps between the values and practices were the starting point for promoting SSE processes at each school. 'Values' in this research are defined as the importance that teachers and leaders place on PL and OL practices for improving pupils' learning. Developing data about OL and PL practices and values allowed for gaps between practice and values to be identified. On the basis of each school's analysis and interpretations of the levels of practices and values and the gaps between them a values-based approach to SSE was made possible. An important part of the research I report here concerns my interventions in each participating school to promote such a SSE process informed by the research and approach developed by Pedder et al. (2005); Pedder and MacBeath (2008); and Pedder and Opfer (2013).

As MacBeath (2006: p. 27) argues school stakeholders are the centre subject for self-evaluation and optimising their participation in SSE and improvement processes was a key purpose of the research I carried out for this thesis. Data concerning teachers' and leaders' values and practices related to professional learning (PL) and organisational learning (OL) in their school were used as the starting point in implementing double loop learning, where teachers and school leaders begin to question and challenge their current arrangements, practices, goals, values and purposes as well as the methods of SSE currently in place (see: Pedder et al., 2005: p215; Peddder and MacBeath, 2008; Hargreaves, 2014: p. 5; & Meuret & Morlaix, 2003, p. 2). Nevertheless, double loop learning is not just a question of method. It is about a school's current systems and practices and, importantly, the values and beliefs that underpin current practices. Double loop learning allows for fundamental change to be proposed and developed. Single-loop learning stays within the limits of current systems and practice (and prevailing power relations) and so what transpires from the single loop tends to be incremental efficiency

improvements to the current system, not a new system which is always possible in the more radical values-based double loop mode of learning.

In this research, the gaps between values and practices can trigger the creation of critical communication and deliberation in policy and practice among all teachers and leaders through which change can be planned and implemented and the internal culture of SSE can be improved. As Swaffield & MacBeath (2005) argue, such process can lead teachers and school leaders towards development of solutions to problems identified through the analysis of the data regarding the teachers' and leaders' practices and values. Through well-managed communication and consideration of values-practice gap data, it is expected that schools can be helped to develop contextually appropriate strategic solutions in supporting OL and PL at each school, through which pupils' learning can eventually be enhanced.

2.7 Research Questions

School self-evaluation and organisational learning (SSE and OL) approaches to improving the quality of professional learning were not in place in schools in West Kalimantan Province or indeed in most schools throughout Indonesia. Therefore, an important component of the research design involved a phased intervention process through which I introduced and facilitated implementation of a school self-evaluation process adapted from MacBeath and Mortimore (2001) and Pedder and MacBeath (2008). In order to address the broad aim of the research, the research had been shaped by the following four sets of research questions. Each of the four questions listed here reflected a distinctive phase of implementation, which, in more detailed, is discussed in the following chapter:

- 1. How well aligned were teachers' professional learning practices and values? How did teachers' professional learning practices and values vary in terms of their leadership responsibility level, teaching experience, employment status, subject taught, certification status, most advanced educational qualification, gender, school performance level, school type and geographic location?
- 2. How did leaders and teachers interpret and make sense of values and practice data for school self-evaluation and organisational learning purposes? What principles underpinned such interpretations? What variations were there in the interpretations of different groups of teachers and leaders?
- 3. What range of strategies was suggested by different groups of teachers and leaders in the light of their interpretations of the SSE data? Which strategic recommendations

- were adopted, adapted and rejected? Who made these decisions? What thinking, and reasoning underpinned such decision-making?
- 4. What changes to policy and practice resulted from the strategic decisions made in the light of the SSE process? How did teachers and leaders consider such changes influence the quality of teachers' professional learning and professional learning support?

CHAPTER 3. RESEARCH METHODOLOGY

In the chapter I present the research design I developed in order to address the research questions listed at the end of chapter 2; I also describe the underpinning thinking behind key methodological decisions in the framing of the research design. This chapter begins with a research method overview section, section 3.1, in which I sketch out in broad terms the general research and implementation design. I introduce the strategic approach I implemented in section 3.2. In section 3.3, I introduce my research participants and how they were selected.

The research was designed to proceed through four distinct stages of data collection and implementation of the SSE and OL approach to improving the quality of teachers' professional learning. I summarise and discuss these stages in section 3.4. In section 3.5, I describe the strategies I incorporated in order to maximise the quality of the data and hence the quality of the findings of this study. In section 3.6 I discuss the ethical issues in this research. In section 3.7 I describe the pilot study that I conducted before going on to discuss the processes and procedures for analysing the different data sets that were developed as part of this research process in section 3.8.

3.1 Research Design Overview

The design of this research was developed by incorporating an interventionist² strategy and a combination of qualitative and quantitative approaches to the collection and analysis of data in order to be the basis for addressing the research questions summarised above. In designing this study, I adopted interpretative assumption, using the qualitative and quantitative data, in the form of interpretation of teachers and leaders in participating schools. I conducted this research in order to find out what kind of school organisational learning (OL) strategic supports for teachers professional learning (PL), in improving learning in rural school and the absence of contextual research in this topic. I wanted to understand these questions and problems from the perspective and interpretation of teachers and leaders in school because they were preoccupied with challenges in improving the quality of learning in their school every day, in very unpromising rural condition. Therefore, I assumed that they knew better than anyone

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² I use the term 'interventionist' to distinguish it from naturalistic forms of enquiry which are concerned with understanding a context of interest as far as possible in terms of its naturally-occurring processes. The research I designed and carried out did not leave the setting of investigation 'untouched'. Instead, I deliberately and purposefully intervened to change naturally occurring processes and promote SSE processes in order to study and understand them better. My interventions took the form of a SSE survey which I introduced together with meetings with school leaders and their staff to interpret the results of the survey data analysis and plan strategic responses to it. Further details of the intervention are clarified in this chapter.

else outside of their schools regarding the challenges on PL and OL which they face every day in their school and they know better about what kind of OL strategic supports is the best for supporting their professional learning (PL) at their school than the external stakeholders.

Teachers' and leaders' interpretations on PL and OL in their schools were central in this research in order to develop locally appropriate support of school OL toward teachers PL in each participating school. Through the adoption of school self-evaluation (SSE) survey and by feeding back its findings to teachers and leaders in each school, I stimulated them to identify and make sense of any significant values-practices gaps on PL and OL in their school. The PL challenges identified and made sense by each individual teacher could develop their awareness regarding existing PL challenges in their schools, and then start thinking about strategic ways to solve each of the challenge. Meanwhile, the collective interpretation of teachers and leaders toward their schools' OL, could stimulate them to increase the quality of their OL culture and the OL support to teachers' PL.

Taking into account its philosophical stance, as described above, this research proceeded through four distinct intervention stages of school self-evaluation and organisational learning. Each stage was designed (a) to realise a specific stage of the SSE and OL intervention and (b) to collect particular data in relation to the formulated research questions. Consistent with this thinking, each intervention stage was matched by the use of particular data collection methods and tools. An overview of each stage of this research, along with methods and processes of data collection and analysis is presented in table 3.1 below.

Table 3. 1: Overview of Data Collection Methods and Data Analysis

Research Questions	Intervention Stage	Data Collection	Data Analysis		
1	School self-evaluation data collection, analysis and reporting by the researcher	Teacher and leader survey questionnaire	Descriptive statistics, significant tests, and exploratory and confirmatory factor analysis.		
2	School self-evaluation data interpretation by school leaders and teachers	Discussion sheet	Inductive thematic analysis, cross-case analysis of completed discussion sheets.		
3	Generating strategic ideas and recommendation	Discussion sheet,	Descriptive analysis, inductive thematic analysis, cross-case analysis of discussion		

		semi- structured interview	sheets and interview transcripts
4	Policy and practice change	Semi- structured interview	Inductive thematic analysis, cross-case analysis of interview transcripts

As can be seen in table 3.1, both qualitative and quantitative approaches to data collection and analysis were employed in this research. The quantitative approach, which refers to the teacher and leader survey, was employed to address research question one as a means of representing patterns of alignment and dissonance in the professional learning values and practices recorded by teachers. Research questions two to four were concerned with the interpretation and strategic responses of teachers and leaders at participating schools to their school's survey data.

Coherence with the ontological stance of this research, as I discussed above, teachers' and leaders' interpretation had been made central in collecting my data. Therefore, within the four stages of data collection processes applied in this research, I had taken non-judgmental stance by acting as a learner and a facilitator. Taking such stance meant that I did not interfere any data collected in each data collection stage in this research. In the first stage, I acted as a learner, learning about the alignment of teachers' values and practices with regard to their professional learning at school through a valid factor structure of teachers' professional learning (PL) and school organisational learning (OL) in West Kalimantan Province, based on an adequate number of participants. Starting from stages two to four, I acted as an agent of change by introducing new strategy of PL, OL and SSE in improving teachers' professional learning in school.

Such interpretative and strategic judgements are at the heart of the research questions and central to the SSE and OL process I was promoting through the intervention. An important part of the SSE process and of my analysis concerns the personal and professional judgments and meanings that teachers and leaders applied to the data they were interpreting. Hence, the methodological approach here was qualitative, which combined the use of semi-structured interviews and teachers' and leaders' responses to open ended questions on the SSE discussion sheets. I turn now to a more detailed description and discussion of the strategic approach that I developed for this research.

3.2 Research Approach

Initially, for the survey phase of the research, 712 teachers and school leaders from 43 schools completed surveys. Following analysis of the survey data, more detailed qualitative research was then undertaken at two secondary schools with contrasting characteristics in West Kalimantan province. These schools differed in terms of type, geographical location and performance level. I planned the research in order to understand more about how SSE and OL approaches to improving teachers' professional learning and the quality of school supports for teacher learning could be introduced and used at two contrasting schools. In this research, the school selfevaluation and organisational learning (SSE and OL) process had its foundation in survey data about teachers' values and practices with respect to their professional learning in school (Mortimore and MacBeath, 2001; Pedder and MacBeath, 2008). The analysis of the survey data for each school in respect of teachers' values and practices (research question 1) formed the basis for promoting SSE and OL processes at each school through which teachers and leaders considered changes in school policy and practice (research questions 3 and 4) based on their interpretations of the survey data (research question 2) and directed towards improving professional learning at school.

Insofar as the use of values-practice survey data (e.g., Pedder and Opfer, 2013) as an SSE and OL approach towards improving teacher learning in schools in West Kalimantan is new, I considered the adoption of an interventionist research strategy to be a necessary component of my research design. Intervening in the lives of both participating schools to promote this SSE and OL process for improving the quality of teacher learning would enable me to examine its potential and power for improving the professional learning of teachers and school supports for teachers' professional learning at these two contrasting secondary school contexts in West Kalimantan Province.

More specifically, I used a sequential mixed methods approach that combines first quantitative and then qualitative approaches. The combination of different methods (see table 3.1 above) developed for this research were undertaken in order (i) to map quantitative patterns of alignment and dissonance in the values and practices of leaders and teachers at the 43 schools involving in the initial SSE survey, as a basis for SSE and OL approaches and (ii) to work more qualitatively and in a more fine-grained way with leaders and teachers at two schools to understand how they interpreted the SSE data, what strategic recommendations they made, what thinking underpinned teachers' and leaders' decisions to adopt, adapt or reject such recommendations, and what changes were made to policy and practice in relation to teachers' professional learning

and what thinking shaped such change. I move now to a more detailed consideration of the thinking behind employing each research method, the contribution of each method towards addressing the research questions, and the procedures involved in implementing each method of data collection.

3.2.1 Multiple case study research

A multiple case study design was selected as a way of helping me develop detailed quantitative and qualitative understandings of the school self-evaluation (SSE) and organisational learning (OL) approaches realised in practice by the teachers and leaders at each of the two schools (see: Gerring, 2007; Adelman et al., 1980 in Cohen, 2005; and Hitchcock and Hughes (1995); Woodside, 2010: p. 2; and Cohen et al., 2005: p. 181). Gerring (2007), for example, presents at least three advantages of case study research that I considered beneficial for the qualitative components of my research. Case study research is particularly well designed for carrying out research that contains exploratory modes of enquiry aimed at developing multi-layered, textured, contextualised in-depth insights (2007: p. 39) and comparisons across distinct contexts of practice and investigation; additionally, case study research enables the development of insight into the intentions, the reasoning capabilities, and the information-processing procedures of actors involved in a given setting (2007: p. 45). In other words, close attention could be paid to the perspectives and interpretations of those directly involved in the SSE and OL approaches I introduced through this research study. Hitchcock and Hughes (1995: p 317) argue that multiple case study designs are valuable for a number of reasons. They (1) are concerned with a rich and vivid description of events relevant to each case, (2) provide a chronological narrative of events relevant to the case, (3) blend a description and analysis of events, (4) focus on individual actors or groups of actors, and seek to understand their perceptions of events, (5) highlight specific events that are relevant to the case, (6) involve the researcher as an integral participant in each case, and (7) attempt to portray the richness of each case in writing up the research report.

In addition, Cohen (2005: p. 184) lists a number of further advantages of a case study approach as follows:

- Case studies recognise the complexity and 'embeddedness' of social truths. By carefully attending to social situations, case studies can represent something of the discrepancies or conflicts between the viewpoints held by participants. The best case-studies are capable of offering some support to alternative interpretations.
- · Case studies may form an archive of descriptive material sufficiently rich to admit

subsequent reinterpretation. Given the variety and complexity of educational purposes and environments, there is an obvious value in having a data source for researchers and users whose purposes may be different from our own.

- Case studies are 'a step to action'. They begin in a world of action and contribute to
 it. Their insights may be directly interpreted and put to use; for staff or individual selfdevelopment, for within-institutional feedback; for formative evaluation; and in
 educational policy making.
- Case studies, may contribute towards the 'democratisation' of decision-making (and knowledge itself). At its best, they allow readers to judge the implications of a study for themselves.

Out of all those advantages mentioned above, Nisbet and Watts (1984, in Cohen, 2005) consider a number of weaknesses associated with case study designs. They argue that results developed from case study research may not be generalizable, except where other readers/researchers see their application. Moreover, the results of this type of research are not easily open to cross-checking, hence findings risk being evaluated as selective, biased, personal and subjective. Eventually, they are prone to problems of observer bias, despite attempts made to address reflexivity. However, Gerring (2007: p. 45) states that even though both single case study and multiple case study have limitations in terms of external validity, multiple case study offers a stronger claim to representativeness than a single case study could. Therefore, as Gerring (2007: p. 45) adds, a multiple case study might be said to have wider relevance than single case study designs.

3.2.2 Survey research

The first phase of this research utilised a survey in the form of a teachers' and leaders' questionnaire. This survey was designed to enable teachers and leaders to record their professional learning (PL) practices and values, and their perspective on their school organisational learning (OL) values and practices. It involved 43 schools in eight out of all 14 districts in west Kalimantan province. In this survey, I distributed around 1049 questionnaires. From those distributed ones, 712 completed questionnaires could be collected. I employed the survey in order to identify a set of valid dimensions of teachers' professional learning (PL) at school and the school organisational learning (OL) through factor analysis of an adequate number of teachers and school leaders as sample. The analysis of the survey data with regard to the SSE and OL process in the schools enabled clarification of within- and between- school variation in PL and OL practices and values in terms of their leadership responsibility level, teaching experience, employment status,

subject taught, certification status, most advanced educational qualification, gender, school performance level, school type and geographic location. The advantages of using surveys to collect data in cross-sectional studies such as this (Cohen et al., 2005) are that:

- They are comparatively quick to conduct and cheap to administer; these
 characteristics of cross-sectional survey enable me to involve a quite big scale of
 sample with cheaper cost. Those both features would be really helpful for me in
 describing the teachers' values and practices with the limited time and resource
 available.
- There are only limited control effects as subjects only participate once; this survey will be conducted to teachers in West Kalimantan Province across different geographical locations. It ranges from urban areas to ones at the rural areas, which are remote in term of communication and transportation infrastructure as explained previously. The characteristics of cross-sectional survey that requires the informants to participate only one time during the survey would be a lot helpful, since visiting the respondent more than once will spend a lot of time and is costly.
- They are useful for charting population-wide features at one or more single points in time; this characteristic is important, because with this characteristic, the survey will have the potential to be able to describe how the teachers in the participating schools value and practice their professional learning at least by the time this survey is conducted.
- They enable researchers to identify the proportions of people in particular groups or states; as mentioned previously, this survey is expected to be able to describe the values and practices of teachers from different characteristics (leadership responsibility level, teaching experience, employment status, subject taught, certification status, most advanced educational qualification, gender, school performance level, school type and geographic location). Being able to identify the proportions of people in those teachers' particular characteristic made the crosssectional survey best-fitted for this research.
- Large samples enable inferential statistics to be used, e.g. to compare subgroups
 within the sample; this feature is useful since in analysing the data I would involve
 exploratory factor analysis in order to group together the items in this survey in to
 smaller set of factors, the factors will then be used to describe the professional
 learning profile of the teachers (the detailed explanation of this analysis will be
 explained at the data analysis section later).

3.3 Strategy Used to Select Research Participants

This research, as aforementioned earlier, was in the form of multiple case study design which, in phase one involved 43 schools and 712 teachers and leaders and in subsequent more qualitative phases involved 31 teachers and leaders at two secondary schools. The participating schools were selected based on their geographic location, type and performance level. Within each participating school, all teachers and leaders were involved. In this section, I introduce the participants of this research, and explain how they were selected. I begin by introducing the participants of the SSE survey, and then, I introduce the two schools.

3.3.1 Selecting the participants of the school self-evaluation survey

As highlighted above, the initial survey of this research involved 43 schools. The schools were selected by using purposive sampling technique. To develop a comprehensive understanding with respect to the PL and OL in the different contexts of West Kalimantan schools, for the initial SSE survey, I selected the participating schools based on their geographical location (rural and urban), school type (Senior and junior high school) and performance level ³ (top, middle and bottom quartile). In addition to those three characteristics, I also considered the access to reach each school (easy and hard to access). In this case, due to the limited time I had, I did not involve schools which required too much time to access.

After taking about four months, as can be seen on table 3.2 below, 712 completed questionnaires were collected out of 1049 distributed ones. The average response rate of the respondent was 67.87%. As can be seen from the table, the SSE survey questionnaires were completed by teachers and leaders from forty-three schools, spread in both rural and urban areas in eight out of fourteen regencies in west Kalimantan province.

³ To decide the schools' performance level, I used the provincial-level list of schools' rankings, which was developed based on their average score in the national examinations.

Table 3. 2: Response Rate of School Self-evaluation (SSE) Survey Participants in each Participating School

No.	School Code	Total of Staffs	Response Rate (%)
1	S1	14	57.14
2	S2	36	75.00
3	S3	30	53.33
4	S4	9	77.78
5	S5	20	50.00
6	S6	10	80.00
7	S7	8	100.00
8	S8	9	100.00
9	S9	24	41.67
10	S10	33	78.79
11	S11	32	50.00
12	S12	38	68.42
13	S13	44	88.64
14	S14	26	80.77
15	S15	14	78.57
16	S16	32	59.38
17	S17	13	69.23
18	S18	30	66.67
19	S19	12	100.00
20	S20	9	88.89
21	S21	19	15.79
22	S22	24	66.67
23	S23	17	70.59
24	S24	48	29.17
25	S25	30	80.00
26	S26	27	70.37
27	S27	29	65.52
28	S28	23	91.30
29	S29	52	51.92
30	S30	11	36.36
31	S31	22	86.36
32	S32	13	100.00
33	S33	13	53.85
34	S34	17	82.35
35	S35	31	90.32
36	S36	19	100.00
37	S37	33	51.52
38	S38	7	71.43
39	S39	33	81.82
40	S40	43	60.47
41	S41	32	96.88
42	S42	21	80.95
43	S43	42	47.62
	TOTAL	1049	67.87

The characteristics of schools and teachers participating in this survey can be seen in table 3.3 below. The number of completed surveys fulfilled the requirements of the analyses I conducted in developing the factors underlying teachers' PL and the schools'

OL (see: Mundfrom et al., 2005: p. 167; and Norusis, 2005, in Garson, 2008).

Table 3. 3: Characteristics of School Self-evaluation (SSE) Survey Participants

	Respondent Involved		
Teachers' Characteristic	cs	Frequency	Percentage (%)
	Senior High School	376	52.9
School Level	Junior High School	335	47.1
0.1	Urban	402	56.5
School Geo. Location	Rural	310	43.5
	Top Quartile	300	42.1
School Achievement	Middle Quartile	147	20.6
Ranking	Bottom Quartile	265	37.2
	Less than 2 years	64	9
Variation Tarakan	2 to 5 Years	141	19.8
Year of Being Teacher	5 to 10 years	180	25.3
	More than 10 years	317	44.5
	Less than 2 years	91	12.8
Year of Teaching at	2 to 5 Years	174	24.4
Current School	5 to 10 years	206	28.9
	More than 10 years	230	32.3
	Less than 2 years	71	10
Year of Teaching the	2 to 5 Years	152	21.3
Current Subject	5 to 10 years	180	25.3
Taught	More than 10 years	298	41.9
	Natural Science	212	29.8
Subject Taught	Social Science	320	44.9
, -	Language and Art	180	25.3
	Permanent	459	64.5
Francisco est Otatica	Government Contract	65	9.1
Employment Status	School Contract	173	24.3
	Part-time	14	2
Contification Status	Not Certified	391	54.9
Certification Status	Certified	320	44.1
	Doctoral	0	0
	Master	39	5.5
Education	Undergraduate	620	87.1
Background Level	Diploma	43	6.0
	High School	10	1.4
	Headmaster	69	9.7
Leadership	Vice-Headmaster	75	10.5
Responsibility at	Class Coordinator	326	45.8
School	Subject Coordinator	220	30.9
	A little/No responsibility	20	2.8
Gender	Male	266	37.4
	Female	443	62.6

3.3.2 Selecting schools

As described earlier, survey findings formed the basis and reference point for utilising the qualitative stages of this research. To conduct the qualitative stages, I involved two contrasting schools, which I named *School One* (CSS 1) and *School Two* (CSS 2). CSS 1 was a junior high school, located in a rural area and listed in the bottom quartile of the school performance level list, while CSS2 was a senior high school, located in an urban area, and listed in the top quartile of the list. The more detailed characteristics of both participating school can be seen in table 3.4 below.

Table 3. 4: Characteristics of Participating Case-Study Schools

Table 3. 4. Characteristics of Farticipating Case-Study Schools					
School C	haracteristics	School Code			
		CSS One	CSS Two		
Type		JHS	SHS		
Geographic Location	1	Rural	Urban		
Performance ranking	g	Bottom Rank	Top Rank		
Total Number of Tea	achers	12	19		
Employment	Permanent Teachers	4	8		
Status	Contract Teachers	8	11		
Gender	Male	4	9		
	Female	8	10		
Leadership	School Leader	2	3		
Responsibility level	Class Coordinator	3	11		
	Subject Coordinator	-	-		
	Little/No Responsibility	7	8		
Teaching	0-5	3	6		
experience	5-10	4	6		
	10-20	5	3		
	20 or more	-	4		
certification status	Certified	2	7		
	Not Certified	10	12		
Subject taught	Natural Science	3	7		
	Social Science	6	8		
	Language and Art	3	3		
qualification	Diploma	0	0		
education)	S1 or higher	12	19		

Within each school, various numbers of teachers and leaders were involved. The number of teachers and leaders involved depended on the data collection method used at each stage of the research. Table 3.5 below summarises the participants who were involved in each data collection method at each stage of this research.

Table 3. 5: Summary of Data Collection Participants in each Research Stage

rable of or Gairman, or Bata G		
	Data	
Stage of Research	Collection	Participants
	Methods	·
School self-evaluation data	Group	All Teachers and Leaders grouped
interpretation by the school	Discussion	based on subject taught
leaders and teachers		
Generating strategic ideas	Group	All Teachers and Leaders grouped
and recommendation	Discussion	based on subject taught
	Interview	One School Leaders and three
		Teachers at each school
Policy and practice change	Interview	One School Leaders and another
		three Teachers at each school

3.4 SSE Intervention Stages

As presented in Table 3.6 below, this research proceeded through four distinct SSE intervention stages, namely (1) School Self-evaluation survey data collection, analysis and reporting by the researcher, (2) School self-evaluation data interpretation by the school leaders and teachers, (3) Generating strategic ideas and recommendations, and (4) Policy and practice change.

Table 3. 6: Steps to undertake in Each Stage of Research

Stage	Purpose
1	SSE Survey ; To describe the alignment of the teachers' values and practices with regard to their professional learning at school through a valid factor structure of teachers' professional learning and school OL in West Kalimantan Province, based on an adequate number of participants Survey Data Analysis; To find out degrees of alignment between the PL and OL practices and values and to investigate how PL and OL practices and values varied across different characteristics of schools and teachers.
2	Feedback survey report; To present the survey result to teachers and leaders Group Discussion ; to (1) understand Group Interpretation with regard to the SSE Survey Data and (2) generate strategic ideas and recommendation of Small group of teachers with regard to the value-practice gaps of their professional learning
3	Interview one ; to (1) generate strategic ideas and recommendations of teachers and leaders in the light of value-practice gaps of their professional learning and (2) describe the decision-making process, and the thinking, and reasoning underpinning such decision-making
4	Interview two, phase one; to investigate the changes to policy and practice of the school in developing and supporting the teachers' professional learning resulted from the strategic decisions made in the light of the SSE process Interview two, phase two; to triangulate data collected from interview two phase one by providing longitudinal data with respect to the policy and practice change resulted from the implementation of teachers' and leaders' strategic recommendations.

It can also be seen in Table 3.6 above, that each of the stages abovementioned was designed distinctively to collect data needed for addressing each research question.

Therefore, within each stage, a number of distinct procedures were conducted. In the following section, I describe in more detail how each stage was implemented.

Stage 1. School self-evaluation data collection, analysis and reporting by the researcher I began this stage by establishing a factor structure of the teachers' professional learning (PL) and the school organisational learning (OL). To do this, I conducted SSE survey by using a value and practice questionnaire, which I adapted from the work of Pedder and Opfer (2013), as I attached in Appendix 1. The main aim of the questionnaire was to (1) describe patterns of alignment and dissonance between teachers' values and practices with regard to their professional learning (PL) their schools' organisational learning (OL), and (3) to analysis variations in practices and values with respect to teachers' and schools' characteristics.

The questionnaire consisted of three sections, covering questions about the teachers' and leaders' professional learning (PL) practices and values at school, school organisational learning (OL) values and practices, and teachers' and leaders' characteristics. Each section of the questionnaire consisted of a number of dimensions, as can be seen in table 3.7 below.

Table 3. 7: School Self-evaluation Questionnaire Blueprint, section 1: Teachers' Professional Learning at School

1 able 5. 1. Scribt		naire Blueprint, section 1: Teachers' Professional Learning at School
	Dimensions	Description
	Internal Orientation	This is about teachers' classroom-based learning that involves reflection, experimentation, self-evaluation, and responding to feedback from pupils. It involves a deliberate attempt to experiment with practice, to modify practice and to adapt it in the light of feedback and evidence.
Section 1: Teachers' Professional	Research Orientation	This is about the influence of research on teachers' professional learning and development; teachers' draw on research ideas for improving their practice and relate their practice to research findings.
Learning at School	Collaborative Orientation	This is about teachers learning together through joint planning, teaching together, carrying out joint research/enquiry and reflective discussions together about working practices.
	Building Social Capital	This is about school culture in which teachers are learning, working, supporting, and talking with each other.
	External Orientation	This is about teacher learning that is outward-looking, drawing on a range of resources that are external to a teacher's direct classroom teaching environment.
	Developing a sense of where we are going	This is about the extent to which there is a shared vision about the way the school is developing and fostering among staff commitment to the whole school based on good working knowledge among staff of school development priorities which they view as relevant and useful for learning and teaching
	Deciding and Acting Together	This is about involving colleagues and students in decision-making and policy formation. It brings to bear everyone's expertise to create and challenge policy.
Section 2: Organisational	Providing formal supports for professional learning	This is about providing formal opportunities for professional learning and how colleagues are using staff development time to realise school improvement priorities.
Practices and System at	Auditing Expertise	This is about taking the expertise of colleagues seriously by collecting information on aspects of their work that colleagues themselves think they do effectively.
School	Building Social Capital	There is a school culture in which teachers are learning, working, supporting, and talking with each other.
	Supporting Collaboration and Networking	This is about the opportunities that colleagues have to develop their skills and share knowledge about practice through collaboration and networking both within the school with teachers in others school
	Valuing learning	There is a school culture in which teachers as well as pupils see themselves as learners, in where learning is celebrated, and where there is a widespread belief that all pupils are capable of learning.
		Teaching Experience

	Subject Taught
Section 3:	Employment Status
Teachers'	Most Advanced Education Level
Background	Leadership Responsibility Level
Information	Gender
	Certification Status

The first section of the questionnaire consists of twenty-four statements in relation to teachers' values and practices on their individual professional learning at school. The second section of the questionnaire contains thirty-seven statements in relation to school organisational learning practices. The statements on the first and second section were put together in reference to Pedder, James, and MacBeath (2005); Macbeath (2006; pp. 22-27); Swaffield and MacBeath (2005); and Pedder and Macbeath (2008: p. 212). The first and the second section of the questionnaire adopted a dual-scale format (see: Pedder and Opfer, 2013) which asked the participants to make two kinds of responses, namely those relating to their values and those concerned with their practices, as can be seen in figure 3.1 below.

ABOUT YOUR PRACTICES How true of your professional learning are these practices?				ABOUT YOU nportant are t opportunities	hese practio			
Not true	Rarely true	Often true	Mostly true		Not at all important	Of limited importance	Important	Crucial
	X			Staff participate actively in teacher networks with colleagues			X	

Figure 3. 1: Dual-scale format used for section one and two of SSE questionnaire

The first response related to their own professional learning (PL) practices in school. There were four response categories which they could choose; not true, rarely true, often true and mostly true. Then, teachers were also asked to record a second response related to their values relating to school organisational learning (OL). They were asked how important each of the PL and OL practices is for creating opportunities for pupils to learn in terms of four response options: not at all important, of limited importance, important or crucial

I analysed the data collected from this questionnaire by using exploratory and confirmatory factor analysis, in order to develop structure factor of both PL and OL. Those factors were then used in a number of descriptive and inferential analysis, in order to clarify of within- and between-school and teachers variations in both PL and OL, in terms of leadership responsibility level, teaching experience, employment status, subject taught, certification status, most advanced educational qualification, gender, school performance level, school type and geographic location. I administered the survey by visiting each school and involved all teachers and leaders in the school. I allocated between three days and one week for each school to complete the questionnaire. As described previously, for the survey, I involved forty-three schools, with 712 teachers

and leaders, in eight out of fourteen regencies in west Kalimantan province. Overall, through the factor analysis, I developed three factors underlying PL, namely Collaborative *Professional Learning, Learning and Reflecting from Different Sources,* and *Learning Conversation and Mutual Support*, and five factors underlying the OL, namely, *Building Social Capital, Involving Teachers in School Policy Development, Critiques and Goal Setting, Developing a Sense of Where We are Going, Supporting Experimentation, Collaboration and Networking,* and *Valuing Learning.*

Stage 2. School self-evaluation data interpretation by the school leaders and teachers

The aim of this stage was to understand how leaders and teachers interpreted and made sense of their school's values and practice data for professional learning (PL) and organisational learning (OL) purposes, what principles underpin such interpretations, and what variations there are in the interpretations of different groups of teachers and leaders. To achieve the aims, I supported teachers and leaders to interpret the SSE survey report by feeding back the survey report to them. Teacher and leaders then made sense of the report through group discussion. A copy of the SSE survey results, containing the comparisons of values and practice in relation to individual items and to each factor of PL and OL, as can be seen in Appendix 2, was handed to each group. To guide them doing so, I developed a discussion sheet which contains a number of guiding questions, as attached in Appendix 3. The sheet was completed by teachers and leaders collectively in small groups at whole staff meetings with reference to the survey data report which I presented to them. The answer of each question on the sheet was based on the consensus of teachers and leaders in each discussion group. The employment of group discussion techniques made such process possible to be undertaken (see; Powell et al., 1996: p. 499; ETA, 2008; Gibbs, 1997; ACAP, 2012; and Purdam 2009).

During the discussion, each group was asked to have a scribe to record the consensus views of the group on the discussion sheet provided. Each scribe completed the sheet and recorded the answer to each question in light of the discussion in the group. These procedures were undertaken for each factor of PL and OL. The completed discussion sheets were used as the main source of data in addressing research question two. In the group discussion process, each group was given between ten and fifteen minutes to interpret each factor.

Stage 3. Generating strategic ideas and recommendation

As part of the same meeting where staff interpreted and made sense of their school's survey results, they were also asked to make recommendations and generate strategic ideas in response to their school's values-practice data. This stage was designed to

provide opportunity to groups of teachers and leaders at each of the two schools to generate in light of their interpretations of the SSE data. In particular I was interested in finding out what range of strategic recommendations different groups would suggest, and, in later stages of the research, which suggestions were adopted, adapted and rejected, who made these decisions, and what thinking and reasoning underpinned such decision-making. The different groups of teachers were asked to record their recommendations on a discussion sheet (see Appendix 3) and I also conducted semi-structured interviews with a school leader and three teachers in each school, which were selected using a purposive strategy. The participating teachers and leaders were selected to reflect a number of teachers' and leaders' characteristics, namely, leadership responsibility level, teaching experience, employment status, subject taught, certification status, most advanced educational level, and gender. To achieve the aims of this interview, I used a number of guiding questions, as listed in Table 3.8 below.

Table 3, 8: List of Questions for Interview 1

3. o. List of Questions for interview 1.
Interview Questions
What strategic recommendations have you given in responding the SSE data?
Why do you think such recommendation(s) are appropriate to respond the SSE
data
During the group discussion where you were involved in, have everyone been
active to deliver their ideas or recommendations?
Had everyone been given equal opportunity to convey their ideas or
recommendations during the group discussion?
How have your recommendation been accommodated in the group discussion?
How far do you think the collective recommendation that the group in which you
involve in represent the recommendations of all members of the group?
What makes your discussion group decide to propose such recommendations?
What makes the teachers in the group believe that such recommendation are
• •
appropriate to respond the school self-evaluation data?
How about the whole school teachers and leaders discussion, have everyone
been actively involved and given equal opportunity?
How far do you think the whole teachers' and leaders' collective
recommendations in responding to the school self-evaluation (SSE) data
represent the recommendations of all groups?
What makes the whole teachers and leaders in the discussion forum believe that
such recommendations are appropriate to be implemented, in order to respond
the SSE data?

As reflected by guiding questions listed in Table 3.8 above, the focus of this interviews was to investigate the personal accounts of each interviewees in relation to the decision made by the discussion group in which they involved in during the group discussion process. In addition, the interviews also aimed at describing the decision-making process during the group discussion, which include investigating the personal(s) behind the group decision with regard to the range of strategic recommendations each group suggested

and, who made these decisions, and what thinking and reasoning underpinned such decision-making. In order to make sure that each interview could run as planned, I developed an interview guide, which can be seen in Appendix 4.

By adopting a semi-structured interview design, there was room for teachers and leaders to develop personal accounts of their interpretations of the survey data, their recommendations for policy and practice change and the thinking behind the recommendations they made in their own terms and using their own language, therefore, the abovementioned aims of the interviews could be achieved. (see: Gray, 2004: p. 217; Gibbs, 1997; Breen, 2006: p. 465; Cohen and Manion; 1997).

Stage 4. Policy and practice change

The stage aimed at investigating the changes to policy and practice at each of the two schools in order to improve school supports for teachers' professional learning, in light of the SSE process. I was especially interested in understanding what strategic decision-making and change is possible within the SSE process and values-practice framework I had adapted and developed. In this stage, I employed another semi structured interview (semi structured interview 2). The focus of the interviews was on what policy and practice changes were attempted in light of the SSE process? What ideas and suggestions for change succeeded and which did not succeed? And what were the main conditions that helped and hindered the change process at each of the two schools. The interviews were structured by six guiding questions as reflected in Table 3.9 below. As I did in conducting interview one, to ensure that these interviews runs as expected, I develop interview guide, which I attached in Appendix 5.

In order to understand policy and practice change over time, these interviews were undertaken twice at each school over a three-month period. Each phase interview involved a school leader and three teachers in each school. The two phases interviews enabled me to develop in-depth and comprehensive qualitative understandings with regard to policy and practice change processes, decision-making and strategic developments in light of the school self-evaluation (SSE) data and how the implementation of those strategic recommendation influenced the quality of the teachers' professional learning (research question 4).

Table 3. 9: List of Question for Semi-structured Interview 1

No.	Interview Questions
1.	Did the strategic decisions that this school have made in the light of the SSE process make any changes to the way the school develop and support your professional learning at school?
	If the answer is 'yes', continue to ask questions 2 to 4 below. But if it a 'no', then continue to ask question 4 and 6.
2.	Can you please describe how the schools' policy and practice in supporting your professional learning differs before and after the implementation of the strategic decisions?
3	How have the changes to the school's policy change your own professional learning practice?
4	Would such a change develop the quality of your own professional leaning practice?
5	What makes the schools' strategic decisions being unable to affect the school support for the teachers' professional learning?
6	If you were a person in charge, what would you do in order to make the strategic plans work properly in developing the quality of teachers' professional learning and the school support for such development?

3.5 Strategies Used to Maximise the Quality of Data and Findings

In this section I discuss the strategies and steps I used to maximise the quality of quantitative and qualitative data and findings I developed for this research.

3.5.1 Maximising the quality of quantitative data and findings

The school self-evaluation questionnaire employed in this research was adapted from Pedder and Offer (2013). The original instrument was developed for the context of teachers in England, and thus was written in English. Meanwhile, the respondents of the survey in this research were the secondary school teachers in West Kalimantan province, Indonesia who spoke Indonesian language. Therefore, the questionnaire was translated from English into Indonesian language to make it comprehensible to survey respondents. With respect to the translation process, Pan and Puente (2005: p. 5) suggest reliability, completeness, accuracy, and cultural appropriacy as the main hallmarks of good quality translations. By reliability they refer to the extent to which the intended meanings have been conveyed faithfully in the translated text. Completeness refers to translations that neither add new information nor omit information provided in the source document. For Pan and Puente (2005: p. 5) accuracy refers to translations that are free of spelling and grammatical errors. Cultural appropriateness is achieved when the message conveyed in the translated text is appropriate in the cultural milieu and frameworks of conceptualisation, interpretation and understanding of the target population.

Following from this, Pan and Puente (2005: p. 5) suggest that translations should also have semantic, conceptual, and normative equivalence. Semantic equivalence refers to

the extent to which terms and sentence structures that give meaning to the information presented in the source language is maintained in the translated text. Conceptual equivalence concerns the degree to which a given concept is present in both the source and target cultures, regardless of the words used to express the concept. Normative equivalence refers to the extent to which the translated text successfully addresses the difficulties created by differences in societal rules between the source and target cultures. Pan and Puente (2005: p. 6) argue that if the translation lacks these characteristics, the intended meaning of the information in the source language text will be jeopardised to a greater or lesser extent in the translation.

In order to translate the SSE survey for my research, taking into account all criteria mentioned above, Pan and Puente (2005) have proposed a number of techniques for translating a questionnaire into another language, that include simple direct translation, modified direct translation, back-translation, and the committee approach. Pan and Puente (2005: p. 4) explain that a simple direct translation is conducted by a single bilingual individual who translates the questionnaire from the source language into the target language. Back-translation is the translation technique that requires a researcher to translate back a translated instrument into its original language. Meanwhile, the committee approach to survey translation referrers to the translation process that involve a committee includes several translators, at least one adjudicator, translation reviewers, subject matter specialists, and someone with knowledge and experience in questionnaire design and pretesting. However, due to its practicality and efficiency, backtranslation is more widely appeal, compared to the other translation techniques (Pan and Puente, 2005; Sauro, 2014 and world health organization -WHO, 2016).

Pan and Puente (2005: p. 4) explain that back-translation requires three steps include (1) Translation of the source language instrument by a bilingual individual; (2) Translation of the target language instrument back to the source language instrument by a second bilingual individual; (3) Comparison of the original source instrument with the back translated source language instrument. However, in order to improve the ability of this technique to produce the data collection instruments with semantically, conceptually, and normatively equivalence, and that are reliable, complete, accurate and culturally appropriate, a number of process can be added including the pre-test/pilot the translated instrument (Sauro, 2014; WHO, 2016) and to validate the items of the translated questionnaire (Sauro, 2014).

In light of my consideration of translation issues and within the constraints of what was possible in practice on the ground to speak, the SSE values-practice questionnaire I adapted and developed for this research was translated through the following six steps namely (1) revising the content of the original questionnaire in order to make it appropriate to the context in West Kalimantan (2) the use of a fully bi-lingual translator to carry out the translation of the original questionnaire from English to Indonesian language. (3) the use of another fully bi-lingual translator to translate the SSE questionnaire back into English (see: WHO, 2016), (4) comparison of the original source questionnaire with the back-translated questionnaire by a panel of three bilingual translators, excluding the bilingual people used in steps two and three (see: Pan and Puente, 2005: pp. 5-6), (5) piloting the instrument with local teachers and leaders and identifying instances of language, conceptual and/or other cultural difficulty with the content, layout and design of the questionnaire (see: Sauro, 2014), (6) validating the instrument, (see: Sauro, 2014; and Verma and Mallick, 1999 in Cohen, 2005; p. 260), and (7) revising the translated instrument, in order to optimise the reliability, validity and practicability of the questionnaire (see: Cohen, et al., 2005).

I find it important to make a number of revisions to the content of the original questionnaire (which was adapted from Pedder and Opfer, 2013), in order to make the content of the questionnaire suitable for both the focus and the participants of the survey of this research. I found it necessary to revise some parts of the original questionnaire since there were a number of items that were not appropriate for either the context or the focus of this research. During the revision process, all of those inappropriate or unnecessary items were either revised or removed from the questionnaire. As explained earlier, the original questionnaire, as attached in Appendix 6, consisted of four sections focused on teachers professional learning values and practices, professional learning opportunities, organisational practices and systems at school, and the teachers' and leaders' background characteristics. In light of feedback from teachers and leaders during the pilot phase, I made three main revisions to the questionnaire, (1) omitted the second section, which was about the professional learning opportunity at schools, (2) added social capital dimension to the teacher professional learning value and practice section, and (3) revised a number of items in the teachers' background section.

The questionnaire consisted of three main sections, namely teachers' professional learning (PL) value and practice, school organisational learning (OL) practices and systems and teachers' background characteristics. Moreover, I also found it important to investigate the teachers' practices and values with regard to their social interaction in

school in relation to their professional learning. It was done because the social capital building had been found to be one of the significant factors in forming an effective organisational learning and leadership culture (Pedder and Opfer, 2013). Therefore, I decided to add such items in the first section of the questionnaire. With this addition, the first section of the employed questionnaire consisted of five dimensions, which include internal orientation, research orientation, collaborative orientation, external orientation, and social capital building. Table 3.10 below compares the questionnaire items I develop in this research for teachers' professional learning (PL) in school and those developed by Pedder and Opfer (2013).

Table 3. 10: Survey Items for Professional Learning Practices and Beliefs of Teachers

	Teachers' Professional Learning (PL) Activities Used by	Teachers' Professional Learning (PL) Activities
No.	Pedder and Opfer (2013)	Used in this Research
1	Staff as well as students learn in this school.	I use the web as one source of useful ideas for improving my practice
2	Staff draw on good practice from other schools as a means to further their own professional development.	I read research reports as one source of useful ideas for improving my practice
3	Staff read research reports as one source of useful ideas for improving their practice.	I draw on good teaching practice from other schools as a means to further my own professional development
4	Staff use the web as one source of useful ideas for improving their practice.	I consult pupils about how they learn most effectively
5	Students are consulted about how they learn most effectively.	I relate what works in my own teaching practice to research findings
6	Staff relate what works in their own practice to research findings.	I reflect on my teaching practice as a way of identifying professional learning needs
7	Staff are able to see how practices that work in one context might be adapted to other contexts.	I experiment with my teaching practice as a conscious strategy for improving classroom teaching and learning
8	Staff use insights from their professional learning to feed into school policy development.	I modify my teaching practice in the light of feedback from my students
9	Staff reflect on their practice as a way of identifying professional learning needs.	I modify my teaching practice in the light of published research evidence
10	Staff experiment with their practice as a conscious strategy for improving classroom teaching and learning.	I modify my teaching practice in the light of evidence from self-evaluations of my classroom practice
11	Staff modify their practice in the light of feedback from their students.	I modify my teaching practice in the light of evidence from evaluations of my classroom practice by school leaders or other colleagues
12	Staff modify their practice in the light of published research evidence.	I carry out joint research/evaluation with one or more colleagues as a way of improving my teaching practice
13	Staff modify their practice in the light of evidence from self- evaluations of their classroom practice.	I engage in reflective discussions of teaching practices with one or more colleagues
14	Staff modify their practice in the light of evidence from evaluations of their classroom practice by managers or other colleagues.	I engage in team teaching as a way of improving teaching practice
15	Staff carry out joint research/evaluation with one or more colleagues as a way of improving their practice.	I engage in regular collaboration with colleagues to plan teaching practice

Table 3. 11: Survey Items for Professional Learning Practices and Beliefs of Teachers (Contd.)

No.	Teachers' Professional Learning (PL) Activities Used by Pedder and Opfer (2013)	Teachers' Professional Learning (PL) Activities Used in this Research	
16	Staff regularly collaborate to plan their teaching.	I regularly observe my colleagues in the classroom and give each other feedback	
17	Staff regularly observe each other in the classroom and give each other feedback.	If I have problem with my teaching, I usually turn to colleagues for help	
18	Staff engage in team teaching as a way of improving practice.	I suggest ideas or approaches for colleagues to try in class	
19	If staff have a problem with their teaching they usually turn to colleagues for help.	I discuss openly with colleagues what and how we are learning	
20	Teachers suggest ideas or approaches for colleagues to try in class.	I and my colleagues make collective agreements to test out new ideas	
21	Teachers make collective agreements to test out new ideas.	I and my colleagues offer one another reassurance and support	
22	Teachers discuss openly with colleagues what and how they are learning.	I and my colleagues frequently use informal opportunities to discuss how pupils learn	
23	Staff frequently use informal opportunities to discuss how children learn.	I am able to see how practices that work in one context might be adapted to other contexts	
24	Staff offer one another reassurance and support.	3	
25	Staff believe that all students are capable of learning.		
26	Students in this school enjoy learning.		
27	Pupil success is regularly celebrated.		
28	Staff discuss with colleagues how students might be helped to learn		
	how to learn.		

To investigate school organisational learning (OL) values and practices, I added leadership and school management dimension to the OL dimensions developed by Pedder and Opfer (2013). Therefore, in the survey questionnaire employed in this research, I used 37 questionnaire items, instead of 26 items used by Pedder and Opfter (2013). The comparison of questionnaire items to describe the school OL used in this research and those used by Pedder and Opfer (2013) is presented in table 3.11 below.

Table 3. 12: Survey Items for School Organisational Learning (OL) Practices and Beliefs

No.	School Organisational Learning (OL) Activities Used by Pedder and Opfer (2013)	School Organisational Learning (OL) Activities Used in this Research	
1	Senior management communicates a clear vision of where the school is going.	The school leaders communicate a clear vision of where the school is going	
2	Staffs have a commitment to the whole school as well as to their department, key stage and/or year group.	Teachers have a commitment to the whole school as well as to their subject department	
3	Senior management promotes commitment among staff to the whole school as well as to the department, key stage and or year group.	The school leaders promote commitment among teachers to the whole school as well as to their subject department	
4	There is effective communication between senior management and teachers.	Teachers have a good working knowledge of the school improvement plan	
5	There are processes for involving all staff in decision-making.	Teachers see the school improvement plan as relevant and useful to learning and teaching	
6	Teachers' professional know-how is used in the formulation of school policy and goals.	Teachers development time is used effectively to realise school improvement priorities	
7	Teachers' professional know-how is used in the formulation of school policy, even where this leads to a questioning of established rules, procedures and practices.	The school provides teachers joint-planning time	
8	Opportunities are provided for teachers to critically evaluate school policy.	Teachers are encouraged to experiment with new ideas as a way of promoting professional growth	
9	Staff are actively involved in evaluating school policy.	Formal training provides opportunities for teachers to develop professionally	
10	Staff participate in important decision-making.	School system encourage impact evaluation of professional development activities	
11	There are processes for involving students in decision-making.	Teacher-initiated networking is an integral element of staff development.	
12	Staff have a good working knowledge of the School Development Plan.	Teachers are helped to develop skills to assess students' work in ways that move their students on in their learning	
13	Staff see the School Development Plan as relevant and useful to learning and teaching.	Teachers are helped to develop skills to observe learning as it happens in the classroom	
14	Staff development time is used effectively to realise School Development Plan priorities.	Teachers regularly collaborate to plan their teaching	
15	Staff development time is used effectively in the school.	School leaders support teachers in sharing practice with other schools through networking.	

Table 3. 13: Survey Items for School Organisational Learning (OL) Practices and Beliefs (Contd.)

No.	School Organisational Learning (OL) Activities Used by Pedder and Opfer (2013)	School Organisational Learning (OL) Activities Used in this Research	
16	The school provides cover to allow staff joint planning time.	If teachers have a problem with their teaching, they usually turn to colleagues for help	
17	Teachers are encouraged to experiment with new ideas as a way of promoting professional growth.	Teachers suggest ideas or approaches for colleagues to try in class	
18	Formal training provides opportunities for teachers to develop professionally.	Teachers make collective agreements with colleagues to test out new ideas	
19	Teachers are helped to develop skills to assess students' work in ways that move their students on in their learning.	Teachers discuss openly with colleagues what and how they are learning	
20	Teachers are helped to develop skills to observe learning as it happens in the classroom.	Teachers frequently use informal opportunities to discuss how children learn	
21	Management supports teachers in sharing practice with other schools through networking.	Teachers offer one another reassurance and support	
22	Information is collected from teachers on those aspects of their work that they themselves think they do effectively.	Teachers are helped to become more aware of professional standards	
23	Information is collected from teachers on effective ways they promote learning to learn skills and knowledge among their students.	Teachers are helped to see how their personal professional learning goals relate to school improvement priorities	
24	Information is collected from teachers on informal teacher networking in which they play an active role.	Teachers are helped to achieve their professional learning goals	
25	Teacher-initiated networking is an integral element of staff development.	There are processes for involving all teachers in decision- making	
26	Learning how to learn is an issue discussed in staff development time.	Teachers' professional learning is used in the formulation of school policy and goals	
27		Teachers' professional learning is used in the formulation of school policy, even where this leads to a questioning of established rules, procedures and practices	
28		Opportunities are provided for teachers to critically evaluate school policy	
29		teachers are actively involved in evaluating school policy	
30		Teachers participate in important decision-making	

31	There are processes for involving students in decision-making.
32	Teachers use insight from their professional learning to feed into school's social policy development
33	Teachers as well as pupils learn in this school
34	Teachers believe that all pupils are capable of learning
35	Pupils in this school enjoy learning
36	Pupil success is regularly celebrated
37	Teachers discuss with colleagues how pupils might be best to help

The teachers' background section was the last part of the questionnaire to be revised. A number of items from the section had been either erased or modified. It was done in order to make all the items appropriate for the focus of this research and to the context of teachers in West Kalimantan Province. The detailed comparison between the items used in this research and those used by Pedder and Opfer (2013) is presented in table 3.12 below

Table 3. 14: Comparison of Teachers' Background Information Gathered by Pedder and Opfer (2013) and those Collected in this Research

	Teachers' Background information	Teachers' Background information		
	Section developed by Pedder and	Section developed in this research		
No.	Opfer (2013)	·		
1.	Gender	Teaching Experience		
2.	School Name	Subject Taught		
3.	Year of Teaching Experience	Employment Status		
4.	Years at this School	Most Advanced Educational Level		
5.	Post and responsibility	Leadership Responsibility Level		
6.	No. of responsibility	Gender		
7.	Main area of responsibility	Certification Status		
8.	Subject Taught			

3.5.2 Maximising the quality of qualitative data and findings

The criteria that I applied to judgements of the quality of my qualitative data and findings were trustworthiness, transferability, dependability, and confirmability (Patton, 2001, p. 14; Golafshani, 2003: p. 600; Lincoln and Guba, 1985: p. 300). I applied of the following strategies:

Triangulation

The first strategy that were employed in this research in order to maximise quality of qualitative data and findings was triangulation (e.g., Denzin, 1978 in Jane Ritchie and Jane Lewis 2003: p. 271; Wiersma, 1986; Creswell and Miller, 2000:126; Yin, 1994; Patton, 1990). Wiersma (1986) argues that triangulation involves testing the credibility of findings and interpretations by checking data from various sources in various ways, and at various times. Creswell and Miller, (2000:126) explain that triangulation is a form of comparative analysis, which is defined as a procedure aimed at searching for convergence among multiple different data sources to support the identification of themes or categories in the data. In this research, I undertook triangulation on source, methods and time of data of collection. In terms of data source triangulation, in collecting the data, I involved not only school leaders but also a number of teachers that reflected different leadership responsibility level, teaching experience, employment status, subject taught, certification status, most advanced educational level, gender, school

performance level, school type and geographic location. By involving those different perspective, I wished to collect a more comprehensive and reliable data, and hence the research finding. Given the interpretivist underpinnings of the qualitative components of my research, I did not expect any necessary convergence between the accounts of different informants. I was just as interested in points of divergence from different groups of participants on the understanding that there are likely to be a range of contrasting perspectives and voices among different groups of teachers and leaders; therefore, a sign of the quality of the data I would develop through interviewing may need to reflect such divergence as well. I could not have more confidence in my findings merely on the basis of Cresswell's convergence model.

Combining discussion sheet forms and different forms of interview opened up opportunities for triangulation through the generation of different data sets and this increased my confidence in the quality of data and hence of the findings of this study. To answer research question three for example, focus group discussion and semi-structure interview were employed. Both techniques were used in order to strengthen and reinforce each other in terms of the completeness and trustworthiness of the collected data whether the different data sets converged or diverged. In this regard, the result of the focus group discussion was followed up through a number of individual semi-structured interviews. The interviews involved a number of key individuals in each group in order to collect more detailed explanations, exemplifications, or clarifications with respect to the teachers' responses and conclusions during the group discussion. By doing so, I expected that a robust assertion of data quality could be established (e.g., Yin, 1994; Youngman (1994) and Fowler (1993) in Ritchie and Lewis 2003: p.94).

The coursework itself lasted approximately 6 months and through repeated visits to each of the two schools, processes of relationship-building and familiarisation I was able to build rapport, mutual trust and emotional affinity with the leaders and teachers who worked with me in the qualitative research stages of this study. Through processes of formal data collection and less formal interaction I was able to establish a friendly and trusting quality of relationship and rapport at both schools. Stainback and Stainback (1988) define rapport as a relationship of mutual trust and emotional affinity between two or more people. The quality of relationships and the establishment of rapport were important in the development of my fieldwork because the quality of relationships influences the quality of data (See Cooper and McIntyre, 1996: 26).

Probing strategies in interviews

High quality data is characterised by plenty of contextual detail about particular concrete settings, examples of general claims, clarity of terms, and congruence. Researchers can have more confidence in the authenticity and trustworthiness of accounts that have these characteristics. Nevertheless, people need to be supported in developing accounts that are richly contextualised in these ways. This is why probing strategies are important in interviews (see; Gray, 2004: p. 218). The purposes of probing in this research were to support the articulation by informants of accounts that were characterised by the following features: (a) plenty of contextual detail, (b) exemplification of general points and general claims, (c) clarification of vague ideas, acronyms and technical terms, and (d) congruence.

3.6 Ethical Conduct of the Research

Cohen et al., (2000, p.49) argue that the ethical conduct of research should be a priority concern of a researcher since they may threaten the validity of research. In this research, a number of ethical procedures were undertaken in order to make sure that the research could obtain ethical clearance and to ensure the research conformed to prevailing local legal requirements and my commitment to safeguarding the privacy and anonymity of research participants, matters that I consider below.

3.6.1 Following legal conventions

To be able to collect data and establish cooperation with the schools and teachers in West Kalimantan Province, obtaining a permission letter from West Kalimantan Education and Culture Office was mandatory. The Office is the highest channel of authority that is empowered to issue an approval for a researcher to carry out research in schools in West Kalimantan. To obtain such permission, I had to make a written permission request and hand it to the Office in person. After fulfilling a number of requirements of the office, I was able to obtain the permission letter from the head of the Office, by which I could legally collect my data in each participating school. The copy of the letter can be seen in Appendix 7.

Since the research was conducted in a number of districts within West Kalimantan Province, I also sent a letter to the Heads of Education and Culture Office in each district in order to make sure that they were well-informed about my research activities in schools under their authority. Along with the letter, I attached a copy of the permission letter from the provincial government. This procedure of professional courtesy was also undertaken with the principals of all participating schools. By following conventional protocol on the ground, I was able to build trust and cooperation with the schools'

authority (Borg and Gall, 1983, p.111 and Cohen et al., 2000, p.54).

3.6.2 Safeguarding privacy

Protecting and respecting participants' privacy was one of the priority concerns of this research process. I shaped this research by awareness of the balance between the public's 'right to know' and participants' 'right to privacy' (Weiss, 1975, p.13) particularly with regard to personal information that I collected through this research, such as teachers' and leaders' gender, length of teaching experience, qualification, and subject taught and which would enable readers of the research report to identify individuals. A covering letter, as attached in Appendix 8 that informed participants of my commitment with respect to their privacy and the steps I would take to safeguard their privacy was provided in order to reassure them. My letter also told them that all data collected from this research would only be used by me for the purpose of conducting my PhD research. They were assured that the data collected from each participant would be archived in a password-protected document and system which could only be accessed by me.

In addition to the privacy issue, informants' anonymity was a related priority. In this respect, I ensure that I could not identify the respondents from the information provided. To do so, on each questionnaire and any other data collection instruments, I did not require them to write their identity. By doing so, their identity was kept anonym. However, to make the data analysis and presentation work properly, I used a certain code in order to represent each school or teacher that participate in the research. In this regard, I made neither the real name nor address of the participants sought (see: Sax, 1979, p. 259).

3.6.3 Teachers' informed consent

To ensure that all participants knew what would be involved in the research if they agreed to participate, I provided them a consent letter, as attached in Appendix 9. A number of information in relation to this research, including the focus, stages and how the finding of this research will be published, were provided in the letter. In addition, the letter also informed teachers that each of them was welcome to participate in the research and, once they participated in the research, they were free to leave the research at any point without explanation.

3.7 Pilot Study

Before conducting the main study, this research was piloted in order to develop and refine the data collection methods and instruments and to find out whether the methods and instruments were worthwhile and practical and fit for the purpose of the research I had designed. The pilot study involved 67 teachers and school leaders from four schools in West Kalimantan Province who were not going to participate in the main study. Since

the teachers were from the similar level of schooling (secondary school level), they typically shared similar characteristics (e.g. in terms of education background and school system and condition) to the other secondary school teachers that were involved in the main study. In this pilot study, all of the data collection methods and instruments were tested, including (1) the school self-evaluation questionnaire with all of the teachers and school leaders, (2) group discussions with all teachers and leaders in each school, and (3) individual semi structured interviews with a school leader and three teachers in each school. In addition, in order to make sure that I would be able to access the participating schools for the main study, I also piloted access processes and procedures by testing out the permission letter that I had prepared. In this section I describe the procedures and the general results of the pilot study in more detail.

3.7.1 School self-evaluation (SSE) questionnaire

To pilot the translated SSE questionnaire, I involved three schools, a rural junior high school, a rural senior high school and an urban senior high school. There were about fifty teachers and school leaders involved. The participants were asked to read through and fill in the questionnaire. Furthermore, they were also asked to give feedback about a number of issues that might exist on the questionnaire. The main purpose of this step was to identify any wording issues within the questionnaire, including the 'words that were not properly translated or ambiguous' (Sauro, 2014). Additionally, this pilot study was also be conducted to clarify a number of issues with respect to the items of the questionnaire as suggested by Cohen, et al., (2005: p. 260) by referring to the claim of Oppenheim (1992); Morrison (1993); and Wilson and McLean (1994), which include (1) to check the clarity of the questionnaire items, instructions and layout, (2) to gain feedback on the type of question and its format, (3) to gain feedback on the attractiveness and appearance of the questionnaire, (4) to gain feedback on the layout, sectionalizing, numbering and itemization of the questionnaire, and (5) to check whether the questionnaire is too long or too short, too easy or too difficult, too unengaging, too threatening, too intrusive, or too offensive. Additionally, this step was also used for some other aims that include: (1) to identify commonly misunderstood or non-completed items by studying common patterns of unexpected response (Verma and Mallick, 1999 in Cohen, 2005: p. 260), (2) to try out the coding/classification system for data analysis and (3) to check the time taken to complete the questionnaire.

Overall, I decided to make a number of modifications to the main study design in light of this pilot process related to the questionnaire layout, the word choice, and the teachers' and leaders' categories used in the questionnaire. For example, in the original questionnaire, for the item concerning teachers' professional career status, I had classified teachers into three categories; permanent teacher, contract teacher and peripatetic teacher. Through the pilot study, I found out that in most regencies in west Kalimantan province teachers were classified into four categories, namely, permanent teachers (civil servant teachers), government contracted teachers, school contracted teachers, and freelance teachers. Based on all of the recommendation collected from the pilot study, I did a number of revision to the questionnaire, as listed in Table 3.13 below. The complete questionnaire which I developed before the pilot study can be seen in Appendix 10.

Table 3. 15: Questionnaire Revision in Light of Pilot Study

Table 3. 15: Questionnaire Revision in Light of Pilot Study			
Before Pilot			
No	Area of Revisions	Study	Revised Version
1	Time allocated to fill in the	Five to 10	Up to 30 minutes
	questionnaire	minutes	
2	Questionnaire Layout	Coloured red	Not coloured
	background		
3	Answering options on Question	Only year	Year and Month
	relating to teachers teaching		
	experience		
4	Answer options for teachers'	 Permanent 	 Permanent
	employment status	 Contract 	 Government
		- Part-time	Contract
			 School Contract
			- Part-time
5	Question regarding teachers'	Not Included	Included
	certification status		
6	Answering option on item	Being arranged	Being arranged from
	relating to teachers' leadership	from the lowest	the highest to the
	responsibility level	to the highest	lowest
7	Teachers' Special Need	Included	Not Included
	Print Out	Two-sided	One-sided

3.7.2 Group discussion

The pilot of the group discussion involved simulation of group and whole school discussions to anticipate the social contexts in which the discussion sheets would be completed in the main study. By doing so I expected to (1) find out how supportive of productive focus group discussions the whole staff and group configurations were (e.g., Gibbs, 1997 and Purdam, 2009; Smithson, 2000), (2) identify any technical problems that might arise during the discussion related to recording equipment, (3) find out how comprehensible and amenable to discussion were the focus group tasks for teachers and leaders, (4) evaluate the quality of data I could develop through using the group discussion sheets in the whole school and small group contexts I had planned, and (5) estimate the time needed in each session for the group discussion.

Overall, the pilot study revealed a number of crucial factors which might interfere with the application of group discussion in the main study. One of them was about the time allocation needed by each group to reach their consensus on a certain PL and OL factor. Before conducting the pilot study, I had allocated three to five minutes to each group to do so. However, the pilot study showed that a group typically needed up to 30 minutes to reach their consensus. The pilot study also revealed that I could not form separate groups for discussion for each subject taught in the school. Besides the limited number of teachers teaching in rural schools, I found out that junior high schools teach general subjects, compared to what is taught in senior high schools. For example, junior high school teach Natural Science as an integrated Science subject, whereas in senior high school, Physics, Chemistry and Biology are taught separately. In this case, I decided to form discussion groups based on general subjects as follows: natural science, social science, and language. In groups where there was a subject or a group of subjects with only a limited number of teachers, I merged them with other groups which closely related to their subjects. For example, for teachers teaching religious studies, I placed them into a larger social science group.

3.7.3 Semi structured interviews

In piloting the semi-structured interviews, I involved three teachers and a leader from four contrasting schools, two from urban and the other two from the rural areas. By piloting the interviews, I expected to (1) find out how effective interview could be developed with the teachers, (2) identify any technical problems that might arise during the discussion. (3) find out how comprehensible and amenable the interview question for teachers and leaders, (4) predict the answer that will be given by the teachers in relation to the questions prepared in interview guide, and any responses beyond the questions given, and (4) estimate the time needed in to conduct the interview. Overall, the pilot study ran as I expected, except on two issues, namely, (1) the pilot study revealed that it was not easy to persuade teachers and leaders to volunteer for the interviews because of concerns about privacy. I needed to convince them that the results of the interviews would be reported without reference to them as named individuals and their identities would not be detectable from the research report, my thesis or any publication emanating from this research, and (2) in terms of time duration allocated for each interview, the pilot study shown that it could take up to 20 minutes. It was a bit longer that I had expected, which was five to seven minutes.

3.8 Processes and procedures of data analysis

In this section I clarify the processes and procedures of data analysis used with the different data sets developed through the four stages of this research.

3.8.1 Data analysis processes

The quantitative data was analysed by using a number of statistical analysis including univariate, bivariate and multivariate analyses, while the qualitative data was analysed by using thematic case and cross-case analyses. I summarise each process of data analysis below.

Univariate analysis

Univariate analysis was used to describe teachers' and leaders' survey responses and what they recorded on discussion sheets: frequency counts, measures of central tendency (mean, median and mode as appropriate), and measures of spread (range and standard deviation).

Bivariate analysis

Bivariate analysis was used to describe variation in teachers' responses in terms of background characteristics such as their leadership responsibility level, teaching experience, employment status, subject taught, certification status, most advanced educational qualification, gender, school performance level, school type and geographic location.

Multivariate analysis

Multivariate analysis comprised exploratory and confirmatory factor analysis. Factor analysis was used to identify underpinning dimensions of PL and OL based on teachers' and leaders' responses to individual items in the SSE questionnaire (see: Loehlin, 2004: P 152). Not only does such analysis enabling the rendering of findings in simpler form, it also opens up challenges and opportunities to conceptualise the central constructs of phenomena of interest – in my case, PL and OL.

Thematic analysis

The qualitative data was analysed by using thematic analysis. Thematic analysis involved identifying, analysing, and reporting patterns and key constructs or themes in the interview accounts of different groups of teachers and leaders at each of the two schools separately. In this research, thematic analysis was used to analyse the data collected from discussion sheets and interviews. Specific constructs or themes from discussion sheet and the interview accounts were identified, analysed and reported (see: Braun and Clarke, 2006: p. 6). In order to identify group and separate constructs or themes I used a colouring technique, applying a different colour for each main theme developed inductively from each discussion sheet and the transcribed text of each interview. More detailed explanation of the constructs or themes that I identified through this time-consuming and iterative process are explained in section 3.8.2 below.

Cross-case analysis

Cross-case analysis enabled me to widen the angle of the lens to bring together themes and constructs developed from the accounts of teachers and leaders at each of the two schools. The process involved accumulating, comparing and contrasting constructs and themes developed from each school case together as a way of producing 'new knowledge and understanding about the issues that were being investigated' (Khan and Wynsberghe, 2008: p. 1). Khan and Wynsberghe, (2008: p. 1) suggest cross-case analysis is one of the best ways of achieving this. They believe that cross-case analysis can mobilise knowledge from individual case study to a broader scope across a number of case studies. In general, Ragin (1997 in Khan and Wynsberghe, 2008: p. 4-5) present two approaches for cross-case analysis, namely variable-oriented case study and caseoriented case study. Ragin explains that in variable-oriented research, variables take centre stage; that is, the outcome observed in the cases varies across observations and causes appear to compete with one another. This approach's main goal is to explain why selected cases vary to one another. However, Khan and Wynsberghe (2008: p. 5) argue that variable-oriented approaches to cross-case analysis are a challenge to conduct because fair comparisons are difficult to achieve and the multitude of factors that are associated with social phenomena are often too numerous to disentangle. Ragin (1997) in Khan and Wynsberghe, 2008: p. 4-5) described that the central question of interest to the case-oriented researcher is in what ways the cases are alike. In this research, I decided to employ a case-oriented approach. This mode of analysis enabled me to understand differences and similarities in how the SSE intervention influenced PL and OL processes at the two schools.

3.8.2 Procedures of data analysis

I now turn to discuss the procedures of data analysis I used for each data set.

Data collected from school self-evaluation survey

To analyse the survey data, I went through three steps of analysis, namely, (1) describing alignment between values and practices item responses of all teachers on PL and OL, (2) developing factors underlying PL and OL in school, and (3) comparing the values and practices on PL and OL by schools and teachers' characteristics.

First, I transformed teachers' responses on the questionnaire into numerical data. As described earlier, to record teachers' and leaders' values on the questionnaire, I provided four options which they needed to choose in order to describe their value to each item, including 'Not True', 'Rarely True', Often True', and 'Mostly True'. While to record their practices, I provided another four options for them namely 'Not Important', 'of limited

important', 'important', and 'crucial'. As can be noticed from Table 3.14, each response was rated from one to four. A score of '1' reflected low value or practice score while a score of '4' was a high score in terms of values and practice on any particular indicator.

Table 3. 16: Score Given to Each Answer of School Self-Evaluation (SSE) Questionnaire

Teachers'	Practice	Teachers' Value				
Option Available	Score Given	Option Available	Score Given			
Not True	1	Not Important	1			
Rarely True	2	Of limited important	2			
Often True	3	Important	3			
Mostly True	4	Crucial	4			

<u>Describing degrees of alignment of values and practices for PL and OL item</u> responses

In this step, means and standard deviations were compared to arrive at measures of values-practice gaps. I compared the means and standard deviations which teachers and leaders put on their values to the mean score they placed on the practices. In this respect, the closer the mean score the teachers placed on the values and practices, meant that the closer the alignment of those scores.

Developing factors underlying PL and OL practices in school

Factor analysis with varimax rotation was carried out to generate underlying factors based on respondents' practice responses to PL and OL. As part of the factor analysis, the strength of association between individual survey items and the factors identified are measured through the calculation of factor loadings, which are similar to correlation coefficients. A factor loading of 0 indicates no association between a certain questionnaire item and a particular factor. A factor loading of 1 indicates a relationship between such item and the factor. An item was included in a factor if it had a factor loading above 0.4. If an item had a loading of more than 0.4 on more than one factor, such items was excluded from analysis. Before making my final decision, I tried different solutions.

• Comparing the values and practices on PL and OL by schools' and teachers' characteristics

To describe the alignment of teachers' values and practices on each PL and OL factors, as I conducted in describing values-practice gaps on the teachers' and leaders' item responses, I compare the average practice scores placed by teachers and leaders on

each factors of PL and OL, to the values score they placed on similar factors. The data resulted from this process was presented using table 3.15 below.

Table 3. 17: Teachers' and Leaders' Values-practice gaps on factors of PL/OL

Table of 111 Todellote and Loddello Values practice gape of lactice of 1 L/OL								
Factors of PL/OL	Values		Practices		Value-Practice Gaps (Mean V – Mean P)			
	Mean	SD	Mean	SD	Mean	SD		
Factor A Item 1 Item 2								
 Factor B Item 1 Item 2								
 Overall Items								

Through table 3.15 above, the gaps between the teachers' values and practices both on each indicator and on each factor of PL or OL, became easier to identify. The gaps reflected the teachers' and leaders' values-practices alignment. The smaller the gap, the closer the values-practice alignment would be. The data resulted from this step was used to answer a part of research question one, particularly that in relation to the alignment of the teachers' values and practices on their professional learning. Moreover, to describe how those values and practices varied across teachers' and schools' characteristics, I conducted the third step analysis using test of significant difference, using *p- value* of 0.01, test of Effect size, using Cohen's d. In this regard, I investigate the significant difference of values and practices score placed by certain characteristics of teachers, to those placed by teachers or school with other characteristics. I presented the result of such analysis using table 3.16 below.

By using the table, the significant difference of PL and OL placed by different characteristics of teachers and schools could be identified. In this respect, a significant difference meant that teachers or schools with a certain characteristic placed different values or practices scores, compared to those with other characteristics.

Table 3. 18: Example of table used to present data regarding the Comparison of Practices and Values for Professional Learning (PL) Factors across School Achievement Ranks

	Ach	ievement R	Between-Groups Differences		
Professional Learning Factors	Тор	Medium	Low	Sig. (2- Tailed)	η²

Factor 1	Practice (P)	N Mean SD α			
Factor 1	Value (V)	N Mean SD α			

Data collected from discussions sheets

As discussed previously, discussion sheet was adapted to collect data in this research, in order to record how teachers and school leaders interpreted and made sense of values and practice data for the purpose of supporting professional learning (PL) in their school. In addition, such discussion sheets were also used to describe variations in teachers' and leaders' interpretations of the survey data at each of the two schools. To describe how teachers and school leaders interpreted and made sense of values and practice data, I employed thematic analysis. The themes of interest were as follows: (1) Values-practice gaps in relation to PL and OL factors, (2) Teachers' and leaders' principles and thinking underpinning their interpretations, (3) which gaps they identified as priorities and which required a school response, (4) strategies suggested by different groups of teachers and leaders in light of their interpretations of the SSE data, and (5) strategic recommendations that were adopted, adapted or rejected in. I used a colouring technique to differentiate the different themes.

To describe the variations in teachers' and leaders' interpretations of the survey data across the schools, I employed case-oriented cross case analysis technique (see: Ragin, 1997 in Khan and Wynsberghe, 2008: p. 4-5). In this respect, I investigated and described if the school from different level, performance and geographical locations have (i) revealed different range of values-practice gaps, (ii) shown different reasons underpinning their judgment to the gaps and (iii) proposed different range of solution in minimising the value-practice gaps with respect to their professional learning practice at school. To undertake such analysis, I summarised, compared, and presented the information in relation the topics above case by case. By doing so, how each school similar or differ in interpreting the SSE data could be revealed and described.

Analysing data collected from semi-structured interviews

Two sets of interviews were undertaken in this research. The first interviews were employed to follow up group discussions. Such interviews were designed to develop

understandings of the personal perspectives and thinking that shaped strategic recommendations in light of the SSE data at each of the two schools.

The second interviews focused on changes in policy and practice that resulted from SSE process and how teachers and leaders considered such changes influenced the quality of teachers' professional learning and professional learning support. More detailed description with regard to the analysis procedures are presented in the following sections.

First set of interviews

I began by focusing on teachers' priority recommendations within each school. To do so, I identified and then summarised the information in relation to (i) the personal perspectives and thinking behind the schools' decisions in adopting, adapting and rejecting such recommendations and (ii) the thinking and reasoning underpinning the decision-making process. An inductive thematic analysis (see: Braun and Clarke, 2006) was employed in the process. The data in relation to the information mentioned above was identified from each interview transcripts by marking them with a certain colour. Such information was summarised and interpreted in order to understand the view of each individual interviewees in each school.

Analysis of each individual interview account were used to develop understandings with regard to the decision-making processes that took place in each school. A key purpose of the analysis was to represent multiple perspectives held and articulated by different groups of teachers and leaders at each school. Through attending to different perspectives, I aimed to develop a comprehensive understanding of dissonant and convergent voices in each school's development of policy recommendations. The last step used in analysing the data was to compare decision-making processes and policy recommendations at each school.

Strategy used to analyse data collected from interview two

The second interviews were focused on changes to policy and practice that resulted from the implementation of strategic decisions made in the light of the SSE process, how teachers and leaders considered such changes influenced the quality of teachers' professional learning and professional learning support. To analyse such data, I adopted similar procedures as I did for the first sets of interviews. The process began by identifying the information on each interview transcript with respect to the information mentioned above. The analysis of individual interviewees was used to develop

understanding with regard to how the policy of each school with regard to supporting the teachers' professional learning have changed due to the implementation of the priority strategic recommendations. The understanding gathered from each interviewee in a school was then compared to that from the other schools, in order to find out if there was different pattern of policy changing across case-study school with different types, geographical locations, and performance levels.

CHAPTER 4. MAKING SENSE OF SCHOOL SELF-EVALUATION (SSE) SURVEY DATA

In this chapter, I report the outcomes of statistical analyses of teachers' and leaders' responses to School Self-evaluation (SSE) Survey. As presented and discussed in chapter three, the survey, which allowed teachers to record their practices and values for professional and organisational learning at schools, was employed to answer the first question of this research. The question was about the patterns of alignment in professional and organisational learning (OL) values and practices recorded by teachers, and about variations of practices and values across schools and by teacher characteristics. Overall, taking the sample as a whole, teachers recorded fairly high values and practices for almost all factors of professional learning (PL) and organisational learning (OL). Values and practices recorded for OL are slightly higher than for PL. Values-practice alignments are close for PL and even closer for OL. Between-group differences in values and practices are mostly insignificant; even where differences are statistically significant, the size of these differences tends to be small.

More detailed analysis of outcomes of the aforementioned broad patterns for OL and PL are the main focus of this chapter. I begin by presenting results of factor analyses through which I developed the underlying dimensions of PL and OL in section 4.1, and in section 4.2 I report the values-practice comparisons across school and by teacher characteristics, for each factor of PL and OL.

4.1 Factors Underlying Teachers' Practices for Professional and Organisational Learning (OL) at School

As discussed in methodology chapter (chapter three), factor analysis made it possible to identify underlying dimensions of professional and organisational learning. In this research, we focus on these underlying dimensions. Not only does the identification of these dimensions enable a clearer conceptualisation of professional learning (PL) and organisational learning (OL), they also provide a clearer basis than item analysis for making comparisons based on a smaller number of variables (the underlying dimensions or factors of PL and OL) between practices and values for the sample as a whole and for different groups of teachers according to both school and teacher characteristics. However, in order to develop broader understanding, before conducting the factor analysis, I also undertook analysis of teachers' values and practices for each item related to both professional learning (PL) and organisational learning (OL). I present mean scores and standard deviations which are summarised in Appendix 11 and 12. The

overall pattern of teachers' responses for the whole sample of a little more than 700 teachers is encouraging, with quite close values-practice alignment at fairly high levels on a 4-point scale; For OL, as presented in table 4.1.2, teachers recorded higher scores for values than practices, with closer values-practice alignment.

In terms of factor underlying the PL and OL practice of teachers and school leaders, through exploratory and confirmatory factor analyses (see chapter three for procedures of analysis) I identified three underlying factors for teachers' PL practices, and five factors for OL. The factors were developed exclusively on the basis of analysis of teachers' practice responses. The factors underlying teachers' professional learning (PL) are presented in subsection 4.1.1, and those underlying OL are presented in subsection 4.1.2.

4.1.1 Factors underlying teachers' professional learning (PL)

Exploratory and confirmatory factor analysis identified three factors underlying teachers' PL, as I summarised in table 4.1 below. The identified underlying factors were interpreted as *Collaborative Professional Learning, Learning and Reflecting from Different Sources, and Learning Conversations and Mutual Support.* Items in the *Collaborative Professional Learning factor*, as the name suggests, share an emphasis on different forms of collaboration and learning together. The *Learning and Reflecting from Different Sources factor* emphasises learning by teachers from a range of sources as listed in table 4.1. The third factor, *Learning Conversations and Mutual Support*, brings together items related to teachers' mutual endeavours, support and discursive practices linked to their learning. Overall, the factors identified above, accounted for 50.6% of the variance in teachers' responses to PL items.

Table 4. 1: Factor items and factor loading of teachers' professional learning practice

Factor and Items of Professional Learning (PL)	Factor Loadings
 Factor 1. Collaborative Professional Learning (n= 571) I modify my teaching practice in the light of evidence from evaluations of my classroom practice by school leaders or other colleagues 	0.73
- I engage in regular collaboration with colleagues to plan teaching practice	0.72
- I engage in team teaching as a way of improving teaching practice	0.66
- I modify my teaching practice in the light of evidence from self- evaluations of my classroom practice	0.66
 I carry out joint research/evaluation with one or more colleagues as a way of improving my teaching practice 	0.63
- I engage in reflective discussions of teaching practices with one or more colleagues	0.49

Table 4. 2: Factor items and factor loading of teachers' professional learning practice (Contd.)

(Conta.)	Factor
Factor and Items of Professional Learning (PL)	Loadings
Factor 2. Learning and Reflecting from Different Sources (n= 571) - I relate what works in my own teaching practice to research findings - I reflect on my teaching practice as a way of identifying professional learning needs	0.69 0.68
 I read research reports as one source of useful ideas for improving my practice 	0.66
 I experiment with my teaching practice as a conscious strategy for improving classroom teaching and learning 	0.63
- I modify my teaching practice in the light of published research evidence	0.58
- I draw on good teaching practice from other schools as a means to further my own professional development	0.54
Factor 3. Learning Conversation and Mutual Support (n= 571)	
- I and my colleagues offer one another reassurance and support	0.71
- I and my colleagues frequently use informal opportunities to discuss how pupils learn	0.70
- I suggest ideas or approaches for colleagues to try in class	0.65
- I am able to see how practices that work in one context might be adapted to other contexts	0.64
 I regularly observe my colleagues in the classroom and give each other feedback 	0.51
- I discuss openly with colleagues what and how we are learning	0.50

4.1.2 Factors underlying teachers' perception of practices with respect to school organisational learning (OL).

For school organisational learning (OL), as presented in appendix 14, and summarised in table 4.2, exploratory and confirmatory factor analysis identified five underlying factors, namely, *Building Social Capital*, *Involving Teachers in School Policy Development, Critique and Goal Setting*, *Developing a Sense of Where We are Going*, *Supporting Experimentation*, *Collaboration*, *and Networking*, and *Valuing Learning*. *Building Social Capital* brings together items that emphasises developing a learning culture of trust in school, in which teachers are learning, working, supporting, and talking with each other. In the second factor, the *Involving Teachers in School Policy Development*, *Critique and Goal Setting factor*, as implied by its name, emphasises an inclusive school culture in which teachers' and pupil's voices are taken seriously in decision-making and goal-setting processes. The *Developing a Sense of Where We are Going* factor, emphasises a school culture in which there is a shared vision about the way the school is developing and commitment among staff to school priorities and the direction of school development.

Moreover, the Supporting Experimentation, Collaboration, and Networking factor emphasises opportunities and a supportive climate in which teachers develop capacity and share knowledge about practices. The last factor, Valuing Learning, reflects a culture in which learning throughout the school is celebrated, and where there is widespread belief that all pupils are capable of learning. Overall, the five factors mentioned above explain 56.73% of the variance in teachers' responses to OL items.

Table 4. 3: Factor items and factor loading of Organisational Learning Practice at School

Factor and Itams of Organisational Learning	Loadings
Factor and Items of Organisational Learning Factor 1. Puilding Social Conital (n= 571)	Loadings
Factor 1. Building Social Capital (n= 571)	0.72
- Teachers discuss openly with colleagues what and how they are learning	0,72
- If teachers have a problem with their teaching, they usually turn to colleagues for help	0,69
- Teachers regularly collaborate to plan their teaching	0,66
- Teachers offer one another reassurance and support	0,65
- Teachers frequently use informal opportunities to discuss how children learn	0,64
- Teachers are helped to become more aware of professional standards	0,60
- Teachers are helped to develop skills to observe learning as it happens in the classroom	0,45
Factor 2. Involving Teachers in School Policy Development, Critiques and Goal Setting (n= 571)	
- Teachers are actively involved in evaluating school policy	0,74
- Opportunities are provided for teachers to critically evaluate school policy	0,72
- There are processes for involving all teachers in decision making	0,72
- Teachers' professional learning is used in the formulation of school policy and goals	0,57
- Teachers' professional learning is used in the formulation of school policy, even where this leads to a questioning of established rules,	0,55
procedures and practices	0,55
- Teachers participate in important decision-making	0,54
Factor 3. Developing a Sense of Where We are Going (n= 571)	
- The school leaders promote commitment among teachers to the whole school as well as to their subject department	0,72
- Teachers have a commitment to the whole school as well as to their subject department	0,71
- Teachers see the school improvement plan as relevant and useful to learning and teaching	0,62
- Teachers development time is used effectively to realize school improvement priorities	0,62
- The school leaders communicate a clear vision of where the school is going	0,61
- Teachers have a good working knowledge of the school improvement plan	0,55
Factor 4. Supporting Experimentation, Collaboration and Networking (n= 571)	.,
- The school provides teachers joint-planning time	0,64
- Teacher-initiated networking is an integral element of staff development	0,57
- School system encourage impact evaluation of professional development activities	0,54
- Formal training provides opportunities for teachers to develop professionally	0,47
Factor 5. Valuing Learning (n= 571)	0,
- Teachers believe that all pupils are capable of learning	0,72
- Pupils in this school enjoy learning	0,69
- Teachers as well as pupils learn in this school	0,63
- Pupil success is regularly celebrated	0,60
- Fupil success is regularly celebrated - Teachers use insight from their professional learning to feed into school's social policy development	0,80
- Teachers use maight from their professional feathing to feed into school's social policy development	U, 44

4.2 Practices and Values for Professional and Organisational Learning (PL - OL) Factors: differences by school and teacher characteristics

In this section, I present values and practices recorded by teachers for each factor underlying PL and OL. I begin this section by describing practices and values recorded by the entire sample of teachers. Then, in subsection 4.3.2, I present teachers' values and practices by school characteristics. In the last subsection, subsection 4.3.3, I present values and practices by teacher characteristics.

4.1.2 Practices and values for professional and organisational learning (OL) factors by all teachers

In this subsection, I present practices and values recorded by the whole sample of teachers for both Professional and Organisational Learning. Table 4.3 indicates fairly high practices and similarly high values recorded by teachers for each factor of professional learning (PL). There are statistically significant differences (p<0.01) between values and practices, where values tended to be higher than practices, but teachers' values and practices were in close alignment for all factors with small effect sizes. For OL factors, teachers recorded slightly higher values and practices following the common pattern across all the survey data of close values-practice alignment reflected in small effect sizes.

Table 4. 4: Values-practice Differences for each Factor of Teachers' Professional and Organisational Learning

	Practice Value			Between-group differences				
Factors and items of PL and OL	Mean	Sd	α	Mean	Sd	α	Sig.	Cohen's d
Professional Learning Factors								
- Collaborative Professional Learning								
	2.7	3.4	8.0	2.9	3.0	0.7	.000	0.4
 Learning and Reflecting from Different Sources 								
	2.9	2.9	0.7	3.1	2.6	0.7	.000	0.2
- Learning Conversation and Mutual Support	0.0	0.4		0.4	0.0	0.0	000	0.0
	3.0	3.1	0.7	3.1	2.9	8.0	.000	0.2
Organisational Learning Factors								
- Building Social Capital	3.0	3.7	8.0	3.1	3.3	8.0	.000	0.2
 Involving Teachers in School Policy 								
Development, Critiques and Goal Setting								
	3.1	3.2	8.0	3.2	2.9	8.0	.000	0.1
 Developing a Sense of Where We are Going 								
	3.4	2.8	8.0	3.4	2.5	8.0	.001	0.1
 Supporting Experimentation, Collaboration and 								
Networking	3.1	2.3	8.0	3.3	3.6	0.7	.000	0.2
- Valuing Learning	3.2	2.3	0.7	3.2	2.4	0.7	.020	0.0

4.1.3 Practices and values for professional learning (PL) and organisational learning (OL) factors by school characteristics

Here I present comparisons between values and practices recorded by teachers for each factor of PL and OL, based on a range of school characteristics. I begin by presenting values-practice comparisons by school achievement ranks and geographic location, then by school levels (junior and senior high schools).

<u>Practices and values for professional and organisational learning (OL) factors by school</u> achievement ranks

Tables 4.4 and 4.5 show that teachers from top, medium and low-ranking schools recorded high values and practices for each factor of PL and OL. Values tend to be higher than practices, but values-practice alignments remain close. There are no large values-practice differences between teachers at schools with different achievement ranks; even when significant (at p < 0.01), the effect sizes are very small.

Table 4. 5: Comparison of Practices and Values for Professional Learning (PL) Factors across School Achievement Ranks

				evement R		Between-Groups	Differences
Professional Learning Fa	ctors		Тор	Medium	Low	Sig. (2-Tailed)	η²
		N	299	147	265		
	Dractice (D)	Mean	2.6	2.9	2.5	0.000	0.02
	Practice (P)	SD	0.5	0.5	0.5	0.000	
Collaborative		α	0.7	8.0	8.0		
Professional Learning		N	299	147	265		
	Value (V)	Mean	2.8	3.1	2.8	0.000	0.03
	value (v)	SD	0.5	0.4	0.5	0.000	0.03
		α	8.0	0.7	0.7		
		N	299	147	265		
		Mean	3.0	3.1	2.8	0.000	0.03
	Practice (P)	SD	0.5	0.4	0.4		
Learning and Deflecting		α	0.7	0.7	0.7		
Learning and Reflecting from Different Sources		N	299	147	265	•	
Hom Different Sources	Value (V)	Mean	3.0	3.2	3.0	0.000	0.02
		SD	0.4	0.4	0.4		
		α	0.6	0.7	0.7		
		N	299	147	265		
	Practice (D)	Mean	2.9	3.1	2.9	0.000	0.02
	Practice (P)	SD	0.5	0.5	0.4	0.000	0.02
		α	0.7	0.6	8.0		
Learning Conversation		N	299	147	265		
and Mutual Support		Mean	3.0	3.3	3.0		
	Value (V)	SD	0.5	0.4	0.4	0.000	0.05
		α	8.0	8.0	0.7		

Table 4. 6: Comparison of Practices and Values for School Organisational Learning (OL) Factors across School Achievement Ranks

N Mean SD α N Mean SD α N Mean SD α N Mean SD α	300 2.9 0.5 0.8 300 3.1 0.4 0.8	147 3.0 0.4 0.8 147 3.0 0.5 0.8	265 3.0 0.6 0.8 265 3.1 0.4	Sig. (2-Tailed) .439047	η² .002
Mean SD α N Mean SD α σ N Mean SD α	2.9 0.5 0.8 300 3.1 0.4 0.8	3.0 0.4 0.8 147 3.0 0.5	3.0 0.6 0.8 265 3.1 0.4	_	
SD α N Mean SD α P) N	0.5 0.8 300 3.1 0.4 0.8	0.4 0.8 147 3.0 0.5	0.6 0.8 265 3.1 0.4	_	
α N Mean SD α ?) N	0.8 300 3.1 0.4 0.8	0.8 147 3.0 0.5	0.8 265 3.1 0.4	_	
N Mean SD α ?) N	300 3.1 0.4 0.8	147 3.0 0.5	265 3.1 0.4	 047	
Mean SD α V) N	3.1 0.4 0.8	3.0 0.5	3.1 0.4	047	
SD α ?) N	0.4 0.8	0.5	0.4	047	
α ') N	0.8			U 4 /	.009
P) N		0.8			.009
,	000		0.8		
	300	147	265		
Mean	3.0	3.1	3.1	.457	.002
SD	0.5	0.5	0.5	.437	.002
α	0.8	8.0	0.8	<u></u>	
N	300	147	265		
Mean	3.2	3.1	3.2	.425	.002
SD	0.4	0.5	0.4	.425	.002
α	8.0	8.0	0.8		
P) N	300	147	265		
Mean	3.3	3.5	3.3	005	.015
SD	0.5	0.4		.005	.015
α	8.0	8.0		_	
N	300	147	265		
Mean	3.4	3.5	3.3	000	.024
SD	0.4	0.4	0.4	.000	.024
	8.0	8.0	8.0		
3	Mean SD α N Mean	Mean 3.3 SD 0.5 α 0.8 N 300 Mean 3.4 SD 0.4	Mean 3.3 3.5 SD 0.5 0.4 α 0.8 0.8 N 300 147 Mean 3.4 3.5 SD 0.4 0.4	Mean 3.3 3.5 3.3 SD 0.5 0.4 0.5 α 0.8 0.8 0.8 N 300 147 265 Mean 3.4 3.5 3.3 SD 0.4 0.4 0.4	Mean SD 0.5 0.4 0.5 α 0.8 N 300 147 265 Mean SD 0.4 0.4 0.4 SD 0.6 SD 0.4 0.4 0.4 SD 0.6 SD SD

Table 4.5 Comparison of Practices and Values for School Organisational Learning (OL) Factors across School Achievement Ranks (Contd.)

				hievement R	Ranks	Between-Groups Differences	
Organisational Learn	ning Factors		Тор	Medium	Low	Sig. (2-Tailed)	η²
	Practice (P)	N	300	147	265		-
		Mean	3.1	3.2	3.1	010	012
Supporting		SD	0.6	0.5	0.6	.010	.013
Experimentation,		α	0.7	8.0	8.0		
Collaboration, and	Value (V)	N	300	147	265	_	
Networking	` '	Mean	3.2	3.3	3.2	007	010
G		SD	0.4	0.4	0.5	.027	.010
		α	0.7	8.0	8.0		
	Practice (P)	N	300	147	265		
	, ,	Mean	3.1	3.3	3.2	.004	.016
		SD	0.4	0.4	0.5	.004	.016
		α	0.7	0.6	8.0		
Valuina Laarnina	Value (V)	N	300	147	265	_	
Valuing Learning	. ,	Mean	3.2	3.1	3.2	204	002
		SD	0.4	0.6	0.5	.321	.003
		α	0.7	0.7	0.7		

<u>Professional learning (PL) and organisational learning (OL) practices and values by school geographic locations</u>

The mean scores presented in tables 4.6 and 4.7, shows that rural and urban teachers recorded high and closely aligned values and practices for PL and OL factors. There are no wide gaps between values and practices recorded by rural teachers to those recorded by the urban ones, where it was significant in a certain factor, the effect sizes are mostly still small.

Table 4. 7: Comparison of Practices and Values for Professional Learning (PL) Factors across School Geographic Locations

Professional Learning (PL)			-	Geo. Loc.		s Differences
Factors			Urban	Rural	Sig. (2-Tailed)	Cohen's d
	Practice (P)	N	401	310		
		Mean	2.7	2.7	0.204	0.072
		SD	0.5	0.5	0.204	0.072
Collaborative Professional		α	0.8	0.8		
Learning	Value (V)	N	401	310	_	
		Mean	3.0	2.9	0.002	0.179
		SD	0.4	0.5	0.002	0.179
		α	0.8	0.8		
	Practice (P)	N	401	310		
		Mean	2.9	2.9	0.111	0.091
		SD	0.4	0.5	0.111	0.091
Learning and Reflecting		α	0.8	0.8		
from Different Sources	Value (V)	N	401	310		
		Mean	3.1	3.0	0.009	0.149
		SD	0.4	0.4	0.009	0.149
		α	0.8	0.8		
	Practice (P)	N	401	310		
		Mean	3.0	2.9		
		SD	0.4	0.5	0.003	0.167
		α	8.0	0.8		
Learning Conversation and	Value (V)	N	401	310		
Mutual Support		Mean	3.1	3.0	0.000	0.21
		SD	0.4	0.4	0.000	0.21
		α	8.0	0.8		

Table 4. 8: Comparison of Practices and Values for Organisational Learning (OL) Factors across School Geographic Locations

·		-	Geographic	Locations	Between-Group	s Differences
Organisational Learning Fa	actors		Urban	Rural	Sig. 2-Tailed)	Cohen's d
		N	401	310		_
	Dractice (D)	Mean	3.0	2.9	0.000	0.44
	Practice (P)	SD	0.5	0.3	0.000	0.41
Duilding Copiel Copital		α	8.0	8.0		
Building Social Capital		N	401	310	_	
	\/alua (\/)	Mean	3.1	3.1	0.422	0.04
	Value (V)	SD	0.4	0.4	0.432	0.04
		α	8.0	8.0		
		N	401	310		
	Dractice (D)	Mean	3.0	3.0	0.242	0.05
Involving Teachers in	Practice (P)	SD	0.5	0.3	0.313	0.05
School Policy		α	8.0	8.0		
Development, Critiques		N	401	310	_	
and Goal Setting	Value (V)	Mean	3.2	3.1	0.380	0.05
	Value (V)	SD	0.5	0.4	0.300	0.05
		α	0.8	0.8		
		N	401	310		_
	Dractice (D)	Mean	3.4	3.0	0.000	0.60
	Practice (P)	SD	0.4	0.3	0.000	0.62
		α	8.0	8.0		
Developing a Sense of		N	401	310	_	
Where We are Going	Value (\/)	Mean	3.5	3.3	0.000	0.25
•	Value (V)	SD	0.4	0.4	0.000	0.25
		α	0.8	0.8		

Table 4.7: Comparison of Practices and Values for Organisational Learning (OL) Factors across School Geographic Locations (Contd.)

			Geographic	Locations	Between-Groups	Differences
Organisational Learning Facto	rs		Urban	Rural	Sig. (2-Tailed)	Cohen's d
		N	401	309		
	Practice (P)	Mean	3.2	3.1	0.024	0.129
Supporting Experimentation	Fractice (F)	SD	0.5	0.3	0.024	0.129
Supporting Experimentation, Collaboration, and		α	0.8	0.8		
Networking		N	401	310		
Networking	Value (V)	Mean	3.3	3.2	0.000	0.237
	value (v)	SD	0.4	0.4	0.000	0.237
		α	0.8	0.8		
		N	401	310		
	Dractice (D)	Mean	3.2	3.1	0.193	0.074
	Practice (P)	SD	0.4	0.3	0.193	0.074
		α	8.0	8.0		
Valuing Learning		N	401	309		
valuing Learning	\/alua (\/)	Mean	3.3	3.2	0.006	0.158
	Value (V)	SD	0.3	0.5	0.006	0.136
		α	8.0	8.0		

<u>Professional learning (PL) and organisational learning (OL) practices and values by school levels</u>

Table 4.8 and 4.9 show that the between-groups differences for values and practices recorded by teachers across school levels, for both PL and OL are mostly insignificant (at p< 0.01). The mean score presented in the tables indicate that teachers recorded fairly high values and practices for both PL and OL, with close values-practice alignments.

Table 4. 9: Comparison of Practices and Values for Professional Learning (PL) Factors across School Levels

			School		Between-Groups	s Differences
Professional Learning Factors			SHS	JHS	Sig. (2-Tailed)	Cohen's d
		N	376	335		
	Practice (P)	Mean	2.7	2.7	0.263	0.061
Collaborative	1 1404100 (1)	SD	0.5	0.5	0.200	0.001
Professional		α	0.8	0.8		
Learning Practice		N	376	335		
	Value (V)	Mean	2.9	2.9	0.062	0.102
	()	SD	0.4	0.5	0.002	01.102
-		α	0.8	0.8		
		N	376	335		
	Practice (P)	Mean	3.0	2.9	0.156	0.078
Learning and	()	SD	0.5	0.4		
Reflecting from		α	0.8	0.8		
Different Sources,		N	376	335		
practice & value	Value (V)	Mean	3.1	3.0	0.195	0.071
	()	SD	0.4	0.4		
		α	0.8	0.8		
		N	376	335		
	Practice (P)	Mean	2.9	2.9	0.674	0.023
	1 1401100 (1)	SD	0.5	0.5	0.07 1	0.020
Learning		α	0.8	8.0		
Conversation and		N	376	335		
Mutual Support,		Mean	3.1	3.0	0.000	0.445
practice & value	Value (V)	SD	0.5	0.4	0.009	0.145
		α	0.8	0.8		

Table 4. 10: Comparison of Practices and Values for Organisational Learning (OL) Factors across School Levels

			School	Levels	Between-Groups	Differences
Organisational Learning	Factors		SHS	JHS	Sig. (2-Tailed)	Cohen's d
		N	376	335		
	Dractice (D)	Mean	2.9	3.0	0.370	0.049
	Practice (P)	SD	0.5	0.5	0.370	0.049
Building Social Conital		α	0.8	8.0	<u></u>	
Building Social Capital		N	376	335		
	Value (V)	Mean	3.1	3.1	0.792	0.014
	Value (V)	SD	0.4	0.4	0.792	0.014
		α	0.8	8.0		
		N	376	335		
	Practice (P)	Mean	3.1	3.0	0.479	0.039
nvolving Teachers in	r ractice (r)	SD	0.5	0.5	0.479	0.039
School Policy		α	0.8	8.0	<u></u>	
Development, Critiques		N	376	335		
and Goal Setting	Value (V)	Mean	3.2	3.2	0.567	0.031
	value (v)	SD	0.4	0.4	0.307	0.031
		α	0.8	8.0		
		N	376	335		
	Practice (P)	Mean	3.4	3.3	0.319	0.055
	Fractice (F)	SD	0.5	0.5	0.519	0.055
		α	0.8	8.0	<u></u>	
Developing a Sense of		N	376	335		
Where We are Going	\/alua (\/)	Mean	3.4	3.4	0.420	0.044
	Value (V)	SD	0.4	0.4	0.420	0.044
		α	8.0	0.8		

Table 4.9. Comparison of Practices and Values for Organisational Learning (OL) Factors across School Levels (Cont.)

			School	Level	Between-Groups Differences		
Organisational Learning Factor	S		SHS	JHS	Sig. (2-Tailed)	Cohen's d	
		N	376	335			
	Proctice (D)	Mean	3.1	3.3	0.227	0.066	
	Practice (P)	SD	0.6	0.4	0.221	0.000	
Supporting Experimentation,		α	0.8	0.8			
Collaboration and Networking		N	376	335	_		
	Value (V)	Mean	3.0	3.2	0.140	0.081	
	Value (V)	SD	0.6	0.5	0.140	0.001	
		α	0.8	8.0			
		N	376	335			
	Practice (P)	Mean	3.2	3.2	0.184	0.073	
	Fractice (F)	SD	0.4	0.5	0.104	0.073	
		α	0.8	0.8			
Valuing Learning		N	376	335	_		
valuing Learning	Value (V)	Mean	3.1	3.2	0.074	0.002	
	Value (V)	SD	0.4	0.4	0.974	0.002	
		α	0.8	8.0			

4.1.4 Professional learning (PL) and organisational learning (OL) practices and values by teacher characteristics

Here, I compare teachers' values and practices according to a range of teacher characteristics. In the first three subsubsections I present values-practice comparisons by teachers' years of teaching experience, their teaching subject, and their certification status. I go on to present values-practice comparisons by their leadership responsibility level, teaching experience, employment status, subject taught, certification status, most advanced educational qualification, and gender.

<u>Professional learning (PL) and organisational learning (OL) practices and values by years of teaching experience</u>

Tables 4.10 and 4.11 indicate that teachers recorded high values and practices for PL and OL factors, with close values-practice alignments. One-way ANOVA tests show that there are no large differences of values and practices across years of teaching experiences (Sig. > 0.01), even where significant, the effect sizes are small.

Table 4. 11: Comparison of Practices and Values for Professional Learning (PL) Factors across Ranges of Years of Teaching Experience

				Year of T	eaching		Between-Groups	Differences
Professional Learning Factors		_	<2	2 - 5	5 - 10	>10	Sig. (2-Tailed)	η²
		N	64	141	180	327		
	Practice	Mean	2.8	2.6	2.7	2.7	0.226	0.006
	(P)	SD	0.5	0.6	0.5	0.5	0.220	0.000
Collaborative Professional		α	8.0	0.8	0.8	8.0		
Learning Practice		N	64	141	180	327		
	Value (V)	Mean	3.0	2.8	2.9	3.0	0.007	0.017
	value (v)	SD	0.5	0.4	0.5	0.4	0.007	0.017
		α	8.0	8.0	8.0	8.0		
		N	64	141	180	327		
	Practice	Mean	3.0	2.9	2.9	2.9	0.771	0.002
Learning and Reflecting from	(P)	SD	0.4	0.4	0.4	0.4	0.771	0.002
Different Sources, practice &		α	8.0	8.0	8.0	8.0		
value		N	64	141	180	327		
value	Value (V)	Mean	3.1	3.1	3.1	3.1	0.996	0.000
	value (v)	SD	0.4	0.4	0.4	0.4	0.000	0.000
		α	8.0	0.87	8.0	8.0		
		N	64	141	180	327		
	Practice	Mean	3.0	2.9	2.9	3.0	0.683	0.002
	(P)	SD	0.4	0.5	0.5	0.5	0.000	0.002
		α	8.0	8.0	8.0	8.0		
Learning Conversation and		N	64	141	180	327		
Mutual Support, practice & value	Value (V)	Mean	3.1	3.0	3.0	3.1	0.034	0.012
	value (v)	SD	0.4	0.4	0.5	0.4	0.004	0.012
		α	8.0	8.0	8.0	8.0		

Table 4. 12: Comparison of Practices and Values for Organisational Learning (OL) Factors across Ranges of Years of Teaching Experience

				Year of	Teaching		Between-Group	os Difference
Organisational Learning Fa	actors		<2	2 - 5	5 - 10	>10	Sig. (2-Tailed)	η²
	Practice (P)	N	64	141	180	327		<u> </u>
		Mean	3.0	3.0	2.9	3.0	0.639	0.002
		SD	0.7	0.4	0.5	0.5	0.039	0.002
Puilding Social Conital		α	8.0	0.8	0.8	8.0		
Building Social Capital	Value (V)	N	64	141	180	327		
		Mean	3.2	2.9	3.1	3.1	0.048	0.011
		SD	0.4	0.6	0.5	0.4	0.046	0.011
		α	0.8	0.8	0.8	0.8		
	Practice (P)	N	64	141	180	327		
		Mean	3.2	3.0	3.1	3.0	0.292	0.005
Involving Teachers in		SD	0.4	0.5	0.5	0.5	0.292	0.005
School Policy		α	8.0	0.8	0.8	8.0		
Development, Critiques	Value (V)	N	64	141	180	327		
and Goal Setting		Mean	3.2	3.1	3.2	3.2	0.199	0.007
		SD	0.4	0.5	0.5	0.4	0.199	0.007
		α	0.8	0.8	0.8	0.8		
	Practice (P)	N	64	141	180	327		
		Mean	3.4	3.1	3.3	3.3	0.534	0.003
		SD	0.4	0.5	0.5	0.5	0.554	0.003
		α	8.0	0.8	0.8	8.0		
Developing a Sense of	Value (V)	N	64	141	180	327		
Where We are Going		Mean	3.5	3.4	3.4	3.4	0.109	0.009
		SD	0.3	0.5	0.4	0.4	0.109	0.009
		α	8.0	8.0	0.8	0.8		

Table 4.11: Comparison of Practices and Values for Organisational Learning (OL) Factors across Ranges of Years of Teaching Experience (Cont.)

				Year of	Teaching	g	Between-Groups	s Differences
Organisational Learning	Factors		<2	2 - 5	5 - 10	>10	Sig. (2-Tailed)	η²
		N	64	141	180	327		
	Dractice (D)	Mean	3.1	3.3	3.1	3.1	0.500	0.003
Supporting	Practice (P)	SD	0.5	0.4	0.6	0.6	0.300	0.003
Experimentation,		α	8.0	8.0	8.0	8.0		
Collaboration and		N	64	141	180	327		
Networking	Value (V)	Mean	3.2	3.0	3.3	3.3	0.270	0.004
-	Value (V)	SD	0.4	0.6	0.5	0.4	0.378	0.004
		α	0.8	8.0	8.0	0.8		
		N	64	141	180	327		
	Dractice (D)	Mean	3.3	3.2	3.1	3.2	0.024	0.040
	Practice (P)	SD	0.3	0.5	0.4	0.4	0.034	0.012
		α	0.8	8.0	8.0	0.8		
Valuina Lagraina		N	64	141	180	327		
Valuing Learning	\/alua (\/)	Mean	3.3	3.1	3.2	3.2	0.045	0.045
	Value (V)	SD	0.4	0.4	0.5	0.5	0.015	0.015
		α	0.8	0.8	8.0	0.8		
		ŭ	0.0	0.0	0.0	0.0		

<u>Professional learning (PL) and organisational learning (OL) practices and values by</u> teachers' leadership responsibility at school

The pattern of values and practices recorded by headmaster (HM), vice-headmaster (VHM), class coordinator (CC), and subject coordinator (SC) are mostly in line with the general pattern of this survey. As can be noticed from tables 4.12 and 4.13, values and practices are high, with close values-practice alignment. Values and practices for OL factors are higher, but values-practice alignments are closer. There are no large difference of values and practices across leadership responsibility levels. In some factors, the differences were significant, but the effect sizes were small.

Table 4. 13: Comparison of Practices and Values for Professional Learning (PL) Factors across teachers' leadership responsibility at school

				Leadership R	esponsibilities		Between-G Differen	
Professional Learning Practice	;		HM	VHM	CC	SC	Sig. (2-tailed)	η²
		N	69	75	326	219		
	Practice (P)	M	2.7	2.8	2.7	2.7	0.854	0.002
	Fractice (F)	SD	0.5	0.5	0.5	0.5	0.054	0.002
Collaborative Professional		α	8.0	0.8	0.8	0.8	<u></u>	
Learning Practice		N	69	75	326	219		
	Value (V)	M	3.2	3.0	3.1	3.1	0.619	0.004
	value (v)	SD	0.5	0.5	0.5	0.5	0.019	0.004
		α	0.8	8.0	8.0	0.8		
		N	69	75	326	219		
	Dractice (D)	M	3.0	2.9	2.9	2.9	0.752	0.002
Loorning and Deflecting from	Practice (P)	SD	0.5	0.5	0.5	0.5	0.752	0.003
Learning and Reflecting from Different Sources, practice &		α	0.8	8.0	8.0	0.8	<u></u>	
value		N	69	75	326	219		
value	\/alua (\/)	M	3.1	3.2	3.1	3.2	0.663	0.003
	Value (V)	SD	0.6	0.4	0.4	0.5	0.003	0.003
		α	8.0	0.8	8.0	0.8		
		N	69	75	326	219		
	Practice (P)	M	3.0	2.9	2.9	3.0	0.226	0.008
	Fractice (F)	SD	0.4	0.5	0.5	0.4	0.220	0.000
Loarning Convergation and		α	8.0	0.8	0.850	0.8	<u></u>	
Learning Conversation and Mutual Support, practice &		N	69	75	326	219		
value	\/alua (\/)	M	3.4	3.3	3.3	3.3	0.498	0.005
value	Value (V)	SD	0.4	0.5	0.5	0.4	0.490	0.005
		α	8.0	0.8	0.8	0.8		

Table 4. 14: Comparison of Practices and Values for Organisational Learning (OL) Factors across teachers' leadership responsibility at school

Organisational Learning Factors			Lea	adership f	Respons	ibility	Between-Gr Differenc	
			HM	VHM	CC	SC	Sig. (2-Tailed)	η²
		N	69	75	326	219		
	Practice (P)	Mean	3.2	3.0	3.1	3.1	0.233	0.008
	Practice (P)	SD	0.4	0.4	0.4	0.4	0.233	0.006
Building Social Capital		α	0.8	0.8	8.0	0.8		
Building Social Capital		N	69	75	326	219		
	Value (V)	Mean	3.5	3.3	3.4	3.4	0.036	0.014
	value (v)	SD	0.4	0.4	0.4	0.4	0.030	0.014
		α	0.8	0.8	8.0	0.8		
		N	69	75	326	219		
	Practice (P)	Mean	3.0	2.9	2.9	3.0	0.598	0.004
Involving Teachers in School Policy	Fractice (F)	SD	0.5	0.5	0.5	0.5	0.590	0.004
Development, Critiques and Goal		α	0.8	0.8	0.8	8.0		
Setting		N	69	75	326	219		
Setting	Value (V)	Mean	3.2	3.2	3.1	3.0	0.126	0.01
	value (v)	SD	0.6	0.5	0.6	0.6	0.120	0.01
		α	0.8	8.0	0.8	8.0		
		N	69	75	326	219		
	Practice (P)	Mean	3.2	3.0	3.0	3.1	0.078	0.012
	Fractice (F)	SD	0.5	0.5	0.4	0.4	0.070	0.012
		α	0.8	8.0	8.0	8.0		
Developing a Sense of Where We are		N	69	75	326	219		
Going	\/alua (\/)	Mean	3.3	3.3	3.2	3.2	0.029	0.015
	Value (V)	SD	0.5	0.4	0.4	0.5	0.029	0.013
		α	0.8	8.0	8.0	8.0		

Table 4.13 Comparison of Practices and Values for Organisational Learning (OL) Factors across teachers' leadership responsibility at school (Cont.)

			Lea	dership R	esponsil	oility	Between-Groups	Differences	
Organisational Learning Factors	3		HM	VHM	CC	SC	Sig. (2-Tailed)	η²	
		N	69	75	326	219			
	Dractice (D)	Mean	2.8	3.0	2.9	3.0	0.240	0.000	
	Practice (P)	SD	0.5	0.5	0.5	0.5	0.249	0.008	
Supporting Experimentation,		α	8.0	8.0	8.0	8.0			
Collaboration, and Networking		N	69	75	326	219			
	Value (V)	Mean	3.1	3.1	3.2	3.2	0.934	0.001	
	Value (V)	SD	0.5	0.5	0.4	0.4	0.934	0.001	
		α	0.8	0.8	8.0	8.0			
		N	69	75	326	219			
	Practice (P)	Mean	2.9	3.1	3.1	3.2	0.006	0.02	
	Practice (P)	SD	0.6	0.4	0.4	0.4	0.000	0.02	
		α	8.0	8.0	8.0	8.0			
Valuing Learning		N	69	75	326	219			
valuing Learning	Value (V)	Mean	3.1	3.2	3.2	3.2	0.450	0.000	
	Value (V)	SD	0.6	0.4	0.4	0.5	0.152	0.009	
		α	0.8	0.8	0.8	8.0			

<u>Professional learning (PL) and organisational learning (OL) practices and values by subject taught</u>

Tables 4.14 and 4.15 show that teachers across subjects recorded similar high values and practices for each factor of PL and OL. The between-subject differences for values and practices recorded for both PL and OL are not significant at p<0.01. Values-practice alignments for each factor are close for PL and closer for OL factors.

Table 4. 15: Comparison of Practices and Values for Professional Learning (PL) Factors across teachers' Subject taught

					5	Subject	s Taught					en-Group erences
Professional L	earning Factors		NS	SS	ENG	IND	MATH	СВ	PE	A&AS	Sig. (2- Tailed)	η²
		N	81	121	74	81	77	141	64	72		
	Dractice (D)	M	2.6	2.6	2.7	2.7	2.6	2.7	2.7	2.8	0.420	0.015
Callabarativa	Practice (P)	SD	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.138	0.015
Collaborative		α	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0		
Professional		N	81	121	74	81	78	141	64	72		
Learning	\/alua /\/\	M	2.9	3.0	2.9	2.9	2.9	2.9	2.8	2.9	0.750	0.006
	Value (V)	SD	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.4	0.750	0.006
		α	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0		
		N	81	121	74	81	77	141	64	72		
	Dractice (D)	M	2.8	2.9	3.0	3.0	2.8	2.9	2.9	3.0	0.444	0.015
Learning and	Practice (P)	SD	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.144	0.015
Reflecting		α	8.0	0.8	8.0	8.0	0.8	0.8	8.0	8.0		
from Different		N	81	121	74	81	78	141	64	72	•	
Different	\/alua /\/\	M	3.1	3.0	3.0	3.1	3.1	3.1	3.0	3.0	0.000	0.005
Sources	Value (V)	SD	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.5	0.808	0.005
		α	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0		
		N	81	121	74	81	77	141	64	72		
	Dractice (D)	M	2.9	3.0	3.0	3.0	2.9	2.9	2.9	3.0	0.339	0.011
	Practice (P)	SD	0.4	0.5	0.5	0.5	0.6	0.4	0.5	0.5	0.339	0.011
Learning		α	8.0	0.8	8.0	8.0	0.8	8.0	8.0	8.0		
Conversation		N	81	121	74	81	78	141	64	72	•	
and Mutual	\/alua /\/\	M	3.0	3.1	3.1	3.1	3.1	3.1	2.9	3.0	0.442	0.010
Support	Value (V)	SD	0.5	0.4	0.4	0.4	0.5	0.4	0.5	0.4	0.443	0.010
		α	0.8	8.0	8.0	8.0	0.8	0.8	8.0	8.0		

Table 4. 16: Comparison of Practices and Values for Organisational Learning (OL) Factors across teachers' Subject taught

					;	Subjec	t Taught				Between- Differer	
Organisational Learning	Factors	_	NS	SS	ENG	IND	MATH	СВ	PE	A&AS	Sig. (2- Tailed)	η²
		N	80	121	73	81	78	141	63	72		
	Practice (P)	М	2.9	3.1	2.9	3.1	2.9	3.0	2.9	3.0	0.066	0.019
	Practice (P)	SD	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.000	0.019
Building Social Capital		α	0.8	0.8	8.0	8.0	0.8	8.0	8.0	8.0		
Building Social Capital		N	81	121.	74	81	78	141	64	72		
	Value (V)	М	3.1	3.1	3.1	3.1	3.0	3.1	3.1	3.1	0.913	0.004
	value (v)	SD	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.913	0.004
		α	8.0	8.0	8.0	8.0	8.0	8.0	8.0	0.8		
		N	81	121	74	81	78	141	64	72		
	Practice (P)	M	3.0	3.2	3.0	3.1	3.0	3.0	3.1	3.1	0.336	0.01
nvolving Teachers in		SD	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.330	0.011
School Policy		α	8.0	8.0	8.0	8.0	8.0	8.0	8.0	0.8	<u>-</u>	
Development, Critiques		N	81	121	74	81	78	141	64	72	1.000	0.001
and Goal Setting	\/alua (\/)	M	3.1	3.2	3.2	3.2	3.2	3.2	3.2	3.2		
	Value (V)	SD	0.5	0.5	0.5	0.4	0.4	0.4	0.5	0.4	1.000	
		α	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0		
		N	81	121	74	81	77	141	63	72		
	Dractice (D)	M	3.3	3.4	3.3	3.3	3.3	3.4	3.3	3.4	0.724	0.00
	Practice (P)	SD	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.734	0.00
		α	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0		
eveloping a Sense of		N	81	121	74	81	78	141	64	72		
Where We are Going	Value (V)	М	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	0.021	0.00
_	Value (V)	SD	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.921	0.00
		α	8.0	8.0	8.0	8.0	8.0	8.0	8.0	0.8		

Table 4.15: Comparison of Practices and Values for Organisational Learning (OL) Factors across teachers' Subject taught (Cont.)

Organizational Lograin	a Footoro		Subject Taught								Between-Groups Differences	
Organisational Learnin	ly Factors		NS	SS	ENG	IND	MATH	CHAR	PE	ART	Sig. (2- Tailed)	η²
		N	81	121	74	81	77	141	63	71		
	Practice	M	3.0	3.1	3.1	3.2	3.0	3.2	3.1	3.1	0.153	0.015
	(P)	SD	0.6	0.5	0.5	0.6	0.6	0.6	0.5	0.5	0.133	0.013
Supporting Experimentation, Collaboration, and Networking		α	8.0	8.0	8.0	8.0	0.8	8.0	8.0	8.0		
	Value (V)	N	81	121	74	81	78	141	64	72		0.005
		M	3.2	3.2	3.2	3.3	3.2	3.3	3.2	3.2	0.830	
		SD	0.5	0.5	0.4	0.5	0.5	0.4	0.4	0.4		
		α	8.0	8.0	8.0	8.0	8.0	8.0	0.8	8.0		
		Ν	81	121	74	81	78	141	64	72		
	Practice	M	3.1	3.2	3.1	3.2	3.1	3.2	3.2	3.2	0.424	0.047
	(P)	SD	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.431	0.010
	, ,	α	8.0	8.0	8.0	8.0	8.0	0.8	8.0	0.8		
Valuina Lagraina		N	81	121	74	80	76	141	64	71		
Valuing Learning	\/ala (\/)	M	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	0.040	0.004
	Value (V)	SD	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.940	0.00
		α	8.0	8.0	0.8	8.0	8.0	8.0	8.0	8.0		

<u>Professional learning (PL) and organisational learning (OL) practices and values by</u> teachers' most advanced educational background

The focus here is on comparisons between teachers according to their academic background measured by their most advanced educational qualification. Distinctions were made between teachers with Diplomas, Undergraduate degrees and Masters degrees. Tables 4.16 and 4.17 show that teachers with different academic backgrounds recorded similarly high values and practices for factors of PL and OL. For OL factors, values and practices tended to be slightly higher than for PL factors. Values-practice alignments are close for both PL and OL factors. Between-group differences are insignificant at p<0.01, which means that teachers with diploma, undergraduate and master degree recorded similar values and practices.

Table 4. 17: Comparison of Practices and Values for Professional Learning (PL) Factors across teachers' Highest Educational Background

			Educat	ion Backgr	ounds	Between-Groups	Differences	
Professional Learning Factors			Mster.	Ugrd.	Dip.	Sig. (2-Tailed)	η²	
<u> </u>		N	39	620	43			
	Practice (P)	Mean	2.7	2.7	2.8	.420	.002	
	Practice (P)	SD	0.5	0.6	0.4	.420	.002	
Collaborative Professional Learning		α	8.0	8.0	8.0			
Collaborative Professional Learning		N	39	620	43	_		
	Value (V)	Mean	3.0	3.1	3.0	.356	.003	
	value (v)	SD	0.6	0.5	0.6	.330	.003	
		α	8.0	8.0	8.0			
		N	39	620	43			
	Dractice (D)	Mean	3.0	2.9	2.9			
	Practice (P)	SD	0.4	0.5	0.5	.361	.003	
Learning and Deflecting from		α	0.8	8.0	0.8			
Learning and Reflecting from Different Sources		N	39	620	43	_		
Different Sources		Mean	3.1	3.2	3.1	.665	004	
	Value (V)	SD	0.5	0.4	0.6	.000	.001	
		α	8.0	0.8	8.0			
	5 (1 (5)	N Mean	39	620	43	2.4.2	0.1.1	
	Practice (P)	SD	0.4	0.5	0.4	.019	.011	
		α	0.8	0.8	0.8			
Learning Conversation and Mutual		N	39	620	43	_		
Support		Mean	3.3	3.3	3.3	070	000	
• •	Value (V)	SD	0.5	0.5	0.4	.972	.000	
		α	0.8	0.8	0.8			

Table 4. 18: Comparison of Practices and Values for Organisational Learning (OL) Factors across teachers' Highest Educational Background

			Educat	ion Backgr	rounds	Between-Groups [Differences
Organisational Learning Factors			Mstr.	Ugrad.	Dip.	Sig. (2-Tailed)	η²
		N	39	620	43		
	Dractice (D)	Mean	3.1	3.1	3.1	EE1	002
	Practice (P)	SD	0.4	0.4	0.3	.551	.002
Building Social Capital		α	8.0	0.8	8.0		
Building Social Capital		Mean	3.5	3.4	3.3		
	Value (V)	N	39	620	43	.332	.003
	value (v)	SD	0.3	0.4	0.4	.552	.003
		α	8.0	0.8	8.0		
		N	39	620	43		
	Practice (P)	Mean	3.0	2.9	3.0		
	r radiloc (r)	SD	0.4	0.5	0.4	.481	.002
Involving Teachers in School Policy		α	8.0	0.8	8.0		
Development, Critiques and Goal	Value (V)	N	39	620	43		
Setting		Mean	3.2	3.1	3.1	.361	.003
	value (v)	SD	0.6	0.6	0.5	.501	.003
		α	8.0	0.8	0.859		
		N	39	620	43		
	Practice (P)	Mean	3.2	3.0	3.1		
	r ractice (r)	SD	0.4	0.4	0.4	.428	.002
		α	8.0	0.8	8.0		
Developing a Sense of Where We are		N	39	620	43		
Going	Value (V)	Mean	3.4	3.2	3.1	.008	.014
	value (v)	SD	0.4	0.5	0.5	.000	.0 17
		α	0.8	8.0	8.0		

Table 4.17: Comparison of Practices and Values for Organisational Learning (OL) Factors across teachers' Highest Educational Background (Contd.)

			Educa	tion Backgr	ounds	Between-Groups [Differences
Organisational Learning Factor	ors		Mstr.	Ugrad.	Dip.	Sig. (2-Tailed)	η²
		N	39	620	43		
	Practice (P)	Mean	2.9	2.8	3.0		
	Fractice (F)	SD	0.5	0.5	0.4	.095	.007
Supporting Experi	mentation,	α	0.8	8.0	8.0		
Collaboration, and Networking	l	N	39	620	43	_	
	Value (V)	Mean	3.2	3.2	3.2	.973	.000
	value (v)	SD	0.4	0.4	0.4	.913	.000
		α	8.0	8.0	8.0		
		N	39	620	43		
	Proctice (D)	Mean	3.2	3.0	3.1		
	Practice (P)	SD	0.4	0.4	0.4	.066	.008
		α	8.0	8.0	8.0		
Valuing Looming		N	39	620	43	-	
Valuing Learning	Value (V)	Mean	3.3	3.2	3.1	254	002
	Value (V)	SD	0.5	0.5	0.5	.354	.003
		α	8.0	8.0	8.0		

<u>Professional learning and organisational learning practices and values by teachers' employment status</u>

Employment status focused on distinctions between Permanent teachers (PT), Government-contract teachers (GCT) and School-contract teachers (SCT). Tables 4.18 and 4.19 show that PL and OL factors are valued and practiced at high levels, with close values-practice alignment by each category of teacher. Between-groups differences are not significant at p<0.01 and the effect sizes are small.

Table 4. 19: Comparison of Practices and Values for Professional Learning (PL) Factors across teachers' employment status

			Emp	loyment St	tatus	Between-Groups D	ifferences
Professional Learning Factor	S		PT	GCT	SCT	Sig. (2-Tailed)	η²
		N	459	174	218	- • • • • • • • • • • • • • • • • • • •	•
	Practice (P)	Mean	2.7	2.7	2.8	.114	.006
	Fractice (F)	SD	0.5	0.5	0.5	.114	.000
Collaborative Professional		α	0.8	0.8	8.0	<u>_</u>	
Learning		N	459	174	218		
	Value (V)	Mean	3.0	3.2	3.2	.000	.024
	value (v)	SD	0.5	0.5	0.5	.000	.024
		α	0.8	0.8	8.0		
		N	459	174	218		
	Practice (P)	Mean	2.9	2.8	2.9		
		SD	0.5	0.4	0.5	.022	.011
Learning and Reflecting		α	8.0	0.8	8.0		
from Different Sources		N	459	174	218	_	
moni Bincient Godices	\/alua (\/)	Mean	3.2	3.1	3.2	.262	.004
	Value (V)	SD	0.4	0.4	0.5	.202	.004
		α	8.0	8.0	8.0		
		N	459	174	218		_
	Practice (P)	Mean	2.9	2.9	3.0		
	Fractice (F)	SD	0.4	0.5	0.5	.130	.006
Learning Conversation and		α	0.8	8.0	8.0	_	
Mutual Support		N	459	174	218		
	\/alua (\/)	Mean	3.3	3.3	3.4	.007	.014
	Value (V)	SD	0.5	0.5	0.4	.001	.0 14
		α	0.8	0.8	0.8		

Table 4. 20: Comparison of Practices and Values for Organisational Learning (OL) Factors across teachers' employment status

			Empl	oyment S	tatus	Between-Groups I	Difference
Organisational Learning Factors			PT	GCT	SCT	Sig. (2-Tailed)	η²
		N	459	174	218		
	Practice	Mean	3.0	3.0	3.1	.568	.002
	(P)	SD	0.4	0.4	0.4	.500	.002
Building Social Capital		α	0.8	8.0	8.0	_	
Building Social Capital		N	459	174	218	-	
	Value (V)	Mean	3.4	3.3	3.4	.319	.003
	value (v)	SD	0.4	0.4	0.4	.518	.003
		α	0.8	0.8	0.8		
		N	459	174	218		
	Practice	Mean	2.9	2.9	3.0		
avalving Tagahara in Cahaal Daliay	(P)	SD	0.5	0.5	0.5	.111	.006
Involving Teachers in School Policy Development, Critiques and Goal		α	0.8	8.0	8.0	_	
Setting	Value (V)	N	459	174	218		
Setting		Mean	3.1	3.0	3.1	.390	.003
	value (v)	SD	0.6	0.7	0.6	.590	.003
		α	0.8	8.0	0.8		
		N	459	174	218		
	Practice	Mean	3.1	3.0	3.0		
	(P)	SD	0.4	0.4	0.5	.566	.002
		α	0.8	8.0	0.8	_	
Developing a Sense of Where We are		N	459	174	218		
Going	Value (V)	Mean	3.3	3.2	3.2	.457	.002
	value (V)	SD	0.4	0.4	0.5	.401	.002
		α	8.0	8.0	8.0		

Table 4.19: Comparison of Practices and Values for Organisational Learning (OL) Factors across teachers' employment status (Cont.)

			Emp	loyment S	Status	Between-Groups	Differences
Organisational Learning Factors			PT	GCT	SCT	Sig. (2-Tailed)	η²
		N	459	174	218		
	Practice	Mean	2.9	2.9	3.0		
	(P)	SD	0.5	0.6	0.6	.071	.008
Supporting Experiment	ation,	α	8.0	8.0	8.0		
Collaboration, and Networking		N	459	174	218	_	
	Value (V)	Mean	3.1	3.2	3.2	.005	.015
	value (v)	SD	0.4	0.4	0.4	.003	.013
		α	0.8	8.0	8.0		
		N	459	174	218		
	Practice	Mean	3.1	3.0	3.1		
	(P)	SD	0.4	0.4	0.5	.207	.005
		α	0.8	0.8	0.8		
Valuing Learning		N	459	174	218		
valuing Learning	Value (V)	Mean	3.2	3.1	3.2	.676	.001
	value (v)	SD	0.5	0.4	0.4	.070	.001
		α	0.8	8.0	8.0		

<u>Professional learning and organisational learning practices and values by teachers'</u> certification status

The focus of values-practice comparison here is between certified and non-certified teachers. As can be observed from Tables 4.20 and 4.21, both certified and non-certified teachers, consistent with previous comparisons, recorded high values and practices for PL factors with close values-practice alignments. Values and practices for OL factors tended to be higher and values-practice alignments are closer.

Table 4. 21: Comparison of Practices and Values for Professional Learning (PL) Factors across teachers' Certification status

Professional Le	arning Fac	tore	Certificat	ion Status		en-Groups erences
1 Totessional Le	arriing r ac		Certified	Non- Certified	Sig.	Cohen's d
		N	391	321		
	Practice	М	2.7	2.7	0.602	-0.029
Collaborative	(P)	SD	0.6	0.5	0.002	-0.023
Professional		α	0.8	0.8		
Learning		N	391	321		
Learning	Value	M	3.1	3.0	0.687	0.022
	(V)	SD	0.5	0.5	0.007	0.022
		α	8.0	0.8		
		N	391	321		_
	Practice	М	2.9	3.0		
Learning and	, ,	SD	0.5	0.4	0.062	-0.104
Reflecting		α	8.0	0.8		
from Different		N	391	321		
Sources	Value	M	3.2	3.2	0.929	0.005
	(V)	SD	0.4	0.4	0.929	0.005
		α	8.0	0.8		
		N	391	321		_
	Practice	M	2.9	2.9		
	(P)	SD	0.4	0.5	0.468	0.041
Learning		α	0.8	0.8		
Conversation		N	391	321		
and Mutual	Value	M	3.4	3.3	0.417	0.045
Support	(V)	SD	0.4	0.5	0.417	0.045
		α	8.0	8.0		

Table 4. 22: Comparison of Practices and Values for Organisational Learning (OL) Factors across teachers' Certification status

Organisational Learning Fa	actore		Certific	ation Status	Between-Group	s Differences
Organisational Learning Fa	actors		Certified	Non-Certified	Sig. (2-Tailed)	Cohen's d
		N	391	321		
	Practice (P)	Mean	3.0	3.1	0.773	-0.016
	Fractice (F)	SD	0.4	0.4	0.773	-0.010
Building Social Capital		α	0.8	0.8		
Building Social Capital		N	391	321		
	Value (V)	Mean	3.4	3.4	0.278	-0.061
	value (v)	SD	0.4	0.4	0.270	-0.001
		α	0.8	0.8		
		N	391	321		
	Practice (P)	Mean	2.9	2.9		
Involving Teachers in	Fractice (F)	SD	0.5	0.5	0.859	-0.010
School Policy		α	0.8	8.0		
Development, Critiques	Value (V)	N	391	321		
and Goal Setting		Mean	3.1	3.1	0.080	-0.098
		SD	0.6	0.6	0.000	-0.090
		α	8.0	0.8		
		N	391	321		
	Practice (P)	Mean	3.0	3.1		
	r ractice (r)	SD	0.5	0.4	0.283	-0.060
		α	8.0	0.8		
Developing a Sense of		N	391	321		
Where We are Going	Value (V)	Mean	3.2	3.3	0.438	-0.043
Which we are Joing	value (v)	SD	0.5	0.4	0.700	0.040
		α	8.0	8.0		

Table 4.21: Comparison of Practices and Values for Organisational Learning (OL) Factors across teachers' Certification status (Cont.)

			Certific	ation Status	Between-Group	s Differences
Organisational Learning Factors			Certified	Non-Certified	Sig. (2-Tailed)	Cohen's d
		N	391	321		
	Dractice (D)	Mean	2.992	3.015		
	Practice (P)	SD	0.614	0.522	0.372	-0.050
Cupporting Experimentation		α	0.865	0.864		
Supporting Experimentation,		N	391	321		
Collaboration, and Networking	Value (V)	Mean	3.208	3.213	0.064	0.010
		SD	0.477	0.461	0.864	-0.010
		α	0.866	0.867		
		N	391	321		
	Dractice (D)	Mean	3.148	3.138		
	Practice (P)	SD	0.501	0.439	0.536	0.035
		α	0.864	0.865		
		N	391	321		
Valuing Learning	\/alua (\/)	Mean	3.204	3.251	0.425	0.044
-	Value (V)	SD	0.518	0.538	0.435	-0.044
		α	0.866	0.868		

<u>Professional learning (PL) and organisational learning (OL) practices and values by teachers' gender</u>

Male and female teachers recorded high values and practices for factors of PL and OL. Compared to values and practices recorded for PL factors, as can be noted from tables 4.22 and 4.23, teachers recorded higher practice and values for OL factors. Values-practice alignments are close for PL factors, and closer for OL factors.

Table 4. 23: Comparison of Practices and Values for Professional Learning (PL) Factors across teachers' Gender

			Ge	nder		en-Groups erences
Professional L	earning Fac	tors	Male	Female	Sig. (2- Tailed)	Cohen's d
		N	266	446		
	Practice	Mean	2.7	2.7	0.041	0.126
Collaborative	(P)	SD	0.5	0.5	0.041	0.120
Professional		α	8.0	8.0		
Learning		N	266	446		
Learning	Value (V)	Mean	3.1	3.1	0.001	0.202
	value (v)	SD	0.5	0.5	0.001	0.202
		α	8.0	8.0		
		N	266	446		
	Practice	Mean	2.9	2.9		
Learning and	(P)	SD	0.5	0.5	0.700	0.024
Reflecting		α	8.0	8.0		
from		N	266	446		
Different	Value (V)	Mean	3.2	3.1	0.157	0.087
Sources	value (v)	SD	0.4	0.5	0.137	0.007
		α	8.0	8.0		
		N	266	446		
	Practice	Mean	2.9	2.9		
	(P)	SD	0.4	0.5	0.538	0.038
Lograina		α	8.0	8.0		
Learning Conversation		N	266	446		
	Value (\/)	Mean	3.3	3.3	0.828	0.013
and Mutual Support	Value (V)	SD	0.5	0.5	0.020	0.013
Support		α	8.0	8.0		

Table 4. 24: Comparison of Practices and Values for Organisational Learning (OL) Factors across teachers' Gender

Organisational Learning Factors			Gender		Between-Groups Differences	
			Male	Female	Sig. (2-Tailed)	Cohen's o
		N	266	446		
	Practice (P)	Mean	3.0	3.1	0.055	-0.118
		SD	0.4	0.4		
Building Social Capital		α	0.8	0.8		
Building Social Capital	Value (V)	N	266	446		-0.133
		Mean	3.4	3.4	0.031	
		SD	0.4	0.4		
		α	0.8	0.8		
	Practice (P)	N	266	446	0.545	-0.037
		Mean	2.9	3.0		
Involving Teachers in School Policy Development, Critiques		SD	0.5	0.5		
		α	0.8	0.8		
	Value (V)	N	266	446	0.385	0.053
and Goal Setting		Mean	3.1	3.1		
		SD	0.6	0.6		
		α	0.8	0.8		
Developing a Sense of Where We are Going	Practice (P)	N	266	446	0.913	0.007
		Mean	3.1	3.1		
		SD	0.4	0.4		
		α	8.0	0.8		
	Value (V)	N	266	446	0.286	-0.065
		Mean	3.2	3.2		
		SD	0.4	0.5		
		α	8.0	8.0		

Table 4.23: Comparison of Practices and Values for Organisational Learning (OL) Factors across teachers' Gender (Cont.)

Professional Learning Factors			Ge	ender	Between-Groups Differences	
			Male	Female	Sig. (2-Tailed)	Cohen's d
	Practice (P)	N	266	446	0.656	0.027
		Mean	2.9	3.0		
		SD	0.5	0.5		
Cupporting Experimentation		α	8.0	8.0		
Supporting Experimentation,	Value (V)	N	266	446	0.551	-0.037
Collaboration, and Networking		Mean	3.1	3.2		
		SD	0.4	0.4		
		α	0.8	8.0		
	Practice (P)	N	266	446	0.717	0.022
		Mean	3.1	3.1		
Valuing Learning		SD	0.4	0.4		
		α	8.0	8.0		
	Value (V)	N	266	446	0.683	-0.025
		Mean	3.2	3.2		
		SD	0.4	0.5		
		α	0.8	8.0		

CHAPTER 5. SCHOOL SELF-EVALUATION (SSE) SURVEY DATA: TEACHERS' AND SCHOOL LEADERS' INTERPRETATION

In this chapter, I discuss the interpretations of teachers and school leaders from participating schools as they made sense of the SSE survey data that I fed back to them. I involved two schools in this process, which I name as 'School one' and 'School two'. In this regard, I involved the entire teachers and school leaders in each school, with the total of 26 teachers and school leaders all together. School one was a junior high school, located in rural area and being at the bottom 25% of the school ranking list at provincial level, based on national examination result. In contrast, School two was a senior high school, located in urban area, and being at the top 25% of the ranking list.

As explained earlier in chapter three, section four, to facilitate teachers' interpretation, I presented my analysis of their school's survey data to them in whole staff meetings. The focus of the survey data that I fed back to school teachers and their leaders at these meetings focused on: the values-practice alignments recorded overall by the school's teachers and leaders with respect to each PL and OL factor, and each item related to PL and OL. The interpretation sessions with each school and their respective staffs were structured into three main parts focused on the interpretations and perspectives of teachers and leaders with regard to: (1) PL and OL reflected in their school's data; (2) the professional significance they placed on patterns in their school's data related to PL and OL; and (3) plans and practices which they (the teachers and leaders) suggested as ways forward in addressing the professional challenges they identified through discussing and interpreting the data together. Through this data feedback and interpretation process I aimed to support research-informed school self-evaluation processes for improving leadership and professional learning at each of the schools that participated with me in the study. Teachers and leaders, working in small groups based on their subject taught (Natural science, social science, and language and art), recorded their interpretations, suggestions and plans for change on discussion sheets, which I collected at the end of each meeting. To obtain further description with regard to the decision-making process in each group, and to describe teachers' personal interpretation with regard the survey data, I undertook semi-structured interviews, which involved teachers reflecting different leadership responsibility level, teaching experience, employment status, subject taught, certification status, most advanced educational qualification, and gender. My analysis of their discussion sheets and the interviews provide the focus for this chapter.

Despite the modest gaps between values and practices recorded in the survey data presented in chapter four, teachers and leaders, placed a great deal of professional significance on a number of areas of practice. Teachers and leaders who were involved in semi-structured interviews claimed that the group discussion result have represented their interpretation in relation to the SSE data, since, they reported, the decision-making process in the group discussion had been undertaken democratically.

In section 5.1, I discuss each area of practice in which professional significance were identified by teachers and school leaders, along with the range of challenges they reported on each of the professional significance, in relation to research question two. In section 5.2, I discuss the solutions suggested by teachers to address each challenge, in relation to research question three.

5.1 Professional Significances and Challenges on Professional Learning (PL) and Organisational Learning (OL) in School: teachers and school leaders' perspective

In this section, I discuss professional significances identified by teachers and school leaders from both participating case-study schools in their own PL in school, and in their schools' OL, in light of the school self-evaluation (SSE) survey data (in subsection 5.1.1). In addition, I also discuss the key influences and factors that the teachers and leaders believed to have challenged their practices in relation to such professional significances (in subsection 5.1.2). Overall, in line with the pattern highlighted at the previous section, teachers and school leaders from both participating case-study schools placed far more professional significance on a number of PL and OL activities than the values-practice alignments data reported in chapter four suggests. The different challenges faced by teachers and leaders from both schools were striking. I now, in the following subsection, begin to report the professional significances identified by teachers and school leaders from School 1.

5.1.1 Professional significances and challenges on PL and OL: school 1 context

I discuss professional significances and challenges identified by teachers and school leaders from case-study school one in their own PL in school, and in their schools' OL. In this regard, I involved all eleven teachers and leaders in the school. As can be seen in table 5.1 below, with regard to their own professional learning (PL), teachers and leaders from case-study school one identified four activities in which they believe

professional significance exceed the small statistical gaps recorded between their values and practices in their survey responses, as presented in chapter four. Three of the activities included in the *Collaborative Professional Learning* factors, while the rest included in the *Learning and Reflecting from Different Sources* factor.

Table 5. 1: Professional Significances and their Challenges: school one context

PL and OL Factors		PL and OL Activities	PL and OL Challenges	
	Learning and	Learning from relevant research report	 Limited Facilities and Resources for Learning in School Limited spare time 	
PL Factors Reflecting from Different Sources Collaborative Professional Learning	Learning from and reflecting on students' input	Limited Access to Formal CPD		
		Learning from other successful schools	Limited of School Leadership and Policy Support	
	Professional	Conducting collaborative learning with colleagues	Limited of School Leadership and Policy SupportLimited Spare Time	
OL Factor	Supporting Experimentation, Collaboration, and Networking	Supporting collaborative learning with teachers from other school	Limited of External Infrastructure Limited of School Leadership and Policy Support	

Source: Discussion Sheet One

With regard to their schools' organisational learning (OL), teachers and leaders case-study school one placed a great deal of professional significance, beyond the modest gaps between values and practices recorded in the survey data, on an OL activity included in the *Supporting Experimentation, Collaboration and Networking* factor. In accordance with the professional significances, teachers and school leaders identified a number of factors which they believed might have challenged their practices in each of the professional significances: I classified each challenge into five groups, namely: (1) Limited Facilities and Resources for Learning in School, (2) Limited Spare Time, (3) Limited Access to Formal CPD, (4) Limited of School Leadership and Policy Support, and (5) Limited of External Infrastructure. In this subsection, I discuss every professional significance and its underpinning challenges, in both professional and organisational learning, in the context of school one. In the first subsubsection, I discuss the professional significances and challenges in their professional learning, and then, in the second subsubsection, I discuss those identified in their school's organisational learning (OL).

<u>Professional significances and challenges in teachers' professional learning (PL): school one context</u>

As highlighted above, for their professional learning (PL) in school, teachers placed far more professional significance on a number of PL activities, which are included in two PL factors, than the values-practice gap data reported in chapter four suggests. The two PL factors in this respect refer to *Learning and Reflecting from Different Source* factor and *Collaborative Professional Learning* factor. The discussion regarding each professional significance and its challenges are presented as follows:

• Learning and Reflecting from Different Sources Factor: school one context

In the Learning and Reflecting from Different Sources factor as can be seen in table 5.1, teachers identified professional significance in three PL activities, namely, in 'learning from relevant research reports', in 'learning and reflecting from students' input', and in 'learning from other successful schools'. With respect to the 'learning from relevant research report', teachers reported difficulties in accessing such reports:

... we believed that the relevant research findings were good for our self-improvement, but the access to such findings became a liability. Distance travelled to reach an adequate library could be very far. In addition, poor internet network quality made online access so limited. Moreover, we also believed that the reflection on research findings would be helpful in improving our capacity, but the limitations to accessing such research results made it difficult for us to routinely use them in evaluating our teaching practices. (Natural science teachers, school one, discussion sheets)

This problem of access was reflected in the accounts of teachers from all subjects taught (social science, language and natural science). They all agreed that research reports were an important source for improving their learning and practice but that poor Internet access and the unavailability of an adequate library in their rural area meant that the research reports were difficult to obtain. Natural science teachers (school one, discussion sheet one) stated that most of the good-quality libraries were in urban areas, which were far from their own area. Such a situation made it difficult for them to incorporate insights from research reports into their professional learning and classroom practice at school.

'Learning and reflecting on students' input' was considered by both natural science and language teachers to be a useful way to improve their learning and practice. However, they reported that they did not consult pupils for their input and ideas. A natural science teacher (school one, interview one) stated that consulting pupils did not form part of the

school's strategic plan and teachers were not supported in developing skills and dispositions for consulting pupils about classroom teaching and learning.

Finally, with respect to 'learning from other successful schools', social science teachers believed that it was important to implement such activity, though they admitted that they still hardly ever did so, "(Regarding the) learning from other successful schools, we believed that it was important to practise, but we still rarely did it" (social science teachers, school one, discussion sheet). In similar vein, language teachers claimed that heavy workloads, which were oriented to covering the government curriculum, made it difficult for them to allocate scarce time to undertaking such professional learning activity.

Collaborative Professional Learning factor: school one context

In the *Collaborative Professional Learning* factor, teachers identified professional significance in PL activity relating to 'conducting collaborative learning with colleagues'. Social science teachers, for example, argued that the practices of collaborative professional learning had not been maximised in their school:

We believed that every activity that constructed this factor was very important to implement. But until now, we still rarely practised them. This was because of our busyness in the teaching and learning processes led us to focus more on the implementation of curriculum activities. (Social science teachers, school one, discussion sheet)

In line with social science teachers, language teachers also claimed that there were still challenges when it came to collaborative professional learning activities in their school. They stated that, so far in their school, collaborative professional learning with their colleagues was mostly still undertaken in informal situations through informal networking, contacts and relationships. They added that such activities were mostly initiated by teachers spontaneously. Interestingly, instead of viewing such informal networking as the expression of a proactive professional agency, these teachers' accounts reflected concerns about whether such informal networking was as effective as it might have been with respect to their professional learning:

...though we judged (that) it could very positively improve our professionalism, ...the collaboration among teachers we did was still (in) informal (situations). Scientific collaboration, such as mutual scientific evaluation, or doing joint research was not undertaken optimally. (Language teachers, school one, discussion sheet one)

Teachers reported that they instigated informal networking due to the absence of school supports for collaborative teacher learning opportunities. To increase collaboration, they

proposed establishing a school policy to facilitate and encourage them to do so. Thus, they argued, they would be motivated, and then get used to participating in such collaborations as a strategy for professional growth and development.

<u>Professional significances and challenges in organisational learning (OL): school one context</u>

For school organisational learning (OL), as also forming the general patterns in this chapter, the professional significance which school one teachers and leaders placed on the values-practice data exceeded the small statistical gaps recorded between their values and practices in their survey responses. This is evident in relation to the OL activity of 'support for collaborative learning with teachers from other schools', which is included in the factor of *Supporting Experimentation, Collaboration, and Networking*. Teachers affirmed that such activity is important for teachers and school learning in their school. They believed that building relationships and inter-school networks in order to expand learning collaboration with other schools is an effective way of supporting professional learning through facilitating exchanges of experience and knowledge. However, teachers claimed that such a process has not been implemented well in their school due to a number of challenges associated with being located in a rural area with limited facilities and infrastructure:

Establishing relationships with teachers from other schools is very important for us to develop our capacity. Nevertheless, such a situation had not fully existed at this school, where the collaborative activities with other schools were still very limited. We knew that the school leaders had tried their best to facilitate such activities, but the limited public facilities and infrastructure meant not many things could be done (Social science teachers, school one, discussion sheet one)

In line with social science teachers, natural science teachers (school one, discussion sheet one) argued that providing support for teachers when conducting collaborative learning with teachers from other schools was not yet an integrated part of the school's strategic plan to improve the quality of teacher and school professional learning and they suggested that supports for inter-school networking would benefit their learning and practice development.

5.1.2 Professional significances and challenges in PL and OL in school: school two context

As was the case in school one, as reported in the previous subsection, the professional significance which school two teachers and leaders placed on the values-practice data exceeded the small statistical gaps recorded between their values and practices in their survey responses. This is evident in relation to a number of PL activities included in every

factor of PL and on a number of OL activities included in *Building Social Capital* and *Supporting Experimentation, Collaboration and Networking* factors on their school OL (see: table 5.2). Furthermore, in this regard, school two teachers also identified a number of challenges in relation to each professional significance reported above. In this subsection, I firstly discuss the professional significances and then followed by discussing each of the challenge, which the teachers reported.

Table 5. 2: Professional Significances and their Challenges: School two teachers' Perspective

PL and OL Factors		PL and OL Activities	PL and OL Challenges	
Professional Learning Factors	Learning and Reflecting from Different Sources	- Learning from relevant research reports	Limited Access to Formal CPDLimited Spare Time	
		- Learning from and reflecting on, students' input	- Limited School Leadership and Policy Support	
		- Learning from other successful schools	 Limited School Leadership and Policy Support 	
	Collaborative Professional Learning	- Conducting collaborative learning with colleagues	- Limited School Leadership and Policy Support	
	Learning Conversation and Mutual Support	- Developing good collaborative learning among teachers	- Limited Spare Time - Limited School Leadership and Policy Support	
Organisational Learning Factors	Building Social Capital	- Developing good collaborative learning among teachers	 Limited School Leadership and Policy Support 	
	Supporting Experimentation,	- Supporting collaborative learning with teachers from other school	- Limited School Leadership and Policy Support	
	Collaboration, and Networking	- Supporting collaboration between teachers within school	 Limited School Leadership and Policy Support 	

Professional Significances and Challenges in PL: school two context

As highlighted above, school two teachers reported more professional significance in a number of activities included within every factor underlying their professional learning (PL) at school. With regard to the *Collaborative Professional Learning* factor, school two teachers identified professional significance on how collaborative learning was conducted with colleagues. With respect to the *Learning and Reflecting from Different Sources* factor, teachers identified professional significance when it came to 'learning from relevant research reports', 'learning from other successful schools', and 'learning from and reflecting on students' inputs'. Furthermore, in relation to the *Learning Conversation and Mutual Support* factor, teachers identified professional significance in how mutual reinforcement and support for colleagues was given.

• Collaborative professional learning factor: school two context

As evident in PL activity relating to 'conducting collaborative learning with colleagues', in this activity, the professional significance which school two teachers and leaders placed on the values-practice data exceeded the small statistical gaps recorded between their values and practices in their survey responses. In this respect, to exemplify, social science teachers (school two, discussion sheet one) referred to the implementation of group teaching and joint research or evaluation which they reported had not been undertaken optimally in their school, although they believed that it was important in order to improve the quality of their professional learning. They argued that such a situation had arisen because there was no policy or system of supports in the school that facilitated or encouraged them to undertake such learning. In addition, they added that the considerable demands of teaching and learning in classrooms also limited their time to collaborate with other teachers.

• Learning and Reflecting from Different Sources factor: school two context

In this factor, teachers reported more professional significance than the values-practice gap analysis I reported in chapter four, in PL activities relating to 'learning from relevant research reports', 'learning from other successful schools', and 'learning from and reflecting on students' input'. With respect to 'learning from research findings', school two teachers agreed that doing so was important, nevertheless, they argued that there was still a fairly significant challenge in practicing such learning activity, especially with respect to efforts to build what is learned through research reports into their professional learning and classroom practice. They reported that they had limited experience and skill in reading and making sense of research reports. In this regard, they expressed their

need for CPD that could guide them in understanding and translating or adapting research findings into different contexts of their classroom practice:

With respect to the learning through research findings, we considered that there was a gap between our values and practices in our school. We realised that doing so was very important, however, it was not yet optimally implemented in our school. This happened because there was no guidance to teachers in applying such relevant research findings. In this context, we needed to be guided from understanding the research findings to the implementation process in teaching and learning activities in the classroom. (Language teacher, school two, discussion sheet)

In line with the language teachers, social science teachers and natural science teachers (discussion sheet, school two), also believed that relevant research findings could be a useful resource for improving their professional learning. In this case, natural science teachers reported that most teachers in their school were aware of this, nevertheless, it was not yet widely implemented. Social science teachers (school two, discussion sheet one) argued that such a situation arose because of the lack of scientific activities initiated by schools to facilitate teachers' integration of such research findings into their professional learning activities in school. Furthermore, natural science teachers reported that busy daily teaching routines and a focus on the syllabus and curriculum that shaped their teaching in school constrained their time and deflected their attention from engaging in research:

The teachers were mostly still fixated on the existing syllabus and curriculum. They even had too little time to conduct their individual research, it was because there was no obligation for teachers to do so. (Natural science teachers, school two, discussion sheet one)

To improve their situation, natural science teachers suggested that their school should give credit to teachers who conducted research or evaluation, or who integrated research findings into their professional learning processes. By doing so, they believed that teachers would become more motivated to do so. In addition, they added that encouragement and support from leaders would enhance their motivation to integrate research into their professional learning activities and findings from research into their classroom practice.

With regard to 'learning from other successful schools', social science teachers (school two, discussion sheet one) argued that this kind of networking was very important for improving their professionalism and broadening their practice repertoire. However, they claimed that so far networking between schools had not been formally supported or encouraged at their schools. These teachers hoped that networking could be promoted in their schools' policy and improvement agendas and coordinated by their school leaders, and in this way, it could be undertaken regularly.

In relation to 'learning from and reflecting on students' inputs', social science teachers (school two, discussion sheet) stated that such practice has been informally implemented by their school. They believed that such practice was important in terms of improving their professionalism. Nevertheless, they claimed that it would be better if such practice could be coordinated by school leaders so that it could be undertaken regularly.

• Learning Conversations and Mutual Support factor: school two context

With regard to this factor, teachers considered the professional significance on PL activity relating to 'giving mutual enforcement and support to colleagues', exceeded the close values-practice gaps I reported in chapter four. In this respect, social science teachers (school two, discussion sheet one) stated that such practice had been applied well in their school, which they believed important to do, nevertheless, they claimed that the role of leadership in accommodating teachers undertaking of such practice needed to be improved. They argued that if there were formal opportunities provided by the school to help teachers to give support and reassurance to each other, such a process should be more organised and directed, so that it could be embedded across the school culture to far greater effect for improving the learning and practice development of teachers in their school.

Professional Significances and Challenges in OL: school two context

In relation to their school organisational learning (OL), school two teachers highlighted professional significance far greater than the values-practices gaps analysis I reported in chapter four in a number of OL practices, which were included in two factors, namely in the *Building Social Capital* factor, and the *Supporting Experimentation, Collaboration, and Networking* factor. In relation to the *Building Social Capital factor,* teachers identified professional significance in 'developing good collaborative learning among teachers', while with respect to the *Supporting Experimentation, Collaboration, and Networking* factor teachers identified a lack of 'support for collaboration between teachers within school'.

Building Social Capital factor: school two context

In relation to this factor, teachers placed a great deal of significance on developing good collaborative learning among teachers despite the rather modest gaps between values and practices recorded in the survey data. In this respect, both natural science and social science teachers stated that there was reasonably satisfactory practice in their school, however, they believed that a number of improvements were still needed.

The practice of collaboration among teachers has been done well in this school. However, the support from the leaders still need to be improved. In this context,

teachers have taken more initiative to collaborate with each other. The leadership did not seem to provide formal facilities and support for this problem. (Natural science teachers, school two, discussion sheet one)

In similar vein with natural science teachers, social science teachers claimed that the development of social interaction in their schools had gone well. Nevertheless, they commented that such a process was undertaken spontaneously by teachers in the school. They argued that it would be better if the school were to provide more organised and formal interaction opportunities for teachers. They were sure that such a process would be more effective. Moreover, they believed that provision of such opportunities was important because, through such collaboration, each teacher would be able to learn from, and exchange experiences with, colleagues and thus expand the range of practices on which they could draw in their own classroom practice.

<u>Supporting Experimentation, Collaboration, and Networking factor: school two context</u>

With respect to this factor, school two teachers identified professional significance in relation to 'supporting collaboration with teachers from other schools'. Social science teachers described how, in general, such activities were implemented in their school: "As a matter of fact, there had been a climate of collaboration and collaborative development among teachers in this school, as well as with (those from) other schools through a series of government programmes (social science teacher, school two, discussion sheet one). In this regard, language teachers (school two, discussion sheet one) believed that such practices could give them better opportunities to develop and increase the quality of their own learning and improve their classroom practices in ways which enhance the learning of their students. Nevertheless, both language and social science teachers agreed that such practices still needed a number of improvements. Language teachers claimed that such practices had not yet been applied as a whole in their school. In addition, social science teachers argued that an improvement in leadership was urgently needed in order to facilitate the undertaking by teachers of such collaborative activities. Furthermore, to stimulate more teachers to participate in such collaborative activities with teachers from other schools, language teachers proposed that their leaders could initiate a number of formal activities with other schools, which could be in the form of joint training courses or joint research.

5.2 Strategic Solutions to Address Professional Challenges: Teachers' and Leaders' Recommendations

In this section, I discuss the strategic plans suggested by teachers and school leaders in light of their interpretations of values-practice gap data for both PL and OL in their

schools. Such discussion is based on analysis of the group discussion sheet and interview one data, which were designed to answer research question three, about the range of strategies suggested by different groups of teachers and leaders in light of their interpretations of the SSE data. Overall, as recorded in the discussion sheets, a number of solutions were proposed by teachers and leaders from both schools to address the professional challenges they identified through interpreting their schools' data. Such solutions ranged from improving school learning facilities to more active school supports for teachers' and schools' learning. However, teachers and school leaders agreed that further meetings were still needed, to finalise the application of each of the solutions. I discuss school one teachers' and leaders' proposed plans in subsection 5.2.1, while in subsection 5.2.2, I discuss those proposed by school two teachers and leaders.

5.2.1 Addressing professional challenge on PL and OL: school one teachers' strategic recommendations

As can be seen in table 5.3, teachers placed far more professional significance on a number of PL and OL activities than the values-practice gap data reported in chapter four suggests. On each professional significance, teachers identified the types of challenge they faced, and in addition, they also proposed a number of recommendations to address each of these challenges. In this subsection, I discuss each of the strategic recommendations, beginning with strategic plans proposed by school one teachers to address each challenge identified in their professional learning (PL), and then, I discuss those proposed to address the challenges identified in their school organisational learning (OL).

Table 5. 3: Professional Challenges and their Solutions: School one teachers' and leaders' recommendation for change

PL and OL PL and OL				
PL and OL Factors		Activities	Challenges	Teachers' Recommended Solutions
Professional Learning Factors	Learning and Reflecting from Different Sources	Learning from relevant research report	Limited Facilities and Resources on Learning in School	 Improving the quality of school learning facilities i.e the Internet and library in schools. Cooperate with campuses which have better access to the latest research findings. Develop a policy which facilitates or provides space to reflect and develop teachers' capabilities. Hold seminars about understanding and implementing research findings for professional learning purposes.
			Limited Spare Time	- To give credit to teachers who conduct research and evaluation.
		Learning and reflecting from students' input	Limited Access to Formal CPD Limited School Leadership and Policy Support	 Conduct group discussions and consultations with experts Develop a policy which facilitates or provides space to reflect and develop teachers' capabilities
		Learning from other successful schools	Limited School Leadership and Policy Support	 Undertake study visit to successful schools Invite a successful teacher Develop a policy which facilitates or provides space for teachers to reflect and develop their capabilities
	Collaborative Professional Learning	Conducting collaborative learning with colleagues	Limited School Leadership and Policy Support Limited spare time	 Set up a system that facilitates and encourages teachers to conduct collaborative learning with colleagues Make collaborative learning mandatory for all teachers.
Organisational Learning Factors	Supporting Experimentation, Collaboration, and Networking	Supporting collaborative learning with teachers from other school	Limited of External Infrastructure Limited of School Leadership and Policy Support	 Conduct discussions with other schools, to plan a well-coordinated joint CPD. Leaders need to seek support from the education office

Strategic solutions to address challenges in professional learning (PL) practice: school one teachers' recommendations

Overall, as presented in table 5.3, the focus of discussion and interpretation that arose as significant for school one teachers centred on four PL activities. In this subsection, I discuss the strategic recommendations proposed by teachers to address the challenges which these teachers identified in relation to the four PL activities.

<u>Challenges in learning from relevant research reports: school one teachers' suggestions</u> for change

As described earlier, in their 'learning from relevant research reports', school one teachers identified two challenges, namely, limited facilities and resources for learning in school and limited spare time. Regarding the facilities and resources for learning, teachers proposed that improvement in the quality of school facilities, for example related to improved internet access and expanded school library service, could give them better access to the latest relevant research reports. In this regard, natural science teachers argued: ... improving the quality of the Internet in schools, can bring significant changes. The increasing of the facilities at school will be very helpful (natural science teachers, school one, discussion sheet). In line with natural science teachers, social science teachers (school one, discussion sheet) argued that improvement in school learning facilities, which could provide better access to relevant research reports, would be an important step toward improving the quality of their professional learning in school. In addition, in order to address the challenge of limited facilities and resources in school, teachers also suggested that their school could develop cooperation with campuses, which they believed had better access to relevant research reports:

With regard to the access to the latest relevant research findings, we recommend that our school may be able to cooperate with campuses, which we believe to have better access to the latest research findings. (Social science teachers, school one, discussion sheet)

By doing so, they expected to be able to have access to the campuses' learning resources, or at least to be able to ask such campuses to send them recent relevant research findings regularly. Finally, to overcome the constraints of limited access to research reports, teachers proposed that their schools should give them better opportunities to attend research seminars, either by holding their own seminars at school (language teachers, school one, discussion sheets), or by sending them to attend research seminars held by external parties (natural sciences teachers, school one, discussion sheets). With regard to sending teachers to attend external seminars,

because they tend to be held in urban areas, where the distance from school is great and can take a long time, teachers suggested the schools to send them in turn.

<u>Challenges in learning from and reflecting on students' input: school one teachers' proposed suggestions for change</u>

Regarding their professional learning practices in school, school one teachers revealed that they had not implemented the practice of learning from and reflecting on student input, even though, they believed that doing so was important in terms of improving the quality of their learning and classroom practice. In this regard, through group discussion, teachers recorded two challenges in relation to such practices, namely, limited access to formal CPD and lack of school leadership and policy support.

Regarding the limited access to formal CPD, natural science teachers wanted to take more account of students' voices in improving their learning, nevertheless, they felt unable do so without the necessary supports from the school:

We hoped to engage more students in improving our teaching skills, but to date, it had not been fully implemented. Maybe because it was not used to be implemented in this school. (Natural science teachers, school one, discussion sheet)

Teachers added that by not making this practice part of the school's strategic policy, training aimed at helping them develop appropriate ways of working with and relating to students in ways that would effectively enable them to learn from and reflect on students' input was never held in their schools. They considered that such training was important to guide them in integrating such practices into their professional learning in school. To overcome this problem, teachers suggested that their school need to provide more formal opportunities for them to learn how to consult with pupils about their learning and teaching experiences at school and integrate students' input into their professional learning through some focused group discussions or continuous professional training. In addition, they also suggested that that the school could consult experts with regard to ways of implementing such practice in their school.

With respect to limited spare time in school, teachers reported that they had difficulties in allocating time in school to undertake evaluation of their professional learning based on students' input. They argued that most of their time was spent doing daily school activities, the implementation of which was required by the national curriculum:

(We did not undertake such practice) ... because we focus more on the teaching and learning process, which is oriented towards the government curriculum. Therefore, it is still difficult for us to allocate extra time to implement it. (Language teachers, school one, discussion sheet)

To address this challenge, teachers suggested that their school should develop a school policy aimed at facilitating or providing space for them to reflect and develop their capabilities through consideration of students' voices. They argued that by having such a policy, there would be official permission from the school leadership for them to adopt this practice and even prioritise it over others. Thus, they believed they would be able to allocate time to implement such practice regularly in their school.

<u>Challenges in learning from other successful schools: school one teachers' proposed solutions for change</u>

With respect to this practice, teachers reported that improvement was needed in their schools. Social science teachers (school one, discussion sheet) believed that doing so was important for improvement of their professional learning, however, they claimed that such practice had not been implemented optimally in their school. In this respect, they recorded that the lack of a school policy to support them had challenged such practice. To improve this situation, social science and language teachers suggested that their school should develop a school policy which could facilitate visits to successful schools. In addition, they also suggested inviting successful teachers from other schools to share with them ideas about teaching and learning practices.

<u>Challenges in conducting collaborative learning with other schools: school one teachers' proposed solutions for change</u>

In undertaking collaborative learning with other schools, school one teachers reported two challenges, namely, limited school leadership and policy support and limited spare time. To address those challenges, teachers suggested that there should be a common vision and commitment among teachers and leaders in school to do more than what they had regularly been doing recently, such as by making joint visits to other schools. They claimed that making such visits is important, and even if schools were unable to finance them, teachers might agree to use their own funds. In addition, they also suggested that leaders should be more active in finding support from the educational office:

To solve this problem, there needs to be a shared commitment to do more. For example, by making joint visits to other schools with self-support costs. In addition, the leaders should also be more active to seek support from the education office (social science teachers, school one, discussion sheet)

In addition to social science teachers' recommendations, language teachers (school one, discussion sheet) recommended that their school should hold general meetings among

all of the school's stakeholders in order to find a proper solution. They added that such meetings could develop a continuous programme which could facilitate teachers' collaboration with those from other schools.

Strategic solutions to address challenges in school's organisational learning (OL) practice: school one teachers' recommendations

With regard to their school's organisational learning, teachers reported a great deal of professional significance in their support for collaborative learning with teachers from other schools, despite the modest gaps between values and practices recorded in the survey data. As presented in table 5.3, teachers underlined two challenges in relation to the professional significance, namely, the external infrastructure and school leadership and policy support.

Regarding external infrastructure, teachers claimed that poor quality of main roads, which link one school to another in their area, caused them to experience difficulties in making regular visits to other schools. They argued that visiting other schools regularly in such conditions could take a lot of time and money. Such a situation meant that every programme that required regular visits to other schools was not regarded as a priority in the teacher learning process in their schools:

... the collaborative activities with other schools were still very limited. We knew that the school leaders had tried their best to facilitate such activities, but the limited facilities and infrastructure meant not many things could be done. (social science teachers, school one, discussion sheet)

To overcome this challenge, they argued that there needs to be a strengthening of shared commitment between teachers and school leaders to do more, for example, by making joint visits to other schools at their own expense, if the school does not have sufficient funds. In addition, it was recommended that leaders should be more active in seeking support from the education office.

With regard to school leadership and policy support, teachers argued that recent school policies were not considered to offer optimal support for the practice of collaboration with teachers from other schools, because these programmes were not embedded in their school's strategic agenda.

... for collaboration between schools, we feel that we are not yet maximal. Relationship activities are still not an inherent part of the teacher's professional development process. (Natural science teachers, school one, discussion sheet)

In this respect, natural science teachers suggested their school should give optimal support to teachers' network enhancement and cooperative programmes with other

schools or institutions by embedding such a programme in their school's annual work plan. Furthermore, language teachers (school one, discussion sheet) suggested that their school needed to develop a more concrete policy for supporting teachers collaborative learning with those from other schools. They added that such a programme could be in the form of providing support for teachers in order to conduct comparative studies or attend teacher self-development programmes offered by external institutions.

5.2.2 Addressing professional challenge in PL and OL: school two teachers' strategic recommendations

As shown in table 5.4, school two teachers reported a number professional challenges on a number PL and OL practices, in spite of the close values-practices gaps I reported in chapter four. In relation to each of the challenges, a number of solutions were recommended by teachers for change. In this subsection, I discuss the solution that teachers proposed to address each of the challenge. I begin by discussing solutions proposed with regard to challenges in school two teachers' PL, and then I discuss solutions they proposed in relation their schools' organisational learning.

Table 5. 4: Professional Challenges and their Solutions: School two teachers' and leaders' recommendation for change

PL and O	L Factors	PL and OL Activities	PL and OL Challenges	Teachers' Recommended Solutions
Professional Learning Factors	Learning from and Reflecting on Different Sources	Learning from relevant research report	Limited Access to Formal CPD	 Giving credit to teachers conducting research and evaluation or using research reports for improving their teaching practice. Participating in internal research seminars or focused discussion forums, to guide teachers in translating the research reports into applicable action in the process of teaching and learning in class. Conducting more discussion among teachers and leaders in designing strategic solutions.
			Limited Spare Time	- Improving encouragement and support from leaders.
		Learning from and reflecting on students' input	Limited School Leadership and Policy Support	 Organising more intensive discussion between teachers and leaders to find ways to make the teachers' mutual support processes part of the school routine programme each year.
		Learning from other successful schools	Limited School Leadership and Policy Support	 Improving policy-makers' role in facilitating teachers' learning through provision of access to research reports, and/or organising formal forums or mandatory teacher activities.
	Collaborative Professional Learning	Conducting collaborative learning with colleagues	Limited School Leadership and Policy Support Limited Spare Time	 Building a common commitment between teachers and school leaders. Undertaking joint discussion to unite thoughts and opinions regarding strategic solution for allocating more time for professional learning purposes at school.

Table 5.4. Professional Challenges and their Solutions: School two teachers' and leaders' recommendation for change (Contd.)

PL and OL						
PL and OL Factors		Activities	Constraints Identified	Teachers' Recommended Solutions		
Organisational Learning Factors	Building Social Capital	Developing good collaborative learning culture among teachers	Limited School Leadership and Policy Support	 Requiring more progressive action from leaders to facilitate teachers learning in the form of formal and organised meetings. Organising discussions, to allow teachers' and leaders to shave perceptions with respect to collaborative learning among teachers, as well as to ensure the commitment of the school in terms of facilitating and realising such processes. 		
	Supporting Experimentation, Collaboration, and Networking	Supporting teachers collaborative learning with colleagues	Limited School Leadership and Policy Support	- Conducting further discussion to design strategic plans.		

<u>Strategic solutions to address challenges in professional learning (PL) practice:</u> <u>school two teachers' recommendations</u>

In practicing professional learning (PL) activities in their school, teachers and school leaders reported five professional challenges, as shown in table 5.4. To address such challenges, teachers proposed a number of solutions for change. In this subsection, I discussed each of the strategic plan.

<u>Challenges in learning from relevant research report: school two teachers' proposed</u> solutions for change

In this activity, teachers reported two challenges, namely, limited access to formal CPD and limited spare time in school. With respect to learning from relevant research reports, despite its important role in increasing teachers professional learning in school, teachers claimed that such a process had not been implemented optimally in their school. Teachers argued that such a situation was caused by 'the lack of scientific activities initiated by schools for teachers to learn and implement such research reports' (Social science teachers, school two, discussion sheet). To improve their situation, social science teachers suggested that their school should help them to do so, through a number of formal CPD activities, such as focus group discussions and research seminars:

In relation to the process of reflecting on the relevant research findings, in our opinion, in order to upgrade our professionalism, it was necessary to have regular activities to discuss such research results. This could be in the form of a research seminar or a focused discussion forum. Then, there should be a kind of guidance to translate the research results into real action in the process of teaching and learning in class. (Social science teachers, school two, group discussion sheet)

In addition to social science teachers, language teachers argued that to develop well-managed CPD in their school, 'there needs to be talks among all parties in this school, in getting around this issue' (language teachers, school two, discussion sheet).

With regard to limited spare time, teachers claimed that it was difficult for them to allocate time to put into practice what they had learnt from research findings. In this regard, they argued that 'their daily activities in schools were mostly still being focused on the existing syllabus and curriculum'. Since they were required to implement these, they then made every activity related to the syllabus and curriculum their priority in school. Such a situation meant that only a small number of teachers practised such learning strategies in their school. To solve such a problem, Natural Science teachers (school two, discussion sheet) suggested that their school should give credit to teachers who integrated the research and evaluation findings into their teaching and learning in school.

By doing so, the motivation of teachers to conduct such research and evaluation in relation to their teaching would increase. In addition, natural science teachers also believed that encouragement and support from leaders would also have a very good effect on teachers, helping them to put into practice what they had learnt from relevant research reports.

<u>Challenges in learning from and reflecting on Students' input: school two teachers' proposed solutions for change</u>

When it came to 'learning from and reflecting on student input', school two teachers identified challenge of limited school leadership and policy support. As described previously, teachers admitted that such a process had been implemented by only a small number of teachers in their school, however, it was done spontaneously, without any guidance or direction from an expert. They believed that if such a process were to be formally initiated on a regular basis by schools, such a practice would be of higher quality:

it (the learning from and reflecting on students' input) would be better if it could be coordinated by school leaders, so it can be done routinely. In addition, it was also necessary to improve the ability of teachers to conduct the research or evaluations through formal training. (Social science teachers, school two, discussion sheet)

To improve the situation, further discussion between the school's policy-makers and the teachers, would be required in order to make the teachers' mutual support processes part of the school's routine programme each year.

<u>Challenges in learning from other successful schools: school two teachers' proposed solutions</u>

The challenge which teachers reported in relation to 'learning from other successful schools' was the lack of school leadership and policy support. In this regard, school two teachers admitted that, in general, such a process had been implemented in their school, but, it was mostly initiated by teachers themselves and was done informally. They considered that the school leaders should coordinate such a process, so that it could be reviewed regularly:

In our opinion, taking lessons from other successful learners to be added to the feedback from students will be very important in improving our professionalism. So far, this process had been informally implemented. However, it would be better if it could be coordinated by school leaders, so it can be done routinely. (Social science teachers, school two, discussion sheet)

To improve the situation, teachers suggested more discussion forums should be conducted among stakeholders and teachers in school in order to formulate school policy which would be able to accommodate such a process. In this regard, they proposed that

the process of collaborating with teachers from other schools be made part of the strategic programme of the school, and this needed to be undertaken regularly.

<u>Challenges in conducting collaborative learning with colleagues: school two teachers' proposed solutions for change</u>

In line with the general patterns reported in this chapter, school two teachers placed greater professional significance in the practice of 'collaborative learning with colleagues', than the close values-practice gaps reported previously in chapter four. They noted that such a process had not yet been undertaken regularly in their school. Teachers and school leader believed that if it were coordinated well and conducted regularly, such a practice would have a much better effect on their professional learning at school. In relation to the practice of collaborative learning with their colleagues', teachers and school leader reported two challenges, namely, limited school leadership and policy support and limited spare time:

These (the professional challenges) happened because there was no system in the school that facilitates and encourages us to do so. In addition, the busyness of each teacher, resulted in the limited time to implement these things. (Natural science teachers, school two, discussion sheet).

To address the challenges mentioned above, teachers proposed that a whole-school meeting should be held in order to build a common commitment among teachers and leaders in order to practise the collaborative learning, and to discuss the most effective strategies which the school needed to employ, in doing so. Teachers expected that practising collaborative learning should be included in the school's strategic plan in order to develop teachers' professional learning at school.

<u>Strategic solutions to address challenges in school organisational learning (OL)</u> practices: school two teachers' recommendations

As shown in table 5.2, in their school organisational learning, school two teachers placed far more professional significance on two OL activities, than the values-practice gap data reported in chapter four suggests, namely, in 'developing good collaborative learning culture in school', which was included in the *Building Social Capital* factor, and in 'supporting teachers' collaborative learning with colleagues', which was included in the *Supporting Experimentation, Collaboration, and Networking* factor. In this section, I discuss the range of solutions proposed by school two teachers and leaders to address each of the challenges constraints. I now begin by discussing strategic recommendations for developing good collaborative learning culture in school.

<u>Challenges in developing good collaborative learning culture in school: school two teachers' proposed solutions for change</u>

In this practice, teachers recorded the challenge of limited school leadership and policy support. In this respect, teachers claimed that such a collaborative learning culture, had indeed existed in their school, however, it was just running naturally without any intervention from school leaders or policy. Teachers believed that it would be better if the school were to facilitate more organised and formal interaction opportunities among teachers. Such opportunities could give teachers a chance to continue to improve their capacity by learning from each other and exchanging experiences with colleagues. To improve such a situation, social science teachers (School two, discussion sheet) argued that it would be necessary to hold a series of meetings and focused discussions involving teachers and leaders in the school in order to share perceptions with respect to the importance of providing proper support and well-organised opportunities for teachers to practise collaborative learning in school. In addition, they claimed that such meetings and group discussions could also be used to design strategic plans to support such a collaborative learning environment, encouraging it to be more better organised.

<u>Challenges in supporting teachers collaborative learning with colleagues: school two teachers' proposed solutions for change</u>

In relation to this particular OL practice, teachers reported challenge of the lack of school leadership and policy support. As described previously, they claimed that the role of school leaders in supporting their collaborative learning with their colleagues needs to be improved. In this regard, they suggested that school leaders need to be more progressive in providing formal and well-organised opportunities for teachers practicing such collaborative learning practices in the school.

In general, collaboration between teachers has been done well in this school. However, the support from the leaders needed to be improved. In this context, teachers had taken more initiative to cooperate with each other. The leaders did not seem to provide formal facilities and support for this problem (Natural science teacher, school two, discussion sheet)

Furthermore, teachers also suggested that the school needed to hold a number of further meetings involving all stakeholders in the school in order to develop strategic plans to address the issue: 'To achieve this goal, it is necessary to hold a series of discussions involving teachers and leaders in school, in order to design strategic solution in supporting teachers' collaborative learning in school' (Social science teachers, school two, discussion sheet). In addition, social science teachers considered that such meetings should also aim to promote the importance of developing a collaborative

learning environment in the school, and to develop a common commitment among teachers and leaders to develop such a learning environment.

CHAPTER 6. INERTIA: LOCKED IN A STATE OF CONTINUOUS UNFULFILLED ASPIRATION AND AMBITION

In this chapter, I discuss data collected through interview two, phase one, which aimed at describing changes in policy and practice in school, resulting from implementation of the school strategic plans which teachers developed and recorded during the data interpretation and discussion meetings that were held in groups. The interviews were undertaken three months after the group discussions were undertaken, involving three teachers from each participating case-study school, who reflected different leadership responsibility level, teaching experience, employment status, subject taught, certification status, most advanced educational qualification, and gender. As described previously, in that phase, teachers formulated their strategic plans in order to address the professional challenges, which they had identified in both their own professional learning (PL) and in their school organisational learning (OL), through critical consideration of the SSE data. The data collected in this phase were designed to answer research question four.

Overall, the interviews showed that there had not been any significant progress made by any of the participating schools in following up the strategic plans. Nevertheless, a high degree of awareness was revealed by teachers with respect to the professional challenges in their professional learning that they themselves had identified. In this regard, most teachers claimed that through having the opportunity to interpret and make sense of the survey results, teachers and leaders had taken the opportunity to consider the professional significance of the data in relation to PL and OL. This collective deliberation centred on the meaning of different facets of PL and OL had proven a rich basis on which to build clarity and awareness together in their groups about what the key challenges were in relation to their PL and OL in their own particular professional contexts. With such awareness, teachers and leaders in both schools expressed a strong desire and ambition to address the challenges; however, they seemed to become locked into a state where these aspirations and ambitions remained unfulfilled. They admitted that they were locked into the situation in their school, where they had been unable to effectively carry out their strategic plans, to address challenges they had identified through the process of considering the SSE survey data. In this regard, during the interview, teachers and leaders from both school discussed a number of reasons that they identified as responsible for the occurrence of such a situation in their schools. I begin this chapter, by discussing the inertia of school one in section 6.1, and, in section 6.2, inertia in the context of school two.

6.1 Following up School Strategic Recommendations to Address Professional Challenges: School one Inertia

The interview revealed that the identification of professional challenges, which was undertaken during group discussion, had increased the awareness of school one teachers about their professional learning practices. In this respect, teachers reported that they become more aware about a number of issues, which they believed might challenge their professional learning practices in school. A classroom coordinator, for example, stated that she started to identify every issue that might challenge her PL practices and started to make priority scale with respect to her practices in school:

What is clear is that I am increasingly aware that the problem exists. So, I started to think about it, which part (of my professional learning practices) was important to me, that I hadn't applied it. (Class coordinator, school one, interview two, phase one)

It was admitted that such awareness had triggered the teachers' strong determination and motivation to get rid of such challenges. Like the class coordinator, the subject coordinator (school one, interview two, phase one) stated that he was aware of problems which challenged their professional learning in school. Such awareness made them eager to make a number of efforts to find proper solutions to such problems: one of them was to hold special meetings to discuss more applicable solutions to address the challenges raises through critical consideration of the SSE data. The strategic recommendations that they developed through such meetings to resolve the learning challenges were claimed to have provided hope for teachers in terms of improved professional learning. However, teachers admitted that such strategic recommendations had not been implemented optimally, so that they had not had significant impact on their learning: 'We have discussed this issue in a number of meetings. However, the results are still abstract...' (head teacher, school one, interview two, phase one). In line with the head teacher, the class coordinator and subject coordinator agreed that there had not been any significant progress in their efforts to follow up group discussion. In this regard, the class coordinator (school one, interview two, Phase one) stated that there had been discussions held to find the right solution through provision of both formal and informal opportunities; however, because the problems they faced were considered difficult to solve, they could not yet apply their solutions optimally.

Overall, teachers conveyed a number of key issues that they believed to have challenged the implementation of their strategic plans. In this regard, the head teacher and subject coordinator (school one, interview two phase one) identified two possible factors, namely, the limited time allocated for teachers' professional learning at school, and the lack of financial support.

The Limited Time Allocated for PL and OL in School

In terms of limited time allocated for teachers' professional learning at school, teachers revealed that they were still having difficulty in allocating their time in school for the PL and OL purpose. They argued that the extent to which they were occupied with classroom teaching allowed only limited time for other activities in school, including for their own professional learning.

This (strategic plans) has not been implemented optimally, sir, because we were busy, ... we have a work plan (to do in school) ... We have to talk about the strategy (to solve such problem) that must be implemented, sir. Later, we will do it by involving teachers in this school, sir. (Head teacher, school one, interview two, phase one)

In line with the head teacher, the subject coordinator (school one, interview two, phase one) suggested to hold more further meetings involving all stakeholders in school in order to find proper solutions. He stated that such meetings should be able to formulate a solution which would enable them to optimally implement their strategic plans in the middle of their hectic activities in school.

Limited Financial Support

In addition to the limited time allocation, teachers claimed that financial support was also another factor that hindered the implementation of their strategic plans. They argued that some of such plans required a lot of funds to be made available. In this regard, head teacher (school one, interview two, phase one) exemplified their efforts to improve the learning facilities in school, which she believed could play a crucial role in improving the quality of the teachers' and school's learning, for example, provision of a school library and Internet access. She expressed the view that to do so, they would need a big amount of financial support, which the school could not provide:

To be able to implement the recommendations, of course there must be significant changes in this school, such as in learning facilities, like adequate library and proper Internet access. Where are the facilities (to come) from? Where did the funds come from (in order to improve our learning facilities)? That is the main problem here. (Head teacher, school one, interview two, phase one)

With regard to the learning facilities, in addition to the Internet access and the adequate library, the head teacher stated that her school was also having problems in the provision of power source for the teaching and learning media employed in classroom. She claimed that improving those facilities was hard to do using their own resources. In this

respect, the head teacher stated that she had even tried lobbying the local government, for support in eradicating such problems. Unfortunately, she found that it was also impossible for the government to accede to their request directly. Besides, in improving the learning facilities, the head teacher also claimed that the lack of financial support had also affected the implementation of the strategic plan to send teachers to attend external training. She claimed that such plans would also need a large amount of money, which the school could not provide. She added that there were indeed a number of training programmes provided by the government; however, she argued that most of such programmes only allowed for a limited number of participants. In addition, the goals did not tend to be coherent with what the school needed.

To address the obstacles mentioned above, teachers stated that there should be more serious commitment on the part of all stakeholders in their schools to implementing every strategic plan that they had designed, or if necessary, to finding an alternative solution to enhance the professional learning climate in their school. Therefore, they stated that they would hold more discussions to evaluate their current professional learning situation and to discuss possible solutions for every identified constraint.

6.2 Following up School Strategic Recommendations to Address Professional Challenges: School two Inertia

As was the case in the school one, school two leaders and teachers revealed that SSE survey results had improved their awareness of their own professional learning, and the learning of their school. In this regard, through critical consideration of the SSE data, they agreed that there were challenges their learning, and they realised that addressing such challenges was important in terms of increasing the quality of their learning. Therefore, they seemed to have the strong enthusiasm and motivation to address the value-practice gap in their learning:

... as far as I know, my colleagues are in this spirit, sir. Because this is a new method, we identify our problems. We have got it, we also talked about a few steps. All of them eager to follow up (such strategic recommendations) immediately sir. (Head teacher, school two, interview two, phase one).

This claim was corroborated by a subject coordinator, who claimed that there was an increase in her awareness with regard to the learning challenges that they were facing: '...for sure, now, I pay more attention to aspects that I think are still lacking, sir. I (for example) do more reading than before, to look for learning references, sir' (subject coordinator, school two, interview two, phase one). However, an increase in such awareness seemed unable to push teachers to take further action to implement their

strategic recommendations, as the interview revealed that there had not been any meaningful progress in this regard.

In contrast to school one teachers who had tried to formulate their strategic plans through a number of formal meetings, school two teachers had not discussed their exact strategies for addressing the identified professional challenges. They argued that their heavy workload in relation to their main duties in school meant they were unable to follow up the professional challenges. The head teacher at the school reported that most of the teachers were still fixated on the national syllabus and curriculum that they had to teach:

Well, so far, I do not see any change sir (in the effect of the strategic plan implementation), I can understand it, sir, we have a lot of work to do. In addition to administering the national examinations, we were also preparing for new student reception. Besides that, we also just had a long holiday, sir. (Head teacher, school two, interview two, phase one)

This claim was corroborated by a subject coordinator, who stated that there has not been any progress made in relation to the implementation of their strategic plans: '...we were busy and also had a long holiday. Yes sir, there is no follow-up meeting yet, after the discussion. But informally, we often talk about that, sir' (subject coordinator, school two, interview two, phase one). However, though there had not been any significant progress made, teachers expressed that they had indeed been in high spirits and were very motivated to do so. They claimed that their failure to design their strategic plan to follow up their identification of challenges to be addressed in light of their interpretations of the SSE data was only due to inappropriate timing. Considering the importance of addressing such challenges for improving their learning, teachers and leaders promised to conduct focused discussion in order to develop an appropriate formula to address obstacles that constrained their own learning and that of their schools.

...it's actually just a matter of time, sir. As you know, during the discussion, we all agreed that there was indeed a lack of alignment in our practice (and our values). We agreed to find a solution, but it will indeed need further discussion. God willing, we'll talk about that soon sir. (Head teacher, school two, interview two, phase one)

The head teacher stated that he, obviously, would coordinate concrete steps towards change. More specific strategies would be discussed in order to guide them to make more progress in implementing their strategic plans

CHAPTER 7. SCHOOL POLICY AND PRACTICE CHANGE

In this chapter, I discuss data collected from interview two, phase two, which was designed to follow up data collected from interview two, phase one, in order to record values-practice change over time in school as a result of the implementation of schools' strategic plans. The interview was conducted three months after undertaking interview two phase one, involving three teachers in each case-study school, reflecting different leadership responsibility level, teaching experience, employment status, subject taught, certification status, most advanced educational qualification, and gender. Overall, teachers and leaders from school one reported that there were changes in their school policy and practice. Nevertheless, they claimed that such changes had not significantly improved either PL or OL. Unlike school one, school two did not seem to make meaningful progress: heavy workload in relation to their main duties at school was claimed to cause their inertia to continue in their school.

Beyond all that, interview two phase two revealed that teachers from both school still believed that addressing the challenges identified through collective deliberation of the SSE data was important when it came to improving the quality of professional and organisational learning at school. Nonetheless, teachers seemed still unable to put such a process as their priority practice in school, over other school mandatory activities. I discuss the policy and practice change in the school one context in section 7.1, and in section 7.2, I discuss the policy and practice change in school two context.

7.1 Policy and Practice Change in School One Context

In school one context, the interviews revealed that there has been some progress made by school one in implementing their strategic plans to address professional challenges in their professional learning (PL) in school. Nevertheless, teachers claimed that such progress did not seem to have significantly increased the professional and organisational learning in the school. The headteacher argued that the lack of financial support had become their main concern when it came to implementing their strategic plans to address their professional learning values-practice gaps. In this regard, the lack of financial support was claimed to have caused difficulties for them with respect to gaining better access to external CPD and to the latest relevant books and research reports.

...we have held a special meeting to discuss it... we were trying to find ways how to solve the existing problems...including the lack of external training opportunity and the lack of supporting facilities to support teacher and student learning, such as the latest books and research report. (head teacher, school one, interview two, phase two)

In these circumstances, the head teacher stated that they 'were trying to find ways, how to solve the existing problems' (head teacher, school one, interview two, phase two). To increase access to the latest books and research report, teachers and leaders made a policy which obliged their teachers to collect relevant books or research reports every time they visited areas where such books and research reports were available:

...we agreed to oblige every teacher who will go to the city to look for this (relevant latest books and research reports) sir. Previously, we did not have such a policy, sir. Now, whoever goes to the city, we ask them to search or download from the Internet, sir. Right there, the Internet quality is good, sir, they can download quickly. (Head teacher, school one, interview two, phase two)

In this regard, teachers were able to borrow books and research reports from a library or download from the Internet. Such books or research reports would be added to their school library, where all teachers and students could access them. Teachers claimed that such a strategy had been undertaken for the previous months, and they claimed that it would increase their book and research report collection quite rapidly. They stated that most of the new books and research reports were in the form of soft files, like PDF.

The increase in the size of their library collection was claimed by teacher to have improved their learning, since they could find more recent theories and practices that could enrich their teaching and learning in class. Furthermore, teachers described how more recent teaching techniques were also to be found in the recently collected books and research reports, which gave them more options when selecting appropriate teaching techniques to apply in their classes. They stated that access to such material had made them more enthusiastic about integrating the findings of the latest research reports into their teaching practice. They argued that the existence of a wide choice of teaching techniques had prompted their desire to try and apply each technique that they considered to be appropriate for the context of their students:

...now we can have more references, sir. Our book collection is increasing, so we can read them in developing our teaching material. ... many of the textbooks that we can adopt, some about the theory of teaching, sir, which widening our knowledge, and challenging us to apply in class. We can now get better access to learn and adopt what other successful teachers usually do, sir. (Class coordinator, school one, interview two, phase two)

However, he realised that such improvement was still considerably short of what they expected. He argued that teachers' and schools' learning would be much more effective if they could have guidance from experts through certain CPD programmes in understanding and applying new teaching and learning theories in authentic teaching and learning settings. In this respect, the head teacher admitted that the lack of funds and the lack of relevant CPD available had limited their opportunity to hold or to attend such training courses. In terms of the lack of financial support for such CPD, teachers

and leaders argued that the current annual budget from the government had been allocated for other activities that they had planned for the current academic year. The head teacher argued they could not run this kind of training in the short term, since the annual budget had been allocated to fund their activities that they had designed for the current academic year. However, the head teacher committed to making such programmes part of their strategic agenda in the coming academic year, so that they would allocate a special budget for the provision of such programmes. By doing so, the head teacher added, teachers and leaders in the school would be able to undertake CPD programmes involving external experts or attendance at such training courses. In addition, they would be able to send selected teachers to attend external CPD, though they claimed that it would be hard for them to find relevant external CPD in the vicinity:

...we could not run this kind of training shortly, it was because our current annual budget had been allocated to fund our agenda in the current academic year. We will put it in the coming budget, so it will be funded well. (Head teacher, school one, interview two, phase two)

Regarding the lack of relevant external CPD which they could attend in their area, the school one admitted that it was quite difficult for them to find CPD that could meet their needs, which could specifically guide teachers in understanding and implementing the current research findings into their teaching and learning practice. Even when available, the head teacher explained that most of the CPD was undertaken in universities or teaching colleges, most of which are located in the provincial capital. In addition, the head teacher also stated that such training was often carried out at times that were not generally in accordance with the school's academic calendar. Because it took place at a distance from school, she argued that to take part in this kind of training, a much larger allocation of time and funds would be needed:

It is quite difficult for us to find any training that matches our needs, in terms of content and time. The available training mostly discussed general topics in education, sir, and mostly just occasionally, not continuously. It is hard to find ones that talk about technical things like what we need. There were actually some, but mostly held by universities, which are located in Pontianak (the Capital city of West Kalimantan Province). However, the time such training was undertaken, mostly, did not fit our schedule (school's academic calendar). (School one head teacher, interview two, phase two)

To overcome this issue, the head teacher decided to send teachers in turn. She argued that if teachers were sent in large numbers simultaneously, the school would be short of teachers for quite a long time, so that the teaching and learning in schools would be disrupted. By sending teachers in turns, the head teacher believed that the teaching and learning process in schools would not be disrupted, while participation in the CPD programmes would still be possible. On return from the training, the teacher who had

been be sent, would be required to share his/her new knowledge and experience gained from the training with colleagues through a formal forum facilitated by the head teacher.

7.2 Policy and Practice Change in School Two Context

In school two, even six months after the intervention phase, there had still been no significant progress made. The head teacher admitted that they have not even undertaken further discussion to discuss the strategy to address professional challenges in their learning in a specific meeting. He argued that the heavy workload of teachers and leaders in the school was still an issue. Such a situation was believed to make it impossible for them to allocate their time to designing their strategic plans: 'It was just briefly discussed in the monthly meeting. And indeed, it was rather difficult to apply in the midst of our busy life' (School two head teacher, interview two, phase two)

The head teacher added that, if what they needed was just an occasional training courses, it would be easier to arrange, but, he continued, what they needed now was a continuous training. He claimed that to organise this would be much harder for them in this respect. He stated that the school needed more time to formulate more applicable alternative solutions.

If it is just occasionally, may be easier, but if continuing training, it might be difficult. Because the teachers in other (successful) schools are busy too (to be invited as speakers), sir. (School two head teacher, interview two, phase two)

In accordance with the head teacher, teachers also claimed that there had still been no significant progress made to addressing the professional challenges in their professional learning at school. Teachers admitted that they had indeed discussed this issue during a monthly meeting, but not in a comprehensive way, and there were still no real steps to be taken, no breakthroughs that could really apply.

... in my opinion there was still nothing significant. It was, indeed, discussed during a monthly meeting. It's just that, just a glance, and there was still no real step to take, sir. There was still no breakthrough that can really be applied, sir. (Subject coordinator in school two, interview two, phase two)

In this regard, because of the extent to which they were occupied with carrying out their main duties at school, teachers implied that, in their current situation in which spare time in school was limited, they prioritised to carrying out activities which were required by the national curriculum and the educational and culture office. Teachers added that, if the process of designing strategy to address professional challenges were required by the government, they would give priority to such a process:

... if it (the order to design strategy to address professional challenges) is from the government, it would be in the form of an order to us, sir, we can leave other activities in order to implement this, the government will not prohibit it (to leave other activities, in order to prioritise processes addressing values-practice gaps). (Subject coordinator in school two, interview two, phase two)

Even though they had not shown significant progress, both leaders and teachers in urban areas still believed that it was important for them to address challenges in their professional learning at school. The head teacher stated that doing so was indeed good and important for their professional learning. Though it would need more time to achieve this, the head teacher committed to keep trying to address such challenges: '... this (addressing the challenges) is indeed good and important sir, that's all. We will try (to find alternative solutions) later' (*School Two* head teacher, interview two, phase two). The head teacher claimed that both teachers and leaders in the school agreed that holding continuing training, which could guide them in optimising the use of facilities and resources in their school, would have a significant impact on increasing the quality of their professional learning at school.

CHAPTER 8. DISCUSSION OF FINDINGS

In this chapter I discuss the findings of this research. This research was conducted in secondary schools in west Kalimantan province, Indonesia, which had various challenging characteristics. The research I developed and have reported in this thesis aimed at describing the potential and power of school self-evaluation (SSE) and organisational learning (OL) strategies for improving teachers' professional learning (PL) in school and the nature of school supports that can be built in for improving PL in school contexts. Particular detailed qualitative attention and a school evaluation intervention was implemented and studied at two schools following an initial survey study of teachers' values and practices at 43 schools in both urban and rural schools in West Kalimantan province of Indonesia.

A central assumption that underpinned this research is related to a tradition in the school effectiveness and school improvement research, which has developed evidence supporting the claim that school has an important influence both directly and indirectly, on pupils' learning in classrooms (see: Raihani, 2008: p.488; Gur, Drysdale & Mulford 2005: p. 545; Drysdale, Goode & Gurr, 2009: p. 701, MacGilchrist, Myers & Reed, 2004: p. 1). In this research, I argue that schools that develop a culture that promotes teachers' professional learning (PL), that in turn can help teachers change and improve their classroom practice, are better able to more effectively support pupils' learning, since pupils' learning is affected by the quality of their teachers' practices in the classroom (MacGilchrist et al., 2004: p. 94; Pedder, James & MacBeath, 2005: p.214; MacBeath, 1999: p. 150). Developing schools with such a culture is important, since schools play a vital role in promoting teachers' professional learning and teachers cannot be expected to make changes to their own professional learning without support from schools (see: Pedder, James and Macbeath, 2005, p.209). A key argument that runs through this research is that asking teachers to develop effective approaches to professional learning poses a significant professional and personal challenge. Teachers cannot be expected to undertake such developments on their own. Schools play a key role in supporting teachers to meet such a challenge. In putting forward this argument, I assumed that adopting organisational learning (OL) strategies, in which a school needs to promote learning orientations at all levels of the organisation, would be effective in promoting and sustaining teachers' professional learning in schools (see: Senge, 2000: p. 5; Pedder and MacBeath, 2008: p. 208; and Pedder, James & MacBeath, 2005: p.214).

In order to develop OL, I argue that schools need to adopt the processes conceptualised by Argyris and Schon (1977) as double loop learning. Double loop learning involves schools adopting, and encouraging among their staff, a critical stance on current school practices, structures and leadership as well as the processes and methods of their own evaluation strategy. Therefore, I decided to implement school self-evaluation (SSE), with reference to Merx-Chermin and Nijhof (2005: p. 139) and Pedder, James and MacBeath (2005: p. 214). Following their example, I believed that data regarding teachers' and school leaders' practices and values in relation to OL and PL could be used as effective starting points for strengthening school improvement and organisational learning (see: Pedder et al., 2005: p215; Hargreaves, 2014: p. 5; & Meuret & Morlaix, 2003, p. 2).

Through four research questions that shaped this research, I described each of the processes above in order to understand how such principles of effective professional learning could be embodied in the systems and practices of high schools in West Kalimantan province. In the following sections, I discuss the research findings that I presented in chapters four to seven. In the first section, section 8.1 I discuss factors underlying teachers PL and OL, then, in section 8.2, I discuss teachers' values-practice alignment with regard to PL and OL. Both sections were discussed in relation to research question one. I discuss teachers' and leaders' interpretations in regard to the SSE survey data, which I fed back to them, in section 8.3, in order to address research question two. In section 8.4 I discuss teachers' and leaders' strategic recommendations in addressing the professional challenges that they themselves identified, in relation to research question three. In the last section, section 8.5, I discuss the policy and practice change in the schools, which resulted from the implementation of teachers' strategic recommendations, in relation to research question four.

8.1 Factors Underlying Teachers and Leaders PL and OL

To describe teachers' values—practice alignment, I employed an SSE questionnaire, containing PL and OL activities. To describe teachers' PL, I used twenty-four items reflecting different facets of PL. In addition, I developed thirty-seven items regarding OL in school. In order to identify underpinning constructs related to PL and OL, on the basis of 712 completed SSE questionnaires, I ran factor analysis. As I discussed in chapter four, through factor analysis I identified three factors or underlying constructs of PL, namely: 'Collaborative Professional Learning', 'Learning and Reflecting from Different Sources', and 'Learning Conversations and Mutual Support'. Overall, the factors identified above accounted for 50.6% of the variance in teachers' responses to the PL

survey items. The number factors developed in this research were smaller than those reported by Pedder, James and MacBeath (2005), Opfer et al. (2011a and 2011b), and Pedder and Opfer (2013). With respect to teachers PL, Pedder and Opfer (2013), reported five factors underlying teachers PL, namely: (1) Internal Orientation, (2) Research Orientation, (3) Collaborative Orientation, (4) Building Social Capital, and (5) External Orientation.

Even though the number of factors reported in this research smaller than those reported by Pedder and Opfer (2013), there is a common PL pattern highlighted on each factor reported by both reports, namely emphasising in collaborative learning among teachers and leaders in schools, developing learning from different sources and promoting mutual support among teachers linked to their professional learning. The characteristics of PL, as implied in the factors reported in this research were also included in those reported by Pedder and Opfer (2013: p. 542) in light of their reviews to a number of previous researches. They believed that professional learning experiences that share all or most of the characteristics can have a positive influence on teachers' classroom practices and student learning and, as such, can be considered a key component within a school's repertoire of improvement processes

In terms of OL, I identified five factors. The factors reported in this research could fit the characteristic of effective OL as described by previous researchers, as I discussed in section 2.4, such as Pedder and Opfer (2013), MacBeath, (1998: p.63), Senge (2000: p. 5), Sammons et al. (2011: p.97), Leithwood et al., (1999, 2000 and 2003), Hallinger (1998), Feger and Arruda (2008), Bolam et al., (2005) and Day et al., (2000), which emphasising in developing a learning culture of trust in school, in which teachers are learning, working, supporting, and talking with each other, an inclusive school culture in which teachers' and pupil's voices are taken seriously in decision-making and goal-setting processes, developing and commitment among staff to school priorities and the direction of school development, opportunities and a supportive climate in which teachers develop capacity and share knowledge about practices, and celebrating learning.

8.2 Teachers' Values-Practice Alignment on PL and OL

Taking my sample as a whole, the analysis of 712 completed SSE questionnaire responses, suggests that teachers assign high levels of value and practice to both PL and OL in school. Teachers' values and practices for both PL and OL were in close

alignment for all factors. Such high values and practices show that participating teachers, in their daily practices in schools, have been aware with activities related to each factor underlying PL and OL developed in this research and have practiced such activities. The high values they recorded in the report meant that they have placed such activities at a high level of importance, while the high practice scores indicate that they have assessed themselves as having carried out these activities at high frequency. On the individual level, such awareness stimulated the teachers to re-examine their own PL in school, which led them to identify some professional challenges in specific areas of their own professional learning and then develop solutions to these challenges. This is indeed a good starting point for teachers in improving their own professional learning (PL) in school. In addition, the collective awareness of the teachers and school leaders with regard to the PL and OL values-practice alignment data could potentially have the power to provoke change in their own learning culture at the whole-school level (see: Woolfolk Hoy et al. 2009). It is evident from the findings of this research, during the whole-school meetings and group discussions, that the collective awareness of teachers was able to provoke them to develop strategic plans to follow up the professional challenges that they themselves had identified in their school, though a number of issues meant that they were unable to implement these strategic decisions optimally. By having such a collective awareness, the improvement to PL and OL in school might be easier to realise.

Furthermore, the closely aligned values and practices might provide optimism for teachers and school leaders (and also for the findings of this research) in terms of adopting changes in order to develop the PL and OL practices in their school. Pedder & Opfer (2013, p. 543) argue that we might expect that high values-practice alignment at high levels provides optimism that teachers and school leaders will prioritise and sustain high levels of PL and OL at school. Pedder and MacBeath, (2008) argued that teachers' professional learning needs to be supported by schools if it is to be sustained as an embedded feature of their work in schools and classrooms. In this research, the analysis of my qualitative data, which I discuss in more detail later in the following subsection, showed that the values-practice alignment data tended to be embraced by teachers and could be a catalyst for provoking change in their school (Woolfolk Hoy, A., Hoy, W. K., & Davis, H. A. 2009).

Further analysis of my quantitative data suggests that there were no significant differences between the values and practices recorded by teachers working at schools with different characteristics or by teachers with different characteristics. In other words, statistically, there was a common view among all of the teachers and school leaders at

all 43 schools involved in the initial survey, that there were high levels of highly valued PL and OL currently in place. As previously argued, such a widespread pattern might give rise to optimism that schools would prioritise, sustain and make any necessary improvements to PL and OL at their respective schools. The survey data on its own cannot demonstrate whether such optimism is well-placed or not. The qualitative component of this research at 2 schools provided opportunities to re-examine teachers' and leaders' orientations, interpretations and suggestions for policy and practice change and, in light of this, to gain a better sense of whether such optimism is well-founded.

8.3 Teachers' interpretation of the SSE survey data

In this section, I discuss the qualitative data I collected through the discussion sheets and semi-structured interview one. As described earlier, in order to address research question two, in relation to the interpretations, suggestions and plans for change of the teachers concerning both PL and OL in school, I involved two schools; *School One* and *School Two*. Within each school, I involved all of the teachers and school leaders. They worked in small groups based on the subjects they taught (Natural Science, Social Science, and Language and Art) to interpret the survey data for their respective schools. I also undertook semi-structured interviews to gain further insights into teachers' and school leaders' interpretations and suggestions for policy and practice change. I interviewed teachers that reflected different leadership responsibility level, teaching experience, employment status, subject taught, certification status, most advanced educational qualification, gender, school performance level, school type and geographic location.

Despite the modest gaps between values and practices recorded in the survey data I presented in chapter four and discussed in chapter five, teachers and leaders, when working more qualitatively with their school's data, placed a great deal of professional significance on a number of PL and OL areas of practice. The data recorded on the discussion sheets shows that such interesting pattern happened because teachers and leaders from both case-study school tended to discuss values-practice alignments in relation to each specific PL and OL activity, rather than in relation to the more generalised PL and OL factors. They were focusing more particularly with responses to specific individual PL and OL items. This reflects the preoccupations of teachers and leaders with specific practices rather than more synthetic combinations of practices reflected in the factors. In this regard, teachers and school leaders appear to have found it more useful to focus on specific practices as a basis for interpreting the data, evaluating

particular aspects of current school practice in relation to the data, and then making recommendations for policy and practice change.

My analysis of the group discussion sheets, supported by data collected from semistructured interview one, suggests that during the group discussion and the whole-school meeting, there were no wide differences in terms of teachers' and school leaders' interpretations, policy and practice recommendations and aspirations for PL and OL practices in their own schools. This pattern of broad qualitative consistency among different groups of teachers and between teachers as a whole and school leaders is in line with the patterns of alignment in the quantitative data. Such data meant that there was no significant different of teachers' and leaders' point of view in school in relation to PL and OL in their school. Such condition might ease the schools to make collective decision with regard to designing strategic plans to address PL and OL challenges in order to develop their school condition. The qualitative process in this research showed that, with the consistency, it appeared that the various small groups of teachers in school one and two could reach a consensus in relation to the effort of improving their quality of their PL and OL practices in their own school, without any tough debate.

Nevertheless, despite broad patterns of alignment in terms of the values and practices of PL and OL in their own school contexts, there were still a number of professional challenges that they had to face in their professional life in school and these were reflected in the discussion sheets and semi-structured interview accounts of teachers and leaders at each school.

School One, a junior high school, in the bottom 25% in terms of school performance ranking, located in a rural area, identified professional significance in regard to access to adequate learning resources, such as adequate access to the Internet, a library and relevant external professional training. Teachers and leaders reported that accessing such learning resources for the purpose of improving their professional learning was still challenging for them. This condition gave them limited access to published research reports and relevant books, which they assumed were important resources for them in order to improve their own professional learning in school.

Since this school is located in a rural area in West Kalimantan province, such conditions are considered reasonable. As I described in chapter one, the rural area in west Kalimantan province indeed has contrasting conditions compared to the urban areas, especially in terms of transportation and communication infrastructure. Such a condition

tends to make schools in this area disadvantaged in terms of learning resources. The damaged roads, for example, make visiting an adequate library and relevant professional training, which are mostly located in the urban areas, challenging for teachers and school leaders in the rural areas.

In School Two, a senior high school, listed in the top 25% in terms of school performance rankings, located in an urban area, teachers reported professional significance mostly in PL and OL areas in relation to providing sustained and embedded professional training in their school strategic agenda. In this regard, they stated that making an effort to improve their own skills in practising a number of PL and OL activities for the purpose of improving their professional learning in school was their concern. In terms of professional significance, there were two main challenges that teachers reported, namely the limited 'School Leadership and Policy Support' and 'Limited Spare Time'. In the context of effective PL and OL as previously discussed, such finding revealed a critical problem in the school, where the embeddedness of PL and OL culture in their school daily activities had not been found. Bolam et al. (2005) and Stoll et al. (2006) argued that a professional learning community aim to promote improvements in students' learning by supporting change through teachers' learning that is not individual and fragmented but collaborative and embedded in their day-to-day routine work and contexts of practice. Pedder and MacBeath, (2008) argued that teachers' professional learning needs to be supported by schools if it is to be sustained as an embedded feature of their work in schools and classrooms. Furthermore, Perkins, (1992), described the embeddedness of PL and OL culture in school daily activities as one of characteristics of an effective school, which he called smart school concept.

In contrast with teachers and leaders from *School One*, who were disadvantaged in terms of access to a number of learning resources, overall, teachers and leaders from *School Two* seemed to face challenges in terms of optimising the use of the available learning resources around them, for the purpose of improving their professional learning in school. In this respect, they had better access to these resources than teachers and leaders in *School One*; however, the skills needed to take advantage of these resources, for the purpose of increasing their professional learning, were still a challenge for them. Supporting school leadership and policies to initiate improvement in this learning area was reported as necessary in the school. In developing effective PL and OL in school, the absence of such leadership is believed to be critical (Robinson, et al., 2008 and Sammons & Bakkum, 2011: p15). Sammons & Bakkum (2011: p15), for example, report that school effectiveness research has drawn attention to the importance of school

leadership for contributing to the effectiveness of schools. They added that the leadership judged to be poor is a well-documented feature of ineffective schools according to inspection evidence in the UK. Such report was also agreed by Phoom, et.al (2015: p. 1586), Yin and Zheng (2018: p. 140) and Sammons et al. (2011: p.97). Phoom, et.al (2015: p. 1586) through their research, conducted in Thailand, found that school leadership as one factor to consider in improving internal professional learning quality in school.

After all, in line with what my quantitative data analysis suggests, where, statistically, there was no significant difference in the PL and OL values and practices recorded by teachers and school leaders with diverse characteristics, the analysis of my qualitative data shows that, during the decision-making processes that took place in the whole-school meeting and group discussions, there were no wide differences in teachers' and school leaders' views when it came to judging the PL and OL practices in their own schools. In this respect, they assigned high value and practice to PL and OL in their own schools, though there were still a number of professional challenges that were a concern for them. Such finding shows how they aware of their values and practices with regard to PL and OL in their respective schools. Such awareness, as also reported by Woolfolk Hoy et al. (2009), could stimulate them to decide and formulate strategic decisions in order to address their professional challenges. I discuss the proposed strategic recommendations in the following subsection.

8.4 PL and OL challenges: teachers' and leaders' strategic recommendations

In this section, I discuss the strategic recommendations proposed by teachers and leaders from both schools in addressing the professional challenges that they identified through the process of making sense of their respective school's SSE survey data, in relation to research question three. The process of identifying such strategic recommendations was undertaken through group discussions, which took place in a subsequent whole school meeting after feeding back the SSE survey data to the teachers from both schools. Overall, as I discussed in chapter 5, section 5.1 and 5.2, a number of strategic solutions were proposed by schools one and two, in order to improve their own professional learning quality in school. Nonetheless, teachers and leaders in both schools realised that implementing each of their recommendations would be a big challenge, which was why they committed to holding further whole-school meetings in order to discuss the technicalities of implementing such recommendations. In the context of *School one*, the strategic steps that they proposed to undertake can be categorised

into four groups, namely: (1) Improving the school learning facilities, (2) developing professional skills by attending external training or inviting experts, (3) facilitating networking activities with other successful schools or relevant institutions, and (4) Improving the head teacher's initiative to make change.

The common strand running through each of the four recommendations listed here was on the question of how to overcome the challenges, impediments and disadvantages of their school's location in a rural area. Improving the school's internal learning facilities, for example, was proposed as a solution to their limited access to external learning resources, as a consequence of having poor communication and transportation infrastructure around them. The learning facilities that teachers mentioned in this regard referred to adequate Internet access and a school library. Teachers and school leaders expected significant improvement in those facilities in their school, since they believed that such facilities were important learning resources for improving their own professional learning. Nevertheless, accessing such facilities was still challenging for them, both internally and externally. Poor internet access made it difficult for them to access online learning resources, while the damaged road made them unable to make regular visits to adequate libraries, which are mostly located in urban areas.

The limitations, in terms of learning facilities, as discussed above, inspired the teachers and leaders in *school one* to propose further strategic solutions. They suggested improving professional learning by participating in external professional training opportunities in order to access ideas and practices unavailable to them at their own school. They also suggested promoting networking activities with other successful schools in order to exchange professional skills and experience. They also suggested 'pushing' school leaders to be more active in achieving each of the proposed strategic solutions. However, the teachers and school leader realised that implementing each of the recommendations would be a big challenge for them in terms of both whole school commitment to change and, most importantly, financial support. That was why, in this respect, the teachers and school leaders agreed to hold further follow-up whole school meetings in order to finalise such recommendations and to identify ways of realising each of the strategic solutions they had recommended.

For teachers and leaders from *school two*, to improve their professional learning in school, they proposed to develop school policies that could improve the support and encouragement among teachers to make changes to their own professional learning, and to give credit to teachers who practise or initiate this. Such a recommendation shows

that teachers and leaders from school two identified the goal of building a common commitment between teachers and school leaders to change as their concern and responsibility. They located themselves at the centre of the change process in contrast to teachers and leaders at school one who emphasised factors outside their direct control. The analysis of my data, which I presented in chapter 5, section 5.2, showed that limited spare time and limited commitment from school staff to make a collective change had been obstacles to improving their professional learning. This made it understandable that teachers and leaders from this school, in order to improve their professional learning, made every strategic effort to build commitment to change among them as the main issue to be addressed.

In addition to building a whole school commitment to change, teachers and school leaders from school two proposed holding more intensive, continuous training in their school, in order to improve their technical professional skills, such as in conducting research or taking lessons from published research findings. This recommendation shows that teachers from this school expected a school commitment to provide more professional training opportunities to be sustained and embedded in their school policy and improvement agenda. Teachers believed that such continuous and sustained training, rather than short one-off training, which are embedded in their school strategic agenda, would be an official permission from the school leadership for them to adopt this practice and even prioritise it over others. Furthermore, as with *school one*, teachers and school leaders in *school two* were also committed to holding further follow-up meetings in order to finalise each of the recommendations.

To sum up, teachers from both schools identified a number of professional challenges with regard to a number of PL and OL areas, despite the close values-practice gaps reported in chapter 4. Overall, the value and practice that teachers assigned to those areas provoked them to design strategic solutions in order to address each of the challenges. In this regard, as I discussed here, a number of strategic recommendations were proposed. However, the enthusiasm that teachers and school leaders had for implementing their strategic plans as their priority practice was, in fact, unable to be fully realised. The analysis of the data I collected from interview two, phase one, suggests that the teachers were in a state of inertia; they were trapped in their unfulfilled desires and ambitions to implement their strategic plans, and they could not realise them due to a number of problems. I discuss this inertia that was present in both schools, and the policy practice changes resulting from the implementation of their strategic decisions in the following section.

8.5 School policy and practice change

In this subsection, I discuss school policy and practice changes, as a result of teachers' and school leaders' strategic decisions, in relation to research question four. To do so, as I described in chapter three, section 3.4, in order to record the changes that occurred over time, I undertook two phases of semi-structured interviews. The first phase of interviews was undertaken three months after I undertook the group discussions, in which the teachers and school leaders made their strategic recommendations to address the challenges in relation to their professional learning in school. The second phase of interviews was undertaken three months after undertaking the first phase, i.e. six months after undertaking the group discussions. In both phases, I involved teachers and leaders from both schools. Within each school, I involved teachers reflecting different leadership responsibility level, teaching experience, employment status, subject taught, certification status, most advanced educational qualification, and gender.

In the first phase interviews, teachers and school leaders reported a high degree of awareness with respect to the professional challenges in their own professional learning that they had identified through making sense of the values-practice alignment data, which I fed back to them. Such awareness confirmed Woolfolk Hoy et al. (2009) which reported that values-practices gaps data, regarding PL and OL, is potentially able to develop teachers' awareness regarding PL and OL in their school. With such awareness, teachers and leaders in both schools expressed a strong desire and ambition to address these challenges; however, they seemed to have been in an inertia, become locked into a state where these aspirations and ambitions remained unfulfilled. Both schools were unable to implement their strategic plan optimally until the last month this research was conducted.

Looking back at the list of professional challenges reported by the teachers and school leaders from these schools, it made sense that they could not get rid of their professional challenges optimally. Teachers from *School One* brought forward the limitation of financial support as one of the issues they faced in implementing their recommendations. Indeed, it was a logic reason why they could not implement their strategic plan. As I discuss previously in section 7.1, teachers from this school, which is located in the rural area, reported their disadvantageous in supporting learning facilities and resources, both within and out of their school, as one issue constraining their PL and OL in school. To

solve this problem, by providing adequate access to these facilities, such as the decent quality internet and adequate school libraries, may require a lot of time and financial allocation. For *school two* context, the most logic reason which could explain why their inertia to continue was because of the lack of effective leadership support, as they reported, and I discuss in section 7.2. In this regard, leadership role, in facilitating and supporting teachers' professional learning, plays a vital role in developing a PL communities, where teachers' PL and school OL were facilitated and supported formally (see: Sammons & Bakkum's, 2011: p15; Phoom, et al. 2015: p. 1586; and Yin and Zheng, 2018: p. 140). Despite being unable to implement their strategic recommendations optimally within the period of time allocated in this research, teachers and leaders from both schools still showed optimism about being able to make better progress in implementing their strategic recommendations in the future time.

Given the facts and findings regarding the implementation of all research phases which I report and discuss above, a number of lessons can be made, as I present in more detailed in the next chapter, with regard to the potential and power of SSE and OL approaches in improving teachers' professional learning in school and the school support for professional learning. Nonetheless, in order to be able to examine the actual potential and power of the SSE and OL approaches in improving teachers' professional learning in school and the school support for professional learning, I argue that further research still needs to be undertaken in order to find out why those schools were unable to implement their strategic plans and how to help them to do so. More specifically, further investigation is needed in order to clarify a number of questions, such as: (1) what are the main obstacles that challenged the teachers and leaders in implementing their strategic plans? (2) What strategy is needed to help them in implementing such strategic recommendations? (3) When the strategic recommendations are implemented optimally, how will that affect the schools' policy and practice, in terms of supporting teachers' professional learning? (4) How will such policy and practice changes, resulting from the optimum implementation of school strategic decisions, affect teachers' professional learning in school? And (5) how will the changes in teachers' professional learning in school affect pupils' learning in the classroom?

CHAPTER 9. RESEARCH CONCLUSIONS AND IMPLICATION

In this chapter, I conclude the findings and processes taking place in all stages of this research. In addition, I believe that this research has contributed to the development of new understandings in the Indonesian context in relation to the use of school self-evaluation and organisational learning approaches to school improvement practice; teachers' PL practices, processes and opportunities in schools; and school supports for teachers' PL. I discuss the implications of my research for policy and practice development in section 9.2. In the last section, section 9.3, I find it important to discuss the strengths and weaknesses of this research.

9.1 Research Conclusion

As described earlier, in chapter three, to answer the research questions, I employed mixed methods that incorporated both quantitative and qualitative approaches. The quantitative approach was in the form of a school self-evaluation questionnaire, while the qualitative approach was conducted through group discussions and semi-structured interviews. 712 teachers and school leaders, from forty-three schools, were involved in the quantitative phase, while in the qualitative phase, I involved two schools.

Overall, the research methodology, as I highlighted above, allowed me to develop data which enabled me addressing the research questions. My analysis of the school self-evaluation (SSE) survey data helped to describe the alignment of teachers' values and practices in regard to PL and OL in the schools, in relation to research question one. In this regard, the analysis of the data suggests that teachers assigned a high level of value and practice to every PL and OL factor. There is no statistical evidence that teachers and school leaders, with different characteristics, were significantly different in terms of values and practices for each factor of PL and OL.

The decision I made to feed back the school self-evaluation (SSE) survey data, particularly in relation to the values-practice alignment regarding PL and OL, to the teachers and leaders in each school, helped in describing how the teachers and school leaders responded to such alignments, in relation to research question two. Overall, the data acted as a catalyst to provoke teachers and leaders to start thinking about making changes in their policies and practices in relation to PL and OL in their respective schools, though, due to a number of obstacles, which I explained above, made not all desires for such changes can be transformed into more concrete school improvements.

In this respect, in light of the SSE survey data, teachers re-examined their practices and values. Through such a process, the teachers and school leaders identified a number of professional challenges in several PL and OL areas in their schools, as they recorded in the group discussion.

Discussion sheet which I adopted enabled me to collect data regarding teachers' and leaders' strategic recommendation in addressing each professional challenges they identified, in relation to research question three. In this process, as I presented in section 5.2, a number of strategic solutions were proposed by both teachers and leaders. Furthermore, the second phase interviews, could provide a range of data regarding policy and practice change in school in regard to teachers' PL and school support for the PL, from teachers' and school leaders' perspective, in relation to research question four. In paragraphs below, I present the conclusion of research finding in light of data collected from each data collection phase.

Overall, analysis of the discussion sheets and interview one suggests that teachers and school leaders, during the group discussion, tended to discuss on the practice of individual PL and OL activities, instead of doing it on the level of PL and OL factors, which I built through factorial analysis on the basis of the 712 completed SSE questionnaires. This shows the preoccupation of teachers with analysing PL and OL in terms of concrete, specific activities, instead of in relation to more abstract factors. There were no wide differences in terms of teachers' and school leaders' views on the contextual PL and OL practices in their own schools. Despite the broad patterns of alignment between values and practices, the qualitative stages of the research revealed a number of key challenges which teachers and leaders at both schools wished to address.

Teachers and leaders from *School One* mostly put forward a number of external factors as the main challenges in promoting PL and OL in their school, such as the lack of learning resources and financial support. Meanwhile, teachers and school leaders from *Schools Two* mostly assigned significance to internal factors within themselves as barriers, namely about building commitment between them to make changes. Despite having high desire to make change, such challenges had made them be unable to implement their strategic recommendation optimally, which meant that there had not been any significant changes they made in their policy and practice regarding PL and OL in their respective schools. Nevertheless, teachers from both schools committed to keep finding ways to implement such strategic recommendation.

Overall, from the conclusions discussed above, with regard to the implementation of SSE and OL in improving teachers' professional learning (PL) in school and school support for PL in west Kalimantan province, Indonesia, a number of lessons could be drawn. Firstly, with a number of modifications and adjustments, SSE survey and follow up interviews could be adopted in order to describe teachers and leaders values and practices. Secondly, Values-practice gaps data could be a starting point for school self-evaluation process, which, with further qualitative processes, could begin the double loop learning process. Thirdly, to be able to optimally implement their strategic plans, teachers and leaders would need to be helped to make PL and OL activities be their priority to implement, out of their other usual mandatory activities in their schools. Lastly, researcher would need to provide adequate strategy to assist teachers and leader in solving each challenge they might face in implementing their strategic plans.

9.2 Research Implications

Taking into account the findings of this research, which I have discussed so far in this thesis, I believe that this research has contributed not only to school policies and practices in improving teachers' professional learning (PL) in school and school support for PL, but, more widely, to the field of school effectiveness and school improvement research. In this section, I discuss the contribution that this research has made to each of these areas. In subsection 9.2.1, I discuss the contribution of this research to the field of school effectiveness and school improvement research, and in subsection 8.2.2, I discuss the contribution it has made to schools' policies and practices.

9.2.1 Contribution to the field of school effectiveness and school improvement research

I designed this research by incorporating an interventionist strategy and a combination of qualitative and quantitative approaches to the collection and analysis of the data. The interventionist research strategy was undertaken by feeding back school self-evaluation (SSE) survey data, particularly in relation to values-practice alignment data, to teachers and leaders in both case-study schools involved in this research. Such a process was a necessary component of my research design. I believed that intervening in the lives of the two participating schools to promote this SSE and organisational learning (OL) process would enable me to examine their potential and power for improving the professional learning (PL) of teachers and school support for teachers' PL in different secondary school contexts. The findings of this research provided more evidence for future researchers that feeding back data regarding values practice alignment, as an intervention stage in the school self-evaluation process, can be a powerful catalyst in

facilitating new forms of critical whole-school communication. Such a communication underlies the concept of double-loop learning proposed by Argyris and Schon (1977), where schools adopt a critical stance on the process and methods of their own self-evaluation by reflecting on and challenging their own internal culture by evaluating practices and policies of PL and OL in their own school. Double-loop learning is believed to be important for a school to develop, in order to become a learning school, which promotes change in its own learning.

The concept of an interventionist study, which I mentioned above, was shaped by arguments and ideas developed by MacBeath and Mortimore (2001) and Pedder and MacBeath (2008). However, instead of stopping at the process of describing the alignment of teachers' values and practices (research question one) and how teachers make sense of survey data for SSE and OL purposes (research question two), I decided to expand the scope of this research, through a number of follow-up qualitative stages, to investigate the variation and implementation of strategic decisions that teachers themselves decided to take, in light of their interpretation of the SSE survey data, for the purpose of improving teachers' PL and the school support for PL (research questions three) and how the implementation of such strategic decisions changed the policy and practice in each participating school (research question four).

The findings of this research have provided evidence that the methodological decisions I undertook in this research have provided adequate answers to each research question I mentioned above. In this regard, my decision to employ SSE survey data and a number of statistical analyses, which included tests of central tendency, significance of differences, measure of effect sizes and multivariate analysis (Exploratory and confirmatory factor analysis), helped to describe the alignment of teachers' values and practices in regard to PL and OL in school, in relation to research question one. Meanwhile, my decision to involve interventionist stages, by feeding back the survey data, particularly in relation to the values-practice alignment, through whole-school meetings and focus group discussions, helped to provide an answer to research question two, which is about describing how teachers make sense of survey data for SSE and OL purposes, and the potential of the SSE approach in regard to provoking change in the case-study schools. Furthermore, the decision I took to undertake follow-up semistructured interviews helped to provide adequate data regarding the variation and implementation process of teachers' strategic recommendations, in relation to research question three, and the changes to school policy and practice, resulting from the implementation of the teachers' strategic plans, in relation to research question four.

9.2.2 Research contribution to school policy and practice

The school self-evaluation (SSE) and organisational learning (OL) approaches, which I promoted in this research, were considered new in the context of Indonesia, especially in the west Kalimantan secondary school context. Therefore, the application of these approaches in each of the schools could be a new reference point for teachers and school leaders when they come to selecting a strategy for promoting change at the school level, in terms of improving teachers' PL and PL support in their schools.

In relation to the qualitative findings that resulted from the qualitative phases that I decided to employ in this research, the research shows that, in spite of the close values-practice alignment shown by the SSE survey data, teachers from both schools still identified a number of professional challenges in some areas of PL and OL in their schools, which they could not optimally overcome. By taking such data into account, or by adopting the methodological decisions I made in this research, school stakeholders could develop more differentiated professional learning policies and strategies, by not only focusing on implementing the national curriculum, but also incorporating PL and OL activities, which are capable of providing adequate support to solve teachers' professional challenges, as an embedded agenda in their school. Doing so is considered important for the purpose of improving school learning, because, in order to help teachers sustain their engagement with the challenges involved in promoting their professional learning in classrooms, they need to continue learning, and be supported to do so by their schools (see: Pedder, James and Macbeath, 2005 P.209).

9.3 Research Strengths and Limitations: the relevance of school effectiveness criticism to my research

As is the case in other school improvement and school effectiveness research, I do not deny that a number of critiques have been made of these research frameworks, as I discussed in chapter 2, section 2.12, and they might also have affected this research. Realising such risks, I embraced the critiques as the basis for tackling related issues in the theoretical framework, methodology and findings of this research. Hence, this research was developed by considering all of the criticisms, though I realise that not all of them can be covered. Therefore, in this section I present the advantages and disadvantages of this research according to the criticisms discussed above, respectively in subsections 9.3.1 and 9.3.2, as follows.

9.3.1 Research Strengths

Given the criticisms of school effectiveness and school improvement research, as described above, there are a number of characteristics of this research that were advantageous in embracing such criticisms. I present each of these advantageous characteristics below.

- 1. This research aimed at investigating how a school self-evaluation (SSE) and organisation learning (OL) approach could improve the professional learning of teachers across different subjects. This study was not focused on a certain subject, but rather, it accommodated all school subjects. Therefore, this research was advantageous in relation to addressing the critiques of school effectiveness research, whereby it is assumed to be too narrow in scope by only involving a certain subject in a school (see: Sheerens, Bosker and Creemers, 2000: p. 140).
- 2. This research was conducted by involving two schools with different characteristics, including their level, performance ranking and geographic locations. As I described in chapter two, schools in rural areas tend to be disadvantaged in terms of SES, parents' education level and teaching learning facilities. In terms of students' performance, rural schools also tend to perform slightly less well than those in urban. All of these facts made this research, to a certain extent, advantageous in regard to the critiques of school effectiveness and school improvement research, whereby it is judged to be lacking in accommodating the differences in school contexts and in pupils' SES (see: Thrupp, 2001: p. 17 and Weindling, 1999, p. 341). Additionally, the decision to involve schools with different performance levels in this respect addressed the criticism of Reynolds and Teddlie (2000 in lyer 2008: p. 55), who argue that school effectiveness research has focused more on successful schools, and hence the factors that have been identified as enhancing school effectiveness may only apply to successful schools and less so or not at all to unsuccessful schools.
- 3. This research was conducted in four stages, involving both qualitative and quantitative approaches. It proceeded by describing teachers' values-and practice regarding PL and OL in schools (research question one), feeding back such data, through an interventionist process, in order to provoke personal and collective improvement in the schools (research question two), observing how the improvement decisions that the teachers themselves developed during the intervention process

were implemented (research question three), and investigating how that improvement process changed the schools' policy and practice in relation to supporting teachers' PL (research question four). To investigate such changes, two phases of interviews were undertaken over a period of six months. The research stages mentioned above show that this research was not only concerned with the final changes in school policies and practices, in relation to PL and OL in the schools, but also with every process that was undertaken in order to bring about these changes. Every process described here reflects the strengths of this research in encountering the critiques of Teddlie and Reynolds, (2000), who argued that school effectiveness research: (a) is often far away from showing interrelations between school process variables and the picture of the school improvements, (b) usually presents a picture of a school at a certain point in time instead of a process of effectiveness evolving over time, and (c) needs ideas about how schools came to be effective (or ineffective) over time in order to develop change and improvement strategies

4. Furthermore, Teddlie and Reynolds (2000) also criticise school effectiveness studies as being very deficient at the level of the study of processes rather than the study of factors. This research encountered such a critique by making the study of both factors and processes of PL and OL a compulsory component of the study. In this regard, the factors underlying teachers' PL and OL, which I developed through factor analysis on the basis of 712 completed SSE questionnaires, were fed back to the teachers and leaders, through the intervention phase of this research, in order to provoke individual and collective changes within each case-study school. Furthermore, a number of follow-up qualitative stages were undertaken in order to understand how each improvement process had been undertaken, and how school policy and practice had changed as a result of such an improvement process.

9.3.2 Research Disadvantages

Despite these advantages there are a number of disadvantages. Such disadvantages occurred in both the research methodology applications and the research findings. Below, I list each of the research disadvantages.

The two schools involved in this research were selected in order to represent schools
with diverse characteristics in the SSE survey, in terms of their geographic locations,
levels and performance rankings. In order to investigate the potential and power of
SSE and OL in improving teachers' PL and school support for PL even more
comprehensively, more schools could be involved. The limited time frame, human

resources, and financial support that I had in undertaking this research meant that I decided to limit the number of schools involved in this research to two.

- 2. Employing a shadowing technique would have been beneficial in digging for more natural and real time information with respect to the progress that the teachers made in implementing their strategic decisions and the challenges that they faced while doing so. By obtaining such information in real time and personally, suggestions on how to solve each challenge could have been given. By doing so, as the researcher, I could have contributed to helping them to make the process of implementing their strategic plans stay on the right track. In addition, the use of a shadowing technique would also have been able to increase the authenticity of the data collected through semi-structured interviews, since I would have been able to triangulate the data collected from the semi-structured interviews by providing qualitative data that were more contextual and natural in their setting (see: McDonald, 2005, 456; Burn, 2010: p. 70; and Sagor, 1992: p. 34;). However, as I described previously in chapter three, section 3.5, due to the limited access that I could obtain to both case-study schools, such a data collection technique could not be applied. However, in the context of this research, I believe that I still maintained the quality of the data that I collected. The two phases of interviews that I undertook provided an in-depth and comprehensive qualitative understanding with regard to the implementation process of the schools' strategic recommendations in light of the school self-evaluation (SSE) data and how the implementation of those strategic recommendations influenced the quality of the teachers' professional learning (research question 4).
- 3. To facilitate the teachers in formulating their strategic plans, in addressing their professional challenges, I undertook whole-school meetings and group discussions. I had expected that during the group discussions, the teachers would have been able to formulate final strategic steps to take; however, unfortunately, in this study, the teachers and school leaders could not do so. They needed to hold their own follow up whole-school meetings, which I could not access, in order to finalise their strategic plans. Such a situation meant that I was unable to observe personally the decision-making process during the follow up meetings. However, by undertaking semi structured interviews involving teachers reflecting different leadership responsibility level, teaching experience, employment status, subject taught, certification status, most advanced educational qualification, and gender. I believe that the data collected in this study were able to describe this process well. To improve future research, I suggest finding ways of helping teachers to decide on their final strategic

recommendations during the group discussion. To do so, a number of activities could be added during the discussion, or another group discussion could be held, instead of doing it only once. In this research I could not do this, due to the limited time available for me to conduct this research, the lack of teachers' spare time to be involved in the group discussion, and the lack of financial support.

- 4. The methodological decisions I undertook in this research, especially by adopting SSE and OL, were able to provoke teachers and school leaders to at least begin the process of thinking through and imagining changes to their professional learning (PL), and the school support for PL, by designing strategic plans to address their own professional challenges in school. However, a certain strategy should have been incorporated in this research in order to provide adequate help for schools in implementing their strategic decisions, which this research could not do optimally. The failure of this research in helping teachers to implement their strategic plans optimally meant that only a few changes to school policies and practices could be reported.
- 5. Due to the limited time I had to undertake this research, I only investigated how schools' policy and practice changes improved teachers' professional learning in school; meanwhile, how such an improvement influenced pupils' learning in the classroom could not be investigated. Such an investigation could have provided further evidence with regard to the potential and power of SSE and OL in improving the learning of both teachers and pupils.

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Appendices

Appendix 1. SSE Survey Questionnaire



Professional Learning (PL) and Organisational Learning (OL) of Teachers in Secondary School in West Kalimantan Province, Indonesia

Angket Guru Dan Pimpinan Sekolah

Angket ini dibagikan dengan tujuan untuk mengumpulkan data yang diperlukan dalam menyelesaikan penelitian Doktoral (S3) saya di University of Leicester, Inggris

Angket ini fokus pada aktivitas-aktivitas yang anda dan rekan kerja anda lakukan dalam meningkatkan kemampuan profesional anda. Selain itu, saya juga tertarik untuk menginvestigasi dukungan dari sekolah dalam peningkatan profesionalisme anda di lingkup organisasi sekolah. Angket ini mencakup 3 bagian:

- Proses Peningkatan Profesionalisme Guru (Professional Learning of Teachers) di sekolah: Penilaian dan Praktek,
- ii) Penerapan Konsep Organisational Learning di sekolah: Penilaian dan Praktek, dan
- iii) Latar Belakang Guru

Pengisian angket ini diperkirakan memakan waktu selama 25 menit. Jawaban anda akan sangat dijaga kerahasiaanya. Hasil angket ini akan ditampilkan dalam bentuk ringkasan atau dalam bentuk statistik sehingga baik anda sebagai individu maupun sekolah anda tidak akan teridentifikasi.

Saya ucapkan terimakasih atas kontribusi waktu dan fikiran anda dalam menjawab angket penting ini. Jawaban anda diharapkan bisa memberikan wawasan baru bagi pendidik secara umum. Selain itu, saya juga berharap hasil refleksi dari jawaban anda pada angket ini mampu mendukung peningkatan profesionalisme anda secara pribadi maupun sekolah anda secara umum.

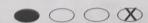
Silanglah lingkaran yang paling mewakili jawaban anda.

Sebagai Contoh:



Jangan habiskan terlalu banyak waktu pada masing – masing item. Jika anda merasa menandai lingkaran yang salah, silakan hitamkan lingkaran tersebut, kemudian silanglah lingkaran yang tepat.

Sebagai Contoh:



Jika anda mempunyai pertanyaan tentang angket ini, silakan menghubungi saya baik secara langsung maupun melalui nomor telefon berikut 082251103383 atau melalui email: di26@le.ac.uk

Bagian A: Peningkatan Profesional Guru (Professional Learning of Teachers) di sekolah: Praktek dan Penilaian

- 1. Bagian A terdiri dari 23 pernyataan. Masing- masing pernyataan berhubungan dengan salah satu aspek peningkatan profesionalisme anda.

 Terdapat dua respon untuk setiap pernyataan:
- - Kolom kiri merupakan respon yang menggambarkan praktek anda sehari-hari
 - Kolom kanan adalah penilaian anda tentang urgensi pelaksanaan setiap praktek tersebut

Anda diperkenankan untuk menandai SATU lingkaran saja pada MASING-MASING KOLOM. Sebagai contoh:

Sebera mengga	pa benar ambarkan katan pro	raktek A kegiatan fesionalisn	berikut usaha		Seberal dalam	ang Per pa Penting menciptak wa untuk	g aktivitas kan kese	s berikut
Tidak Benar	Jarang Sekali Benar	Sering Kali Benar	Sangat Benar		Tidak penting	Lumayan Penting	Penting	Sangat Penting
	X			Guru berpartisipasi secara aktif dalam kegiatan dewan guru di sekolah.	0		X	0

Responden pada contoh di atas jarang sekali berpartisipasi dalam kegiatan dewan guru tetapi dia menganggap partisipasi tersebut penting dalam menciptakan kesempatan belajar bagi siswa.

Sekarang, silakan jawab bagian A.

Peningkatan Profesional Guru (Professional Learning of Teachers): Praktek dan Penilaian

Sebera	apa bena gambarkar gkatan pro	raktek A r kegiatan n nfesionalisn	berikut usaha		Seberap dalam i	ang Pen pa penting menciptak wa untuk l	aktivitas an kese	berikut
Tidak Benar	Jarang Sekali Benar	Sering Kali Benar	Sangat Benar		Tidak penting	Lumayan Penting	Penting	Sangat Penting
		0		Saya menggunakan website (internet) sebagai salah satu sumber ide dalam meningkatkan profesionalisme saya		0		
				Saya membaca laporan-laporan penelitian sebagai salah satu sumber ide dalam meningkatkan profesionalisme saya				0
	0			3. Saya mempelajari praktek mengajar yang baik dari sekolah lain sebagai usaha meningkatkan profesionalisme saya	0	0	0	0
		0	0	Saya berkonsultasi dengan siswa mengenai cara yang paling efektif bagi mereka untuk belajar	0	0	0	0
				 Saya merujuk pada hasil penelitian dalam mencari cara terbaik untuk mengajar 		0	0	
				 Saya merefleksi praktek mengajar saya sebagai cara untuk mengetahui hal yang saya butuhkan dalam meningkatkan profesionalisme saya. 	0	0		0
				7. Saya ber-eksperimen dalam praktek mengajar saya sebagai sebuah strategi dalam meningkatkan proses belajar mengajar di kelas.		0		0

Peningkatan Profesional Guru (*Professional Learning of Teachers*): Praktek dan Penilaian (Lanjutan)

Sebera	entang P apa bena gambarkar gkatan pro olah?	r kegiata n	n berikut usaha		Seberap dalam	ang Pen pa Penting menciptak wa untuk b	aktivitas kan kese	berikut
Tidak Benar	Jarang Sekali Benar	Sering Kali Benar	Sangat Benar		Tidak penting	Lumayan Penting	Penting	Sangat Penting
0	0		0	Saya memodifikasi praktek mengajar saya berdasarkan masukan dari siswa saya	0	0		0
	0		0	Saya memodifikasi praktek mengajar saya berdasarkan hasil penelitian yang di publikasikan	0	0	0	
		0	0	 Saya memodifikasi praktek mengajar saya berdasarkan evaluasi diri terhadap praktek belajar mengajar di kelas 	0	0	0	
		0		Saya memodifikasi praktek mengajar saya berdasarkan evaluasi oleh rekan kerja atau pimpinan sekolah terhadap proses mengajar saya di kelas	0	0		
			0	 Saya melaksanakan penelitian/evaluasi gabungan dengan satu atau lebih rekan kerja sebagai sebuah cara dalam meningkatkan praktek mengajar saya. 	0		0	
0	0	0	0	 Saya terlibat dalam diskusi-diskusi yang merefleksi praktek mengajar saya dengan satu atau lebih rekan kerja saya 	0		0	
0	0	0	0	Saya terlibat dalam pengajaran berkelompok di kelas sebagai sebuah cara dalam meningkatkan praktek mengajar saya	0		0	0
0	0	0		15. Saya terlibat dalam kegiatan rutin gabungan bersama rekan kerja dalam merencanakan praktek mengajar saya.				
0	0	0		16. Saya secara rutin mengamati rekan kerja saya mengajar di kelas dan saling memberikan masukan				0
	0	0	0	17. Jika saya memiliki masalah dalam mengajar, saya biasanya meminta bantuan pada rekan kerja saya				0
				18. Saya mengusulkan ide-ide atau pendekatan-pendekatan untuk diterapkan di kelas bagi rekan kerja saya				
				Saya berdiskusi secara terbuka dengar rekan kerja saya mengenai apa dar bagaimana kami meningkatkar profesionalisme kami.				
				Saya dan rekan kerja saya membua kesepakatan bersama untuk mencoba ide-ide baru dalam mengajar				

Sebera mengg	ambarkar katan pro	r kegiatai	n berikut usaha		Tentang Penilaian Anda Seberapa Penting aktivitas beriku dalam menciptakan kesempatan bag siswa untuk belajar?				
Tidak Benar	Jarang Sekali Benar	Sering Kali Benar	Sangat Benar		Tidak penting	Lumayan Penting	Penting	Sangat Penting	
		0		21. Saya dan rekan kerja saya saling menawarkan penguatan dan dukungan	0				
	0	0	0	22. Saya dan rekan kerja saya sering menggunakan kesempatan – kesempatan informal untuk mendiskusikan cara siswa belajar.		0	0	0	
	0	0		Saya bisa memahami bahwa praktek mengajar yang baik di satu kontex bisa di adopsi ke kontex yang lain.	0	0			

Bagian B: Penerapan Konsep Organisational Learning di Sekolah: Praktek

Bagian ini fokus pada sistem peningkatan profesionalisme guru di level sekolah. pertanyaan – pertanyaan berikut menanyakan seberapa sering praktek – praktek berikut benar dilakukan **sekolah dan rekan – rekan anda**, serta seberapa penting praktek-praktek dan sistem tersebut bagi anda.

(Cara menjawab pertanyaan – pertanyaan berikut sama dengan cara menjawab pertanyaan pada bagian A di atas)

B Penerapan Konsep Organisational Learning di Sekolah: Praktek dan Penilaian

Sebe dilak kerja	erapa ben ukan oleh anda saa	kerja a ar aktivi sekolah	h dan nda tas berikut dan rekan			berikut	tang per pa penting dalam malisme a	g praktek menii	anda k-praktek ngkatkan
Tida Bena		li Kali	Benar			Tidak penting	Lumayan Penting	Penting	Sangat Penting
0	0	C		1.	Pimpinan sekolah menyampaikan visi kemana sekolah akan di bawa secara jelas.	0	0	0	
0	0	C		2.	komitmen bagi sekolah dan mata pelajaran yang diajarnya	0		0	0
0	0			3.	guru pada sekolah dan mata pelajaran yang mereka ajar				
0	0	C		4.	mengenai rencana pengembangan sekolah	\bigcirc		0	
0	0	0		5.	sekolah sebagai sesuatu yang relevan dan berguna bagi proses belajar mengajar	0			
	0	0	0	6.	peningkatan kapasitas guru dimanfaatkan secara efektif dalam mewujudkan prioritas-prioritas pengembangan sekolah	0	0	0	
	0			7.	Sekolah menyediakan waktu bagi guru untuk melaksanakan perencanaan pengajaran secara berkelompok	0	0	0	
	0	0		8.	dengan ide-ide baru sebagai bentuk dukungan sekolah dalam meningkatkan profesionalisme guru	0	0	0	
	0	0		9.	kesempatan bagi guru untuk mengembangkan diri secara profesional.			0	
		0		10.	Sistem di sekolah mendukung dilakukanya evaluasi pada aktivitas-aktivitas pengembangan professionalisme guru.				
	0			11.	Inisiatif para guru dalam meningkatkan jaringannya dijadikan bagian integral dalam pengembangan profesionalisme guru.			0	
				12.	Guru diberi bantuan untuk mengembangkan keterampilannya dalam menilai kinerja siswa dengan berbagai cara sehingga dapat meningkatkan pembelajaran siswa				

B Penerapan Konsep *Organisational Learning* di Sekolah: Praktek dan Penilaian (Lanjutan)

Seber dilaku	entang s rekan k rapa bena ikan oleh s anda saat	erja an r aktivita sekolah d	da as berikut			beri	erapa kut	ang per a penting dalam aalisme ai	illaian a praktek menin nda?	nda -praktek gkatkan
Tidak Benar	Jarang Sekali Benar	Sering Kali Benar	Sangat Benar			Tida		_umayan Penting	Penting	Sangat Penting
			0	13.	Guru diberi bantuan untuk mengembangkan keterampilannya dalam mengamati pembelajaran yang sedang berlangsung di kelas	C		0	0	
				14.	Para guru secara rutin bekerjasama dalam merencanakan pengajaran mereka					
				15.	Pimpinan sekolah mendukung guru dalam membagikan praktek mengajar mereka ke sekolah lain melalui jaringan antar sekolah	C		0	0	0
				16.	Jika guru memiliki masalah dalam proses pengajaran mereka, mereka biasanya meminta bantuan rekan kerjanya				0	
				17.	Para guru menyarankan ide dan pendekatan bagi rekan kerja mereka untuk diterapkan di kelas.	C				
				18.	Para guru membuat kesepakatan bersama untuk menguji coba ide-ide baru dalam mengajar					
				19.	Para guru berdiskusi secara terbuka mengenai cara mereka mengembangkan diri			0	0	
				20.	Para guru secara rutin menggunakan kesempatan-kesempatan informal untuk mendiskusikan cara siswa belajar)	0	0	
				21.	Para guru saling menawarkan penguatan dan dukungan satu sama lain		>	0		
				22.	Para guru dibantu untuk lebih memperhatikan peningkatan profesionalisme mereka					
				23.	Sekolah membantu guru memahami bagaimana target peningkatan profesionalisme mereka berkaitan dengan prioritas pengembangan sekolah	1				
	0	0	0	24.	Sekolah membantu guru dalam mencapai target pengembangan diri mereka	C)	0		
	0	0	0	25.	Sekolah selalu berusaha melibatkan guru dalam pengambilan keputusan	C	5	0	C	
0	0	0	0	26.	Pengembangan Profesionalisme guru dijadikan bagian dari kebijakan dan tujuar sekolah		5	0		
	0	0		27.	Pengembangan profesionalisme guru dijadikan bagian dari kebijakan sekolah meskipun kondisi ini harus menyebabkar dipertanyakannya aturan baku yang mengatur, prosedur pelaksanaan dar prakteknya	,	\supset			
0	0	0	0	28.	Para guru diberikan ruang untul melakukan evalusi secara kritis terhada kebijakan sekolah)	C		
5	0	0	0	29.	Para guru secara aktif terlibat dalam pengevaluasian kebijakan sekolah	n	0	C		

Sebera dilakuk	ntang s rekan ke apa benar an oleh s anda saat i	e rja and aktivita ekolah d	da s berikut		Seberaj berikut	tang per pa penting dalam pnalisme a	g praktek menii	a nda k-praktek ngkatkan
Tidak Benar	Jarang Sekali Benar	Sering Kali Benar	Sangat Benar		Tidak penting	Lumayan Penting	Penting	Sangat Penting
0	0	0	0	Para guru terlibat dalam pengambilan keputusan penting di sekolah	0	0	0	0
	0	0	0	Ada proses-proses yang dilakukan untuk melibatkan siswa dalam membuat keputusan di sekolah		0	0	0
				32. Para guru menggunakan pemahamar mereka tentang proses peningkatar profesionalisme mereka sebagai masukar dalam pengembangan kebijakan sosia sekolah				
0	0	0	0	 Di sekolah ini, proses belajar tidak hanya di lakukan oleh murid, tetapi juga oleh para guru. 		0	0	
	0	0	0	 Para guru di sekolah ini percaya kalau setiap siswa memiliki kemampuan untuk belajar 		0	0	0
	0	0	0	35. Siswa di sekolah ini menyenangi proses belajar		0	0	C
		0	0	 Keberhasilan siswa di sekolah ini selalu d rayakan. 		0	0	C
		0	0	 Para guru selalu berdiskusi dengar rekannya mengenai bantuan seperti apa yang diperlukan oleh siswa dalam belajar 		0	0	C

Bagian C: Latar Belakang Guru

Pada bagian terakhir ini, kami perlu mendata beberapa informasi latar belakang anda. Kembali kami tegaskan bahwa data anda ini tidak akan di tampilkan secara individu, melainkan hanya secara ringkasan dan bentuk statistik saja. Oleh karena itu, identitas anda tidak akan bisa diidentifikasi oleh pihak manapun.

C Latar Belakang Guru

1.	Per Oktober 2016, berapa lama anda sudah menjadi				
Soh			ah Tahun	Jumlah	Bulan
a.	segai contoh, jika anda sudah menjadi guru selama 10 tahun dan 11 bulan seorang guru?	1	0	1	1
b.	seorang guru yang mengajar di Sekolah ini?				
C.	seorang guru yang mengajar mata pelajaran yang anda ajar saat ini?				
2.	Mata pelajaran apa yang anda ajar saat ini? (Tolong tuliskan jawaban anda)				
3.	Apakah anda (Tolong tandai SATU lingkaran saja)				
a.	guru PNS?				
b.	guru kontrak?				0
C.	guru honor sekolah?				$\overline{\bigcirc}$
d.	guru tidak tetap/guru terbang?				$\tilde{\bigcirc}$
				Sudah	Belum
4.	Apakah anda sudah tersertifikasi?				
5. a. b.	Apa pendidikan terakhir anda? (Tolong tandai SATU lingkaran Doktor /S3 Magister/ S2				0
c.	Sarjana/S1				
d.	Diploma				
e.	Sekolah Menengah (SMA/SMK)	1			
6.	Manakah dari pilihan berikut yang menggambarkan pel kepemimpinan anda di sekolah? (Tolong tandai SATU lingkaran saja yang merupakan tanggungjawab te			ngjawab	
1.	Kepala Sekolah				
).	Wakil Kepala Sekolah				
	Wali Kelas				
	Penanggungjawab Mata Pelajaran				
	Sedikit atau tidak ada tanggungjawab kepemimpinan sama sekali				
	Apa jenis kelamin anda?			Laki-Laki	Perempuan

Terimakasih atas waktu yang bapak/ibu luangkan untuk menjawab angket ini

Catatan: Data yang anda berikan akan digunakan untuk penelitian dan pengembangan saja, data mentahnya hanya akan di olah oleh saya dan pembimbing saya di School of Education, University of Leicester.

Tolong kembalikan angket yang sudah di jawab ini kepada Dedi Irwan, Prodi Pendidikan Bahasa Inggris, IKIP PGRI Pontianak, Jin. Ampera, Pontianak, Kalimantan Barat, Indonesia.

Appendix 2. SSE Survey Report to Feedback to Teachers and Leaders

SCHOOL SELF-EVALUATION SURVEY REPORT

Teachers' practice and values on overall items of professional learning (PL)

	practice and values on everal items of professional learning (i L)		Practic	е		Values	
Item No.	Professional Learning (PL) items	N	Mean	SD	N	Mean	SD
1	I use the web as one source of useful ideas for improving my practice	708	2.946	0.737	709	3.116	0.669
2	I read research reports as one source of useful ideas for improving my practice	709	2.660	0.730	710	2.842	0.721
3	I draw on good teaching practice from other schools as a means to further my own professional development	706	2.867	0.790	710	3.086	0.775
4	I consult pupils about how they learn most effectively	709	3.028	0.724	711	3.124	0.735
5	I relate what works in my own teaching practice to research findings	710	2.863	0.780	712	3.036	0.699
6	I reflect on my teaching practice as a way of identifying professional learning needs	705	3.223	0.657	709	3.278	0.627
7	I experiment with my teaching practice as a conscious strategy for improving classroom teaching and learning	703	3.046	0.750	705	3.126	0.661
8	I experiment with my teaching practice as a conscious strategy for improving classroom teaching and learning	715	2.657	0.800	717	2.814	0.781
9	I modify my teaching practice in the light of feedback from my students	714	2.633	0.785	712	2.813	0.686
10	I modify my teaching practice in the light of published research evidence	715	3.209	0.652	716	3.253	0.632
11	I modify my teaching practice in the light of evidence from self- evaluations of my classroom practice	716	2.950	0.729	717	3.135	1.006
12	I modify my teaching practice in the light of evidence from evaluations of my classroom practice by school leaders or other colleagues	715	2.635	0.811	715	2.914	0.696
13	I carry out joint research/evaluation with one or more colleagues as a way of improving my teaching practice	715	2.923	0.768	715	3.061	0.654
14	I engage in reflective discussions of teaching practices with one or more colleagues	716	2.887	0.775	718	2.961	0.725
15	I engage in team teaching as a way of improving teaching practice	715	2.619	0.799	716	2.913	0.750

Teachers' practice and values on overall items of professional learning (PL) (Contd.)

		Practice				Values	
Item No.	Professional Learning (PL) items	N	Mean	N	Mean	N	Mean
16	I engage in regular collaboration with colleagues to plan teaching practice	714	2.404	0.859	715	2.754	0.805
17	I regularly observe my colleagues in the classroom and give each other feedback	716	3.024	0.752	718	3.123	0.692
18	If I have problem with my teaching, I usually turn to colleagues for help	716	2.646	0.775	716	2.839	0.754
19	I suggest ideas or approaches for colleagues to try in class	717	3.068	0.674	717	3.207	0.682
20	I discuss openly with colleagues what and how we are learning	717	2.824	1.084	717	3.019	0.711
21	I and my colleagues offer one another reassurance and support	689	2.990	0.726	685	3.067	0.687
22	I and my colleagues frequently use informal opportunities to discuss how pupils learn	688	3.031	0.685	687	3.125	0.652
23	I am able to see how practices that work in one context might be adapted to other contexts	689	3.042	0.729	685	3.028	0.703
	GRAND MEAN	709	2.877	0.764	710	3.028	0.717

Teachers' practice and values on each dimension of professional learning (PL)

<u>Collaborative Professional Learning factor; practice and values</u>
(shares an emphasises on different forms of collaboration and learning together among teachers).

			Practice	s		Values	
No.	Professional Learning (PL) items	N	MEAN	SD	N	MEAN	SD
11	I modify my teaching practice in the light of evidence from self-evaluations of my classroom practice	716	2.950	0.729	717	3.135	1.006
12	I modify my teaching practice in the light of evidence from evaluations of my classroom practice by school leaders or other colleagues	715	2.635	0.811	715	2.914	0.696
13	I carry out joint research/evaluation with one or more colleagues as a way of improving my teaching practice	715	2.923	0.768	715	3.061	0.654
14	I engage in reflective discussions of teaching practices with one or more colleagues)	716	2.887	0.775	718	2.961	0.725
15	I engage in team teaching as a way of improving teaching practice	715	2.619	0.799	716	2.913	0.750
16	I engage in regular collaboration with colleagues to plan teaching practice	714	2.404	0.859	715	2.754	0.805
17	I regularly observe my colleagues in the classroom and give each other feedback	716	3.024	0.752	718	3.123	0.692
18	If I have problem with my teaching, I usually turn to colleagues for help Grand Mean	716 715	2.646 2.761	0.775 0.784	716 716	2.839 3.014	0.754 0.745

Learning and Reflecting from Different Sources factor; practice and values

(emphasises on learning by teachers from a range of sources)

		Practice			Values			
No.	Professional Learning (PL) items	N	MEAN	SD	N	MEAN	SD	
19	I suggest ideas or approaches for colleagues to try in class	717	3.068	0.674	717	3.207	0.682	
20	I discuss openly with colleagues what and how we are learning	717	2.824	1.084	717	3.019	0.711	
21	I and my colleagues offer one another reassurance and support	689	2.990	0.726	685	3.067	0.687	
22	I and my colleagues frequently use informal opportunities to discuss how pupils learn	688	3.031	0.685	687	3.125	0.652	
23	I am able to see how practices that work in one context might be adapted to other contexts	689	3.042	0.729	685	3.028	0.703	
	Grand Mean	700	2.991	0.780	704	3.051	0.697	

<u>Learning Conversations and Mutual Support factor; practice and values</u>
(brings together items related to teachers' mutual endeavours, support and discursive practices linked to their learning)

			Practic	е		Values	
No.	Professional Learning (PL) items	N	MEAN	SD	N	MEAN	SD
3	I draw on good teaching practice from other schools as a mean to further my own professional development	706	2.867	0.790	710	3.086	0.775
4	I consult pupils about how they learn most effectively	709	3.028	0.724	711	3.124	0.735
5	I relate what works in my own teaching practice to research findings	710	2.863	0.780	712	3.036	0.699
	Grand Mean	710	2.854	0.774	713	3.015	0.747

Mean Comparison of Teachers Values and Practice on each PL Factors

Professional Learning (PL) Factors	Category	N	Mean*	SD
Collaborative Orientation	Practice	715	2.761	0.784
Collaborative Orientation	Value	716	3.014	0.745
Enforcement among Teachers in developing	Practice	700	2.991	0.780
Professional learning at school	Value	704	3.051	0.697
Deflective Strategy to Improving the teaching practice	Practice	710	2.854	0.774
Reflective Strategy to Improving the teaching practice	Value	713	3.015	0.747

Teachers' practices and values on overall items of organisational learning (OL)

Item			Practice	s		Values		
No.	Organisational Learning (OL) items	N	Mean	SD	N	Mean	SD	
1	The school leaders communicate a clear vision of where the school is going	709	3.447	0.704	713	3.520	0.611	
2	Teachers have a commitment to the whole school as well as to their subject department	711	3.501	0.619	713	3.575	0.564	
3	The school leaders promote commitment among teachers to the whole school as well as to their subject department	709	3.497	0.637	711	3.532	0.597	
4	Teachers have a good working knowledge of the school improvement plan	710	3.338	0.647	712	3.413	0.612	
5	Teachers see the school improvement plan as relevant and useful to learning and teaching	710	3.294	0.646	712	3.329	0.622	
6	Teachers development time is used effectively to realise school improvement priorities	709	3.221	0.695	711	3.267	0.625	
7	The school provides teachers joint-planning time	710	3.059	0.793	712	3.216	0.661	
8	Teachers are encouraged to experiment with new ideas as a way of promoting professional growth	709	3.155	0.732	712	3.322	0.634	
9	Formal training provides opportunities for teachers to develop professionally	709	3.268	0.768	711	3.442	0.623	
10	School system encourage impact evaluation of professional development activities)	707	3.211	0.735	711	3.319	0.640	
11	Teacher-initiated networking is an integral element of staff development	709	3.068	0.739	711	3.159	0.638	
12	Teachers are helped to develop skills to assess students' work in ways that move their students on in their learning	709	3.113	0.817	712	3.296	0.626	
13	Teachers are helped to develop skills to observe learning as it happens in the classroom	703	2.855	0.737	711	3.108	0.649	
14	Teachers regularly collaborate to plan their teaching	706	2.925	0.778	710	3.156	0.652	
15	School leaders support teachers in sharing practice with other schools through networking	702	2.765	0.875	709	2.931	0.770	
16	If teachers have a problem with their teaching, they usually turn to colleagues for help	707	3.105	0.706	711	3.100	0.643	
17	Teachers suggest ideas or approaches for colleagues to try in class	708	2.958	1.012	710	3.023	0.650	
18	Teachers make collective agreements with colleagues to test out new ideas	709	2.743	0.802	711	2.985	0.674	
19	Teachers discuss openly with colleagues what and how they are learning	709	2.948	0.751	709	3.100	0.653	

Teachers' practices and values on overall items of organisational learning (OL)

Item	production and values on everal name of organicational learning (O2)	•	Practice	es		Values	
No.	Organisational Learning (OL) items	N	Mean	SD	N	Mean	SD
20	Teachers frequently use informal opportunities to discuss how children learn	710	3.027	0.681	711	3.114	0.665
21	Teachers offer one another reassurance and support	708	3.078	0.716	713	3.154	0.657
22	Teachers are helped to become more aware of professional standards	705	3.138	0.719	712	3.243	0.635
23	Teachers are helped to see how their personal professional learning goals relate to school improvement priorities	708	3.100	0.741	712	3.237	0.635
24	Teachers are helped to achieve their professional learning goals	708	3.093	0.715	711	3.257	0.628
25	There are processes for involving all teachers in decision making	709		0.722	709	3.357	0.662
26	Teachers' professional learning is used in the formulation of school policy and goals	706	3.242	0.688	710	3.275	0.656
27	Teachers' professional learning is used in the formulation of school policy, even where this leads to a questioning of established rules, procedures and practices	703	2.994	0.718	707	3.100	0.641
28	Opportunities are provided for teachers to critically evaluate school policy	706	2.935	0.729	711	3.091	0.638
29	Teachers are actively involved in evaluating school policy	706	3.028	0.726	707	3.199	0.644
30	Teachers participate in important decision-making	712	3.157	0.743	708	3.247	0.689
31	There are processes for involving students in decision-making	710	2.637	0.848	710	2.778	0.806
32	Teachers use insight from their professional learning to feed into school's social policy development	712	3.042	0.628	709	3.102	0.595
33	Teachers as well as pupils learn in this school	710	3.448	0.612	710	3.448	0.576
34	Teachers believe that all pupils are capable of learning	712	3.475	0.607	708	3.412	0.691
35	Pupils in this school enjoy learning	712	3.201	0.656	709	3.332	0.702
36	Pupil success is regularly celebrated	711	2.865	0.818	707	2.880	0.846
37	Teachers discuss with colleagues how pupils might be best to help	711	3.142	0.689	709	3.207	0.706
	Grand Mean	710	3.118	0.728	710	3.222	0.654

(Mean; 0 to 1 = very less frequently practiced, 1.1 to 2 = less frequently practiced, 2.1 to 3 = frequently practiced, 3.1 to 4= Very high frequently practiced

Teachers' practice and values on each factors of organisational learning (OL)

Building Social Capital factor; practice and values

(brings together items that emphasises developing a learning culture of trust in school, in which teachers are learning, working, supporting,

and talking with each other. In the second factor)

			Practic	е		Values	
No.	Organisational Learning (OL) items	N	MEAN	SD	N	MEAN	SD
14	Teachers regularly collaborate to plan their teaching	706	2.925	0.778	710	3.156	0.652
15	School leaders support teachers in sharing practice with other schools through networking	702	2.765	0.875	709	2.931	0.770
16	If teachers have a problem with their teaching, they usually turn to colleagues for help	707	3.105	0.706	711	3.100	0.643
17	Teachers suggest ideas or approaches for colleagues to try in class	708	2.958	1.012	710	3.023	0.650
18	Teachers make collective agreements with colleagues to test out new ideas	709	2.743	0.802	711	2.985	0.674
19	Teachers discuss openly with colleagues what and how they are learning	709	2.948	0.751	709	3.100	0.653
20	Teachers frequently use informal opportunities to discuss how children learn	710	3.027	0.681	711	3.114	0.665
21	Teachers offer one another reassurance and support	708	3.078	0.716	713	3.154	0.657
22	Teachers are helped to become more aware of professional standards	705	3.138	0.719	712	3.243	0.635
	Grand Mean	707	2.965	0.782	711	3.089	0.667

Involving Teachers in School Policy Development, Critique and Goal Setting factor; practice and values

(emphasises an inclusive school culture in which teachers' and pupil's voices are taken seriously in decision-making and goal-setting processes)

		•	Practice	es		Values	
No.	Organisational Learning (OL) items	N	MEAN	SD	N	MEAN	SD
24	Teachers are helped to achieve their professional learning goals	708	3.093	0.715	711	3.257	0.628
25	There are processes for involving all teachers in decision making	709		0.722	709	3.357	0.662
26	Teachers' professional learning is used in the formulation of school policy and goals	706	3.242	0.688	710	3.275	0.656
27	Teachers' professional learning is used in the formulation of school policy, even	702	2.004	0.740	707	2.400	0.644
27	where this leads to a questioning of established rules, procedures and practices	703	2.994	0.718	707	3.100	0.641
28	Opportunities are provided for teachers to critically evaluate school policy	706	2.935	0.729	711	3.091	0.638
29	Teachers are actively involved in evaluating school policy	706	3.028	0.726	707	3.199	0.644
30	Teachers participate in important decision-making	712	3.157	0.743	708	3.247	0.689
	Grand Mean	707	3.105	0.720	709	3.218	0.651

<u>Developing a sense of where we are going factor; practices and values</u>
(emphasises a school culture in which there is a shared vision about the way the school is developing and commitment among staff to school

priorities and the direction of school development)

		Practices		Values			
No.	Organisational Learning (OL) items	N	MEAN	SD	N	MEAN	SD
1	The school leaders communicate a clear vision of where the school is going	709	3.447	0.704	713	3.520	0.611
2	Teachers have a commitment to the whole school as well as to their subject department	711	3.501	0.619	713	3.575	0.564
3	The school leaders promotes commitment among teachers to the whole school as well as to their subject department	709	3.497	0.637	711	3.532	0.597
4	Teachers have a good working knowledge of the school improvement plan	710	3.338	0.647	712	3.413	0.612
5	Teachers see the school improvement plan as relevant and useful to learning and teaching	710	3.294	0.646	712	3.329	0.622
6	Teachers development time is used effectively to realise school improvement priorities	709	3.221	0.695	711	3.267	0.625
	Grand Mean	710	3.383	0.658	712	3.439	0.605

<u>Supporting Experimentation, Collaboration, and Networking factor; practices and values</u>
(emphasises opportunities and a supportive climate in which teachers develop capacity and share knowledge about practices)

		Practices Practices			Values		
N	No. Organisational Learning (OL) items	N	MEAN	SD	N	MEAN	SD
7	The school provides teachers joint-planning time	710	3.059	0.793	712	3.216	0.661
8	Teachers are encouraged to experiment with new ideas as a way of promoting professional growth	709	3.155	0.732	712	3.322	0.634
9	Formal training provides opportunities for teachers to develop professionally	709	3.268	0.768	711	3.442	0.623
1	O School system encourage impact evaluation of professional development activities	707	3.211	0.735	711	3.319	0.640
_1	1 Teacher-initiated networking is an integral element of staff development	709	3.068	0.739	711	3.159	0.638
	Grand Mean	709	3.152	0.753	711	3.292	0.639

<u>Valuing Learning factor; values and practices</u>
(reflects a culture in which learning throughout the school is celebrated, and where there is widespread belief that all pupils are capable of learning).

No	Organizational Learning (OL) items		Practic	е	Values			
No.	Organisational Learning (OL) items	N	MEAN	SD	N	MEAN	SD	
33	Teachers as well as pupils learn in this school	710	3.448	0.612	710	3.448	0.576	
34	Teachers believe that all pupils are capable of learning	712	3.475	0.607	708	3.412	0.691	
35	Pupils in this school enjoy learning	712	3.201	0.656	709	3.332	0.702	
36	Pupil success is regularly celebrated	711	2.865	0.818	707	2.880	0.846	
37	Teachers discuss with colleagues how pupils might be best to help	711	3.142	0.689	709	3.207	0.706	
	Grand Mean	711	3.226	0.676	709	3.256	0.704	

Mean Comparison of Teachers' Values and Practices on each Factor of Organisational Learning (OL)

Organisational Learning (OL) Factors		N	Mean	SD
Building Social Capital	Practice	707	2.965	0.782
	Value	711	3.089	0.667
Deciding and Acting Together	Practice	707	3.105	0.720
	Value	709	3.218	0.651
Developing a sense of Where we are Going	Practice	710	3.383	0.658
	Value	712	3.439	0.605
Supporting Collaboration and Networking	Practice	709	3.152	0.753
	Value	711	3.292	0.639
Valuing Learning	Practice	711	3.226	0.676
	Value	709	3.256	0.704

Appendix 3. Discussion Sheet for Each PL and OL Factor or Item

Discussion Sheet 1

(Interpreting and Making Sense of the School Self-evaluation Survey Data)				
'Factor 'A"				
Group Name :				
School name :				
This sheet is designed to help you interpreting the scho data. Please complete all questions below based on the of your group.				
Now please look at the values and practice report on following question!	Factor A' a	and then a	answer the	
Does the survey data indicate a gap between what we	No	A bit	Definitely	
value and what we actually do? (please tick one option only)		()	()	
How do we explain this gap? Is this a problem? Do we	need to tak	e action?		
What kind of strategy could we adopt to address this pr	oblem?			

Appendix 4. Guide for Semi-Structured Interview One

Semi-structured Interview Guide

Interview One

Investigating the personal(s) behind the decision with regard to the strategic recommendations that are adopted, adapted and rejected by each school in responding to the school self-evaluation (SSE) data and what thinking and reasoning underpins such decision-making.

1.	What strategic recommendations have you given in responding the SSE data?
2	Why do you think such recommendation(s) are appropriate to respond the SSE
	data
3	During the group discussion where you were involved in, have everyone been
	active to deliver their ideas or recommendations?
4	Have everyone been given equal opportunity to convey their ideas or
	recommendations during the group discussion?
5	How have your recommendation been accommodated in the group discussion?
6	How far do you think the collective recommendation that the group in which you
	involve in represent the recommendations of all members of the group?
7	What makes your discussion group decide to propose such recommendations?
	What makes the teachers in the group believe that such recommendation are
	appropriate to respond the school self-evaluation data?
8	How about the whole school teachers and leaders discussion, have everyone
	been actively involved and given equal opportunity?
9	How far do you think the whole teachers' and leaders' collective
	recommendations in responding to the school self-evaluation (SSE) data
-10	represent the recommendations of all groups?
10	What makes the whole teachers and leaders in the discussion forum believe that
	such recommendation are appropriate to be implemented, in order to respond
	the SSE data?

Appendix 5. Guide for Semi-Structured Interview Two

Semi-structured Interview Guide Interview Two

Investigating the changes to policy and practice of the school in developing and supporting the teachers' professional learning resulted from the strategic decisions made in the light of the SSE process.

Did the strategic decisions that this school have made in the light of the SSE process make any changes to the way the school develop and support your professional learning at school? (If the answer is 'yes', continue to ask questions 2 to 4 and 6 below. But if it is a 'no', then continue to ask question 4 to 6). 2. Can you please describe how the school policy and practice in supporting your professional learning differs before and after the implementation of the strategic decisions? 3 How have the changes to the school's policy change your own professional learning practice? 4 Would such a change develop the quality of your own professional leaning practice? 5 What makes the schools' strategic decisions being unable to affect the school support for the teachers' professional learning? 6 If you were a person in charge, what would you do in order to make the strategic plans work properly or even better in developing the quality of teachers' professional learning and the school support for such development?

Appendix 6. SSE survey questionnaire developed by Pedder and Opfer (2013)

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Secondary School Questionnaire

for completion by Secondary School Staff



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Please read the instructions on the next page carefully

Instructions for completing the questionnaire

Purpose of the questionnaire

Thank you very much for agreeing to complete this questionnaire. We realise that you are very busy and so we are particularly grateful for your commitment and effort. Staff at all our project schools completed this questionnaire at the beginning of the research. Responses to the questionnaire items have told us very useful things indeed about your practices and values at the start of the research in relation to classroom assessment, teachers' learning and school management.

We would like to ask you to complete this questionnaire again now at the end of the project so that we can identify any changes in your practices and values over the course of the project.

The questionnaire

Staff tend to take between **30 and 45 minutes** to complete this questionnaire. The questionnaire consists of four sections: **sections A, B, C and D.**

- Section A contains 30 statements about assessment practices
- Section B contains 28 statements about teachers' professional learning.
- Section C contains 26 statements about school management practices and systems.
- Section D asks for some background information about you: personal information shall be kept anonymous. All responses will be treated as strictly confidential.

Completing Section A: Classroom Assessment

- 1. Section A consists of 30 statements. Each statement relates to an aspect of assessment.
- 2. There are **two scales** for each of the 30 statements: **scale X and scale Y.** For each statement we would ask you to tick **one box only** under **scale X** and **one box only** under **scale Y**.
- 3. You will notice in the <u>example on the next page</u> that **each statement appears in the centre**, between **scale X** and **scale Y**.
- 4. **Scale X** on the left hand side is **about you**. We would like you to read each statement and think about **your own practices** in relation to **assessment**. Please tell us how often or rarely you do each of the listed practices.
- 5. Scale Y on the right hand side asks you to tell us about your educational values in relation to each of the listed practices. Irrespective of how much or how little of a practice you do, scale Y asks you to tell us how important you think the practice is for enhancing the quality of pupils' learning. Or, do you think the particular practice is simply bad practice? In this case you would tick the box in the fifth column in scale Y. Please tick only one box in scale X and one box ion scale Y.

Example

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- 1. Section A consists of 30 statements. Each statement relates to an aspect of assessment.
- 2. There are **two scales** for each of the 30 statements: **scale X and scale Y.** For each statement we would ask you to tick **one box only** under **scale X** and **one box only** under **scale Y.**
- 3. You will notice in the <u>example on the next page</u> that **each statement appears in the centre**, between **scale X** and **scale Y**.
- 4. Scale X on the left hand side is about you. We would like you to read each statement and think about your own practices in relation to assessment. Please tell us how often or rarely you do each of the listed practices.
- 5. Scale Y on the right hand side asks you to tell us about your educational values in relation to each of the listed practices. Irrespective of how much or how little of a practice you do, scale Y asks you to tell us how important you think the practice is for enhancing the quality of pupils' learning. Or, do you think the particular practice is simply bad practice? In this case you would tick the box in the fifth column in scale Y. Please tick only one box in scale X and one box ion scale Y.

Example

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	Sca	le X			Scale Y					
Your assessment practices				Section A Assessment practices	How important are assessment practices for creating opportunities for students to learn?					
(About You)					(About your values)					
Never true	Rarely true	Often true	Mostly true		Not at all important	Of limited importance	Important	Crucial	Bad practice!	
	✓			Parents are helped to think about how their child learns best.				✓		

This respondent rarely helps parents to think about how their child learns best; however, even though this respondent only provides such guidance rarely, she thinks that such guidance is crucial for creating opportunities for pupils to learn.

Please turn over now and complete section A

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	Sca	le X				Scale Y						
Your assessment practices					Section A	How important are assessment practices for creating opportunities for students to learn?						
(About You)					Assessment practices					your values)		
Never true	Rarely true	Often true	Mostly true			Not at all important	Of limited importance	Important	Crucial	Bad practice!		
				1.	Assessment provides me with useful evidence of my students' understandings which I use to plan subsequent lessons.							
				2.	The next lesson I teach is determined more by the prescribed curriculum than by how well my students did in the last lesson.							
				3.	The main emphasis in my assessments is on whether my students know, understand or can do prescribed elements of the curriculum.							
				4.	The feedback that my students receive helps them improve.							
				5.	Students are told how well they have done in relation to others in the class.							
					Students are given opportunities to decide their own learning objectives.							
				7.	I use questions mainly to elicit factual knowledge from my students.							

	Scal	le X			Scale Y						
You	r assessn (Abou	nent pract	ices	Section A Assessment practices		tices for to learn?					
Never true	Rarely true	Often true	Mostly true		Not at all important	Of limited importance	Important	Crucial	Bad practice!		
				8. I consider the most worthwhile assessment to be assessment which is undertaken by me.							
				My assessment practices help students to learn independently.							
				10. Students are told how well they have done in relation to their own previous performance.							
				11. Students' learning objectives are discussed with students in ways they understand.							
				12. Assessment of students' work consists primarily of marks and grades.							
				13. I provide guidance to help my students assess their own work.							
				14. I identify students' strengths and advise them on how to develop them further.							
				 Students are helped to find ways of addressing problems they have in their learning. 							

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	Scal	e X			Scale Y					
You	r assessn	nent pract	ices	Section A	How important are assessment prac creating opportunities for students t					
	(Abou	t you)		Assessment practices	(About your values)					
Never true	Rarely true	Often true	Mostly true		Not at all important	Of limited importance	Important	Crucial	Bad practice!	
				I consider the most worthwhile assessment to be assessment which is undertaken by me.						
				My assessment practices help students to learn independently.						
				10. Students are told how well they have done in relation to their own previous performance.						
				11. Students' learning objectives are discussed with students in ways they understand.						
				12. Assessment of students' work consists primarily of marks and grades.						
				13. I provide guidance to help my students assess their own work.						
				14. I identify students' strengths and advise them on how to develop them further.						
				 Students are helped to find ways of addressing problems they have in their learning. 						

	Sca	le X					Scale Y		
You	r assessn	nent pract	ices	Section A continued Assessment practices	creating opportunities for stude				
	(Abou	t You)							
Never true	Rarely true	Often true	Mostly true		Not at all important	Of limited importance	Important	Crucial	Bad practice!
				16. Students are encouraged to view mistakes as valuable learning opportunities.					
				 Students are helped to think about how they learn best. 					
				18. I use questions mainly to elicit reasons and explanations from my students.					
				 I provide guidance to help students to assess one another's work. 					
				20. Students' errors are valued for the insights they reveal about how students are thinking.					
				21. Students are helped to understand the learning purposes of each lesson or series of lessons.					
				22. Assessment of students' work is mainly in the form of comments.					
				23. Students' learning objectives are determined mainly by the prescribed curriculum.					

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	Scal	e X			Scale Y						
You	r assessn	ent pract	ices	Section A continued		portant ar opportun					
	(Abou	t you)		Assessment practices	(About your values)						
Never true	Rarely true	Often true	Mostly true		Not at all important	Of limited importance	Important	Crucial	Bad practice!		
				24. I provide guidance to help students assess their own learning.							
				25. The main emphasis in my assessment is on what students know, understand and can do.							
				26. Students are helped to plan the next steps in their learning.							
				 Pupil effort is seen as important when assessing their learning. 							
				28. Assessment criteria are discussed with students in ways that they understand.							
				29. Students are given opportunities to assess one another's work.							
				30. I regularly discuss with students ways of improving learning how to learn.							

Please turn over now and read the instructions for section B carefully.

Completing Section B: Professional Learning

- Section B consists of 28 statements. Each statement relates to an aspect of teachers' practices and beliefs
 about professional learning.
- 2. <u>As in section A</u> there are **two scales** for each of the 28 statements: **scale X and scale Y.** Again, we would ask you to tick **one box only** under **scale X** and **one box only** under **scale Y** for each statement.
- 3. <u>In contrast to section A</u>, in section B, scale X on the left hand side is <u>not about you</u>. Scale X is <u>about your</u> colleagues' practices as you perceive them.
- 4. If you are **unable to make a judgement** about colleagues' practices in relation to a statement, please tick the 'Don't Know' box in scale X.
- 5. As in section **A**, scale Y on the right hand side asks you to tell us about **your values**: how important do you regard each of the listed beliefs and practices for **creating opportunities for pupils to learn.** Or, do you think the particular practice is bad practice? In this case you would tick the box in the fifth column in scale Y.
- 6. Please just tick one box in scale X and scale Y.

Example:

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Scale X	Section B	Scale Y
This school now	Professional learning practices and beliefs of colleagues	How important are these practices and beliefs for creating opportunities for students to learn?
(this is about <u>your colleagues!)</u>		(this is about <u>your values)</u>
True of no True of True if True of Don't staff few staff some staff most staff know		Not at all Of limited Important Crucial Bad important importance Bad practice!
	Staff participate actively in teacher networks with colleagues.	

This respondent thinks that most staff in his school actively participate in informal teacher networks with colleagues. He also thinks that networking among colleagues is crucial for creating opportunities for pupils to learn.

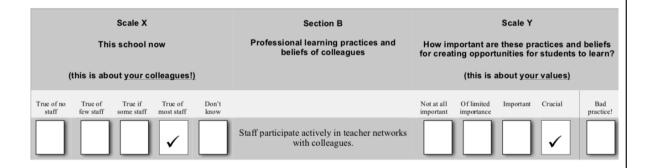
Please turn over now and complete section B.

Completing Section B: Professional Learning

- Section B consists of 28 statements. Each statement relates to an aspect of teachers' practices and beliefs
 about professional learning.
- 2. As in **section A** there are **two scales** for each of the 28 statements: **scale X and scale Y.** Again, we would ask you to tick **one box only** under **scale X** and **one box only** under **scale Y** for each statement.
- 3. <u>In contrast to section A</u>, in section B, scale X on the left hand side is <u>not about you</u>. Scale X is <u>about your colleagues' practices</u> as you perceive them.
- 4. If you are **unable to make a judgement** about colleagues' practices in relation to a statement, please tick the '**Don't Know**' box in scale X.
- 5. As in **section A**, scale Y on the right hand side asks you to tell us about **your values**: how important do you regard each of the listed beliefs and practices for **creating opportunities for pupils to learn.** Or, do you think the particular practice is bad practice? In this case you would tick the box in the fifth column in scale Y.
- 6. Please just tick one box in scale X and scale Y.

Example:

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This respondent thinks that most staff in his school actively participate in informal teacher networks with colleagues. He also thinks that networking among colleagues is crucial for creating opportunities for pupils to learn.

Please turn over now and complete section B.

		Scale X				Section B	Scale Y					
	This	school	now		Pr	ofessional learning practices and beliefs of colleagues	How important are these practices and beliefs for creating opportunities for students to learn?					
	(About	our coll	eagues)			(About y				t your values)		
True of no staff	True of few staff	True of some staff	True of most staff	Don't know			Not at all important	Of limited importance	Important	Crucial	Bad practice!	
					1.	Staff as well as students learn in this school.						
					2.	Staff draw on good practice from other schools as a means to further their own professional development.						
					3.	Staff read research reports as one source of useful ideas for improving their practice.						
					4.	Staff use the web as one source of useful ideas for improving their practice.						
					5.	Students are consulted about how they learn most effectively.						
				П	6.	Staff relate what works in their own practice to research findings.						
		ō	ō	ō	7.	Staff are able to see how practices that work in one context might be adapted to other contexts.	ō			ō	ō	
					8.	Staff use insights from their professional learning to feed into school policy development.						

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		Scale X			Section B continued	Scale Y					
	This	school	now		Professional learning practices and beliefs of colleagues	How important are these practices and belief for creating opportunities for students to learn					
	(About y	our coll	eagues)			(About your values)					
True of no staff	True of few staff	True of some staff	True of most staff	Don't know		Not at all important	Of limited importance	Important	Crucial	Bad practice!	
					Staff reflect on their practice as a way of identifying professional learning needs.						
					 Staff experiment with their practice as a conscious strategy for improving classroom teaching and learning. 						
					11. Staff modify their practice in the light of feedback from their students.						
					 Staff modify their practice in the light of published research evidence. 						
					 Staff modify their practice in the light of evidence from self-evaluations of their classroom practice. 						
					14. Staff modify their practice in the light of evidence from evaluations of their classroom practice by managers or other colleagues.						

		Scale X			Section B continued	Scale Y				
	This	school	now		Professional learning practices and beliefs of colleagues	How important are these practices and beli for creating opportunities for students to lea				
	(About y	your coll	eagues)				(About your values)			
True of no staff	True of few staff	True of some staff	True of most staff	Don't know		Not at all important	Of limited importance	Important	Crucial	Bad Practice!
					 Staff carry out joint research/evaluation with one or more colleagues as a way of improving their practice. 					
					 Staff regularly collaborate to plan their teaching. 					
					17. Staff regularly observe each other in the classroom and give each other feedback.					
					 Staff engage in team teaching as a way of improving practice. 					
					19. If staff have a problem with their teaching they usually turn to colleagues for help.					
					 Teachers suggest ideas or approaches for colleagues to try in class. 					
					21. Teachers make collective agreements to test out new ideas.					

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		Scale X			Section B continued	Scale Y				
	This	school	now		Professional learning practices and beliefs of colleagues	How important are these practices and belief for creating opportunities for students to learn				
	(About	your coll	leagues)				(About your values)			
True of no staff	True of few staff	True of some staff	True of most staff	Don't know		Not at all important	Of limited importance	Important	Crucial	Bad Practice!
					22. Teachers discuss openly with colleagues what and how they are learning.					
					23. Staff frequently use informal opportunities to discuss how children learn.					
					24. Staff offer one another reassurance and support.					
					 Staff believe that all students are capable of learning. 					
					26. Students in this school enjoy learning.					
					27. Pupil success is regularly celebrated.					
					28. Staff discuss with colleagues how students might be helped to learn how to learn.					

Please turn over now and read the instructions for section C carefully.

Г	Leamin	ng How to Learn – in classrooms, schools and networks Φ Learning	g How to Learn 2002
	Completing section C: S	School Management Practices and Systems	
	As in sections A and B, there Scale X on the left hand side carried out at any level of m Scale Y on the right hand side and systems for creating opportunity.	de asks you to indicate how important you regard each portunities for pupils to learn, irrespective of the exter . Or, do you think a particular practice is simply bad pu	e X and scale Y. think that particular management practices are of the listed management practices nt to which you think that the practice
	Scale X	Section C	Scale Y
	This school now	School management practices and systems	How important are these management practices for creating opportunities for pupils to learn?
	Never true Rarely true Often true Mostly true		Not at all Of limited Important Crucial Bad important importance Bad practice!
		Parents are included in decision-making processes.	
		are rarely included in decision-making processes at this schott role in enhancing pupils' learning.	ool but that inclusion of parents in
		nt role in enhancing pupils' learning.	ool but that inclusion of parents in over now and complete section C

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	Sca	le X			Section C	Scale Y					
	This sch	nool now		School management and systems			How important are these aspects of management for creating opportunities for students to lear				
Never true	Rarely true	Often true	Mostly true			Not at all important	Of limited importance	Important	Crucial	Bad practice!	
				1.	Senior management communicates a clear vision of where the school is going.						
				2.	Staff have a commitment to the whole school as well as to their department, key stage and/or year group.						
				3.	Senior management promotes commitment among staff to the whole school as well as to the department, key stage and or year group.						
				4.	There is effective communication between senior management and teachers.						
				5.	There are processes for involving all staff in decision-making.						
				6.	Teachers' professional know-how is used in the formulation of school policy and goals.						
				7.	Teachers' professional know-how is used in the formulation of school policy, even where this leads to a questioning of established rules, procedures and practices.						
				8.	Opportunities are provided for teachers to critically evaluate school policy.						

	Sca	ıle X		Section C continued	Scale Y					
	This sch	nool now		School management and systems	How important are these aspects of management for creating opportunities for students to learn?					
Never true	Rarely true	Often true	Mostly true		Not at all important	Of limited importance	Important	Crucial	Bad practice!	
				 Staff are actively involved in evaluating school policy. 						
				10. Staff participate in important decision-making.						
				11. There are processes for involving students in decision-making.						
				12. Staff have a good working knowledge of the School Development Plan.						
				13. Staff see the School Development Plan as relevant and useful to learning and teaching.						
				 Staff development time is used effectively to realise School Development Plan priorities. 						
				Staff development time is used effectively in the school.						
				The school provides cover to allow staff joint planning time.						
				17. Teachers are encouraged to experiment with new ideas as a way of promoting professional growth.						
				 Formal training provides opportunities for teachers to develop professionally. 						

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	Scale X				Section C continued	Scale Y					
	This school now				School management and systems	How important are these aspec management for creating opportunities for students			for		
Never true	Rarely true	Often true	Mostly true			Not at all important	Of limited importance	Important	Crucial	Bad practice!	
				19.	Teachers are helped to develop skills to assess students' work in ways that move their students on in their learning.						
				20.	Teachers are helped to develop skills to observe learning as it happens in the classroom.						
				21.	Management supports teachers in sharing practice with other schools through networking.						
				22.	Information is collected from teachers on those aspects of their work that they themselves think they do effectively.						
				23.	Information is collected from teachers on effective ways they promote learning to learn skills and knowledge among their students.						
				24.	Information is collected from teachers on informal teacher networking in which they play an active role.						
					Teacher-initiated networking is an integral element of staff development.						
				26.	Learning how to learn is an issue discussed in staff development time.						

Please turn over now and complete section D.

Section D: Background information - Please tick or fill in the appropriate boxes

Male	ale			5. Post and responsibility (please read all categories before ticking of	one box)
				♦ Subject teacher	
2. Nam	e of your s	chool		 Subject teacher with management responsibilities 	
				◆ Head of Department	
				 Head of Faculty 	
3. Year	s of teachir	ng experience	4.Years at this school	 Head of Year 	
less t	than 2		less than 2	 Assistant headteacher 	
2 – 4	years		2 – 4 years	 Deputy headteacher 	8
5 – 1	0 years		5 – 10 years	 Headteacher 	
11 –	20 years		11 – 20 years	♦ Key stage 3 strategy manager	
21+	years		21+ years	♦ Learning support assistant	
				♦ Other – please specify	
7. <u>Pl</u>	ease identi		m – in classrooms, schools and ne	6. No. of responsibility points: httworks © Learning How to Learn 2002 ck one relevant box)	
•	Learning	support			
•		support as an Additional La	anguage		
•		as an Additional La	anguage		
•	English a	as an Additional La	anguage		
•	English a Assessm Subject t	as an Additional La	anguage		

Thank you very much indeed

Appendix 7. Permission Letter from Head of West Kalimantan Province **Education and Culture office**



PEMERINTAH PROVINSI KALIMANTAN BARAT **DINAS PENDIDIKAN DAN KEBUDAYAAN**

Jalan Sutan Syahrir No. 7 Telp. (0561) 734602, 733756 Fax. 732976 PONTIANAK

 ${\bf http://dikbud.kalbarprov.go.id\ Email: \underline{info@dikbud} kalbarprov.go.id}$

Kode Pos: 78116

Nomor: 420 / /52 /DIKBUD/12.03

Lamp : -

Perihal: Ijin Penelitian

Kepada

Yth. Ketua Program Studi Pendidikan Bahasa Inggris IKIP PGRI

Pontianak, 11 Januari 2017

Jalan Ampera No. 88 Pontianak

Memperhatikan surat Saudara Nomor . 012/202.502.32/I/2017 tanggal 11 Januari 2017 perihal Permohonan Ijin, dengan ini kami beritahukan bahwa:

- 1. Pada prinsipnya kami menyetujui dan memberikan Ijin Penelitian kepada atas nama Dedi Irwan, S.Pd., M.Pd. Dosen Tetap pada IKIP PGRI Pontianak yang menempuh pendidikan doctoral (S3) di the University of Leicester Inggris.
- 2. Agar penelitian disertasi yang berjudul "School Self-evaluation and Organisational Learning Approach to Improving the Quality of Professional Learning of Teachers in school (A Multiple case study of Four Secondari Schools ini West Kalimantan Province, Indonesia (Penggunaan Pendekatan School Selfevaluation dan Organisational Learning dalam membantu meningkatkan kemampuan guru di sekolah (Studi Kasus di Empat Sekolah Menengah di Kalimantan Barat) dapat terlaksana dengan baik, kami minta dikoordinasikan terlebih dahulu dengan pihak sekolah menengah yang bersangkutan.

Demikian untuk dapat dimaklumi.

PROVINSI KALIMANTAN BARAT,

MANTA Dr. AKIM, M.M.. Pembina Utama Madya NIP 19600423 198903 1 007

KEPALA DINAS PENDIDIKAN DAN KEBUDAYAAN

Appendix 8. Questionnaire Information Sheet for Participants



INFORMATION SHEET FOR PARTICIPANTS

Title of the Project: School Self-Evaluation and Organisational Learning Approach to Improving the Quality of Professional Learning of Teachers in School (A Multiple Case Study of Four Secondary Schools in West Kalimantan Province, Indonesia)

Researcher: Dedi Irwan, School of Education, University of Leicester, UK.

I am a PhD student at the School of Education, University of Leicester, UK. The topic of my PhD study is the teachers' professional learning at school. The general purpose of the research is to investigate the similarities and differences among participating schools in terms of how school self-evaluation (SSE) and organisational learning (OL) approaches are developed and used to improve the quality of teachers' professional learning and the helpfulness of school supports for such improvements in secondary schools in West Kalimantan Province, Indonesia. This research is supervised by Prof. David Pedder and Prof. Emma Smith. As part of the proposed study, I will conduct an initial survey that will involve about 1000 teachers (from about 50 schools). In this regard, I will ask you to fill in the value practices questionnaire. Then, I will involve you to a number of qualitative procedures in order to follow up the survey data, which include interview and group discussion. The interview will spend approximately 15 minutes, while the group discussion and shadowing will spend about an hour and a day respectively. This study has been assessed and approved by the Faculty of Education Ethics Committee. The interview, which will be audiotaped, will be held in a setting of your choice in or near your school at a time convenient to you. Any information taken during interview will be checked with you for accuracy at the end of the session.

Sharing of information

The data collated will be part of my PhD probation review report that will be available through University of Leicester library. However, none of the information you share with me will be shared with anyone else, except with my supervisors and me. All collected data (recordings, transcripts and notes) will be kept on password protected system. A summary of the research findings will be sent to you at your request.

Confidentiality

Your participation in this research is voluntary. You have the right to withdraw from the research at any time without providing any explanation. If you do so, the information gathered from you will be destroyed after your withdrawal. If you have any questions about this project, please contact me at di26@le.ac.uk. Thank you for your cooperation.

Best wishes

Dedi Irwan Researcher

Appendix 9. Invitation and Consent Letter for Participants



Dear TEACHERS at School XXX

My name is Dedi Irwan and I'm currently a full time PhD student at the School of Education, University of Leicester in the UK. The main topic of my PhD study is School Self-Evaluation and Organisational Learning Approach to Improving the Quality of Professional Learning of Teachers in School. The general purpose of the research is to investigate the similarities and differences among participating schools in terms of how school self-evaluation (SSE) and organisational learning (OL) approaches are developed and used to improve the quality of teachers' professional learning and the helpfulness of school supports for such improvements in secondary schools in West Kalimantan Province, Indonesia.

As part of my study, I need to work with some individual teachers who are willing to participate in the study. The study includes piloting study and the main study. Both of the phases will include survey, group discussion and interview. The data from questionnaire will be used as the reference and foundation for the group discussion, interview and the shadowing. If you agree to participate in my study, I need you to fill in the survey questionnaire and then will conduct group discussion and interviews with you about your value and practice in relation to your professional learning at school. The interview, which will be audiotaped, will be held in a setting of your choice in or near your school at a time convenient to you and will spend approximately 15 minutes, while the group discussion and shadowing will spend about an hour and a day respectively.

I would really appreciate if you could consider taking part in my study. If you have any further questions or concerns about participation in this research or about my research in general, please feel free to contact me via email di26@le.ac.uk or telephone via XXX. I look forward to hearing from you and wish you success in your forthcoming endeavors.

Best Wishes,

Dedi Irwan

PhD student, University of Leicester



CONSENT TO PARTICIPATE IN THE RESEARCH

Title of the Project: School Self-Evaluation and Organisational Learning Approach to Improving the Quality of Professional Learning of Teachers in School (A Multiple Case Study of Four Secondary Schools in West Kalimantan Province, Indonesia)

Researcher: Dedi Irwan, School of Education, University of Leicester, UK

Please read each of the following statements carefully before acknowledging your participation, by ticking boxes, in the research.

	I acknowledge that I have been provided with enough information about the nature and objectives of this research and I have been given the opportunity to seek further clarification
	I understand that my identity will remain confidential.
	I understand that any information I provide will be kept at a secure location, and will only be available to the researcher and his supervisors
	I understand that I can withdraw from the project at any stage
	I understand that if I withdraw from the study all research notes and interview data will be destroyed immediately following my withdrawal
	I understand that the information I have provided will be used only by Dedi Irwan for this research project, publications and presentation arising from this research
	I understand that I may contact the researcher or his supervisors if I require further information or to make a complaint relating to my involvement in the research.
	I agree to participate in pilot survey and interview for this project
Name	:
Signe	d: date



Professional Learning (PL) and Organisational Learning (OL) of Teachers in Secondary School in West Kalimantan Province, Indonesia

Angket Guru Dan Pimpinan Sekolah

Angket ini dibagikan dengan tujuan untuk Pengisian angket ini diperkirakan memakan di University of Leicester, Inggris

Angket ini fokus pada aktivitas yang anda dan rekan kerja anda lakukan dalam meningkatkan kemampuan profesional anda. Selain itu, saya juga tertarik untuk menginvestigasi dukungan dari sekolah dalam peningkatan profesionalisme anda di lingkup organisasi sekolah. Angket ini mencakup 3 bagian:

- Proses Peningkatan Profesionalisme Guru (Professional Learning of Teachers) di sekolah: Penilaian dan Praktek,
- Penerapan Konsep Organisational Learning di sekolah: Penilaian dan Praktek, dan
- iii) Latar Belakang Guru

mengumpulkan data yang diperlukan untuk waktu selama 25 menit. Jawaban anda akan menyelesaikan penelitian Doktoral (S3) saya sangat dijaga kerahasiaanya. Hasil angket ini akan ditampilkan dalam bentuk ringkasan atau dalam bentuk statistik sehingga baik anda sebagai individu maupun sekolah anda tidak akan teridentifikasi.

> Saya ucapkan terimakasih atas kontribusi waktu dan fikiran anda dalam menjawab angket penting ini. Jawaban anda diharapkan bisa memberikan wawasan baru bagi pendidik secara umum. Selain itu, saya juga berharap hasil refleksi dari jawaban anda pada angket ini mampu mendukung peningkatan profesionalisme anda secara pribadi maupun sekolah anda.

Silanglah lingkaran yang paling mewakili jawaban anda.

Sebagai Contoh: X



Jangan habiskan terlalu banyak waktu pada masing - masing item. Jika anda merasa menandai lingkaran yang salah, silakan hitamkan lingkaran tersebut, kemudian silanglah lingkaran yang



Jika anda mempunyai pertanyaan tentang angket ini, silakan menghubungi saya baik secara langsung maupun melalui nomor telefon berikut 082251103383 atau melalui email: di26@le.ac.uk

Bagian A: Peningkatan Profesional Guru (Professional Learning of Teachers) di sekolah : Praktek dan Penilaian

1. Bagian A terdiri dari 23 pernyataan. Masing- masing pernyataan berhubungan dengan salah satu aspek Bagian A terdin dan 25 pernyataan, wasing- masing pernyataan bernubungan dengan sala peningkatan profesionalisme anda.
 Terdapat dua respon untuk setiap pernyataan:
 Kolom kiri merupakan respon yang menggambarkan praktek anda sehari-hari
 Kolom kanan adalah penilaian anda tentang urgensi pelaksanaan setiap praktek tersebut

Anda diperkenankan untuk menandai satu lingkaran saja pada masing-masing kolom. Sebagai contoh:

Sebera, mengga	pa benai ambarkan katan prof	raktek A kegiatar essionalis	berikut usaha	Pernyataan	Tentang Penilalan Anda Seberapa Penting aktivitas berikut dalam menciptakan kesempatan bagi siswa untuk belajar?					
Tidak Benar	Jarang Sekali	Sering kali	Sangat Benar		Tidak penting sama sekali	Lumayan Penting	Penting	Sangat Penting		
	\propto			Guru berpartisipasi secara aktif dalam kegiatan dewan guru di sekolah.			X			

Responden pada contoh di atas jarang sekali berpartisipasi dalam kegiatan dewan guru tetapi dia menganggap partisipasi tersebut penting dalam menciptakan kesempatan belajar bagi siswa.

Sekarang, silakan jawab bagian A.

Peningkatan Profesional Guru (Professional Learning of Teachers): Praktek dan Penilaian

Sebera mengga	ntang Pa pa benar ambarkan katan pro lah?	kegiata	n berikut usaha	· Pernyataan	Tentang Penilaian Anda Seberapa Penting aktivitas be dalam menciptakan kesempatan siswa untuk belajar?			berikut
Tidak Benar	Jarang Sekali	Sering	Sangat Benar		Tidak penting	Lumayan Penting	Penting	Sangat Penting
0				Saya menggunakan website (internet) sebagai salah satu sumber ide dalam meningkatkan profesionalisme saya				
				Saya membaca laporan- laporan penelitian sebagai salah satu sumber ide dalam meningkalkan profesionalisme saya				
				Saya mempelajari praktek mengajar yang baik dari sekolah lain sebagai usaha meningkatkan profesionalisme saya				
				4. Saya berkonsultasi dengan siswa mengenal cara yang paling efektif bagi mereka untuk belajar				
				 Saya merujuk pada hasil penelitian dalam mencari cara terbaik untuk mengajar 			0	0
				Saya merefleksi praktek mengajar saya sebagai cara untuk mengetahui hal yang saya butuhkan dalam meningkatkan profesionalisme saya.				
				7. Saya ber-eksperimen dalam praktek mengajar saya sebagai sebuah strategi dalam meningkatkan proses belajar mengajar di kelas			0	0

A Peningkatan Profesional Guru (*Professional Learning of Teachers*): Praktek dan Penilaian (Lanjutan)

Sebera mengg	ambarkan katan pro	kegiata	n berikut usaha		Tentang Penilalan Anda Seberapa Penting aktivitas berikut dalam menciptakan kesempatan bagi siswa untuk belajar?				
Tidak	STEPHEN IN LANGUAGE	Sering -kali	Sangat Benar	Pernyataan	Tidak penting sama sekali	Lumayan Penting	Penting	Sangat Penting	
				Saya memodifikasi praktek mengajar saya berdasarkan masukan dari siswa saya					
				 Saya memodifikasi praktek mengajar saya berdasarkan hasil penelitian yang di publikasikan 					
				Saya memodifikasi praktek mengajar saya berdasarkan evaluasi diri terhadap praktek belajar mengajar di kelas					
				11. Saya memodifikasi praktek mengajar saya berdasarkan evaluasi oleh rekan kerja atau pimpinan sekolah terhadap proses mengajar saya di kelas					
				12. Saya melaksanakan penelitian/evaluasi gabungan dengan satu atau lebih rekan kerja sebagai sebuah cara dalam meningkatkan praktek mengajar saya.					
				13. Saya terlibat dalam diskusi-diskusi yang merefleksi praktek mengajar saya dengan satu atau lebih rekan kerja saya					
				 Saya terlibat dalam pengajaran berkelompok di kelas sebagai sebuah cara dalam meningkatkan praktek mengajar saya 					
				15. Saya terlibat dalam kegiatan rutin gabungan bersama rekan kerja dalam merencanakan praktek mengajar saya.					
				 Saya secara rutin mengamati rekan kerja saya mengajar di kelas dan saling memberikan masukan 					
				 Jika saya memiliki masalah dalam mengajar, saya biasanya meminta bantuan pada rekan kerja saya 					
	0	0		 Saya mengusulkan ide-ide atau pendekatan-pendekatan untuk diterapkan di kelas bagi rekan kerja saya 					
				Saya berdiskusi secara terbuka dengan rekan kerja saya mengenai apa dan bagaimana kami meningkatkan profesionalisme kami.					

A Peningkatan Profesional Guru (*Professional Learning of Teachers*): Praktek dan Penilaian (Lanjutan)

Sebera	ntang P apa benar ambarkan katan pro- lah?	r kegiata	n berikut usaha	Pernyataan	Tentang Penilaian Anda Seberapa Penting aktivitas berikut dala menciptakan kesempatan bagi siswa unt belajar?				
Tidak Benar	Jarang Sekali	Sering kali	Sangat Benar		Tidak penting sama sekali	Lumayan Penting	Penting	Sangat Penting	
				20. Saya dan rekan kerja saya membuat kesepakatan bersama untuk mencoba ide-ide baru dalam mengajar					
				21 Saya dan rekan kerja saya saling menawarkan penguatan dan dukungan					
				22. Saya dan rekan kerja saya sering menggunakan kesempatan – kesempatan informal untuk mendiskusikan cara siswa belajar.					
				23. Saya bisa memahami bahwa praktek mengajar yang baik di satu kontex bisa di adopsi ke kontex yang lain.					

Bagian B: Penerapan Konsep *Organisational Learning* di Sekolah: Praktek dan Penilaian

Bagian ini fokus pada Sistem Peningkatan Profesionalisme Guru di Level Sekolah. Pertanyaan – pertanyaan berikut menanyakan seberapa sering praktek – praktek berikut benar dilakukan sekolah dan rekan – rekan anda, serta seberapa penting praktek-praktek dan sistem tersebut bagi anda.

(Cara menjawab pertanyaan – pertanyaan berikut sama dengan cara menjawab pertanyaan pada bagian A di atas)

В

Penerapan Konsep *Organisational Learning* di Sekolah: Praktek dan Penilaian

Sebera dilakuk	EKAN K	ERJA ar aktivi sekolah	AH DAN ANDA itas berikut dan rekan		ILAIAN A praktek menir	ANDA k-praktek ngkatkan		
Tidak	Jarang Sekali	Sering	Sangat Benar	Pernyataan	Tidak penting sama sekali	Lumayan I Penting		Sangat Penting
				Pimpinan sekolah menyampaikan visi kemana sekolah akan di bawa secara jelas.				
				Para guru bekerja dengan penuh komitmen bagi sekolah dan mata pelajaran yang diajarnya				
				Pimpinan sekolah mendukung komitmen guru pada sekolah dan mata pelajaran yang mereka ajar				
				Guru memiliki pengetahuan yang baik mengenal rencana pengembangan sekolah				
				 Guru memahami rencana pengembangan sekolah sebagai sesuatu yang relevan dan berguna bagi proses belajar mengajar 				
				Waktu yang di alokasikan untuk peningkatan kapasitas guru dimanfaatkan secara efektif dalam mewujudkan prioritas-prioritas pengembangan sekolah				
	0			Sekolah menyediakan waktu bagi guru untuk melaksanakan perencanaan pengajaran secara berkelompok				
				Guru di dukung untuk bereksperimen dengan ide- ide baru sebagai bentuk dukungan sekolah dalam meningkatkan profesionalisme guru			0	
				Pelatihan formal menyediakan kesempatan bagi guru untuk mengembangkan diri secara profesional.			0	0
				10. Sistem di sekolah mendukung dilakukanya evaluasi pada aktivitas- aktivitas pengembangan				

B Penerapan Konsep *Organisational Learning* di Sekolah: Praktek dan Penilaian (Lanjutan)

TENTANG SEKOLAH DAN REKAN KERJA ANDA Seberapa benar aktivitas berikut dilakukan oleh sekolah dan rekan kena anda saat ini? Tidak Jarang Sering Sangat				NDA as beriki lah da	ıt i	MENGENAI PENILAIAN ANDA Seberapa penting praktek-praktek berikut dalam meningkatkai profesionalisme anda?					
Tidak J Benar	arang Sekali	Se	ring	Sanga Bena		Tidak penting	Lumayan	Penting	Sangat		
					11. Inisiatif para guru dalam meningkatkan jaringannya dijadikan bagian integral dalam pengembangan profesionalisme guru.	A MATLE PARTY OF					
					12. Guru diberi bantuan untuk mengembangkan keterampilannya dalam menilai kinerja siswa dengan berbagai cara sehingga dapat meningkatkan pembelajaran siswa						
					13. Guru diberi bantuan untuk mengembangkan keterampilannya dalam mengamati pembelajaran yang sedang berlangsung di kelas						
)				14. Para guru secara rutin bekerjasama dalam merencanakan pengajaran mereka			0			
					15. Pimpinan sekolah mendukung guru dalam membagikan praktek mengajar mereka ke sekolah lain melalui jaringan antar sekolah						
					16. Jika guru memiliki masalah dalam proses pengajaran mereka, mereka biasanya meminta bantuan rekan kerjanya						
					 Para guru menyarankan ide dan pendekatan bagi rekan kerja mereka untuk diterapkan di kelas. 						
)		18. Para guru membuat kesepakatan bersama untuk menguji coba ide-ide baru dalam mengajar						
) (\bigcirc			Para guru berdiskusi secara terbuka mengenai cara mereka mengembangkan diri						
) (Para guru secara rutin menggunakan kesempatan-kesempatan informal untuk mendiskusikan cara siswa belajar						
			0.5		21. Para guru saling menawarkan penguatan dan dukungan satu sama lain						
		\supset			22. Para guru dibantu untuk lebih memperhatikan peningkatan profesionalisme mereka						
					23. Sekolah membantu guru memahami bagaimana target peningkatan profesionalisme mereka berkaitan dengan prioritas pengembangan						

B Sistem Peningkatan Profesionalisme Guru di Level Sekolah: Praktek dan Penilaian (Lanjutan)

Benar Sekali Benar 24. Sekolah m		ngat iting
24. Sekolah m	embantu guru dalam	CO HALL
diri mereka		
25. Sekolari sel melibatkan pengambila	guru dalam	\supset
26. Profesionali	sme guru dijadikan kebijakan dan tujuan	
27. Pengembar guru dijadik kebijakan se	gan profesionalisme an bagian dari ekolah, meskipun arus menyebabkan	
dipertanyak yang menga pelaksanaar	annya aturan baku tur, prosedur I dari prakteknya	<u></u>
melakukan e terhadap ke	berikan ruang untuk ivalusi secara kritis bijakan sekolah	
29. Para guru se dalam pengi sekolah	ecara aktif terlibat evaluasian kebijakan	\supset
30. Para guru te pengambilar di sekolah	rlibat dalam keputusan penting	\supset
31. Ada proses- dilakukan un siswa dalam keputusan d	tuk melibatkan membuat	
proses penting profesionalis	mereka tentang gkatan me mereka sebagai am pengembangan	
murid, tetapi	li lakukan oleh juga oleh para guru.	\supset
	sekolah ini percaya siswa memiliki untuk belajar	
	olah ini menyenangi	5
36. Keberhasilan selalu di raya	siswa di sekolah ini kan.	
bantuan se	selalu berdiskusi cannya mengenai perti apa yang oleh siswa dalam	

Bagian C: Latar Belakang Guru
Pada bagian terakhir ini, kami perlu mendata beberapa informasi latar belakang anda. Kembali kami tegaskan bahwa data anda ini tidak akan di tampilkan secara individu, melainkan hanya secara ringkasan dan bentuk statistik saja. Oleh karena itu, identitas anda tidak akan bisa diidentifikasi oleh pihak manapun.

Latar Belakang Guru

1.	Per Oktober 2016, berapa lama anda sudah menjadi		
	Sebagai contoh, jika anda sudah menjadi seorang guru selama 10.	Jumlah Tal	nun 0
a.	tahun, tulis Seorang Guru?	CHECK THE PARTY OF	The extended managers
b.	Seorang Guru di Sekolah ini?		
C.	Seorang Guru yang mengajar mata pelajaran yang anda ajar saat ini?		
2.	Mata pelajaran apa yang anda ajar saat ini? (Tolong tuliskan jawaban anda)		
3	Apakah anda (Tolong tandai SATU lingkaran saja)		
a.	Guru Tetap/PNS?		
b.	Guru Kontrak/Bantu?		
c.	Guru Terbang?		
4. a. b.	Apa pendidikan terakhir anda? (Tolong landai SATU lingkaran saja) Doktor /S3 Magister/ S2		
C.	Sarjana/S1		
d.	Diploma		
e.	Sekolah Menengah (SMA/SMK)		
5	Manakah dari pilihan berikut yang menggambarkan peran atau tang kepemimpinan anda di sekolah? Tolong tandai SATU lingkaran saja	jgungjawab	The state of
a.	Sedikit atau tidak ada tanggungjawab kepemimpinan sama sekali	1. 黄芩之苗	
b.	Wali Kelas		- One Lord
C.	Penanggungjawab Mata Pelajaran		
d.	Pimpinan Sekolah (Kepala/Wakil Kepala Sekolah))		
6	Apa jenis kelamin anda?	Laki-laki	Perempuan
7.	Apakah anda penyandang difabilitas / berkebutuhan khusus ?	lya	Tidak

Terimakasih atas waktu yang bapak/ibu luangkan untuk menjawab angket ini

Catatan: Data yang anda berikan akan digunakan untuk penelitian dan pengembangan saja, data mentahnya hanya akan di olah oleh saya dan pembimbing saya di School of Education, University of Leicester.

Tolong kembalikan angket yang sudah di jawab ini kepada Dedi Irwan, Prodi Bahasa Inggris, IKIP PGRI Pontianak, Jin. Ampera, Pontianak, Kalimantan Barat, Indonesia.

Appendix 11. Analysis of Teachers' Values and Practices for each Item Related to Teachers' Professional Learning (PL)

No.	Professional Learning (PL) Activities	N	Mean	SD	N	Mean	SD
1	I use the web as one source of useful ideas for improving my practice	708	2.946	0.737	709	3.116	0.669
2	I read research reports as one source of useful ideas for improving my practice	709	2.660	0.730	710	2.842	0.721
3	I draw on good teaching practice from other schools as a means to further my own professional development	706	2.867	0.790	710	3.086	0.775
4	I consult pupils about how they learn most effectively	709	3.028	0.724	711	3.124	0.735
5	I relate what works in my own teaching practice to research findings	710	2.863	0.780	712	3.036	0.699
6	I reflect on my teaching practice as a way of identifying professional learning needs	705	3.223	0.657	709	3.278	0.627
7	I experiment with my teaching practice as a conscious strategy for improving classroom teaching and learning	703	3.046	0.750	705	3.126	0.661
8	I experiment with my teaching practice as a conscious strategy for improving classroom teaching and learning	715	2.657	0.800	717	2.814	0.781
9	I modify my teaching practice in the light of feedback from my students	714	2.633	0.785	712	2.813	0.686
10	I modify my teaching practice in the light of published research evidence	715	3.209	0.652	716	3.253	0.632
11	I modify my teaching practice in the light of evidence from self-evaluations of my classroom practice	716	2.950	0.729	717	3.135	1.006
12	I modify my teaching practice in the light of evidence from evaluations of my classroom practice by school leaders or other colleagues	715	2.635	0.811	715	2.914	0.696
13	I carry out joint research/evaluation with one or more colleagues as a way of improving my teaching practice	715	2.923	0.768	715	3.061	0.654
14	I engage in reflective discussions of teaching practices with one or more colleagues	716	2.887	0.775	718	2.961	0.725
15	I engage in team teaching as a way of improving teaching practice	715	2.619	0.799	716	2.913	0.750
16	I engage in regular collaboration with colleagues to plan teaching practice	714	2.404	0.859	715	2.754	0.805
17	I regularly observe my colleagues in the classroom and give each other feedback	716	3.024	0.752	718	3.123	0.692
18	If I have problem with my teaching, I usually turn to colleagues for help	716	2.646	0.775	716	2.839	0.754
19	I suggest ideas or approaches for colleagues to try in class	717	3.068	0.674	717	3.207	0.682
20	I discuss openly with colleagues what and how we are learning	717	2.824	1.084	717	3.019	0.711
21	I and my colleagues offer one another reassurance and support	689	2.990	0.726	685	3.067	0.687
22	I and my colleagues frequently use informal opportunities to discuss how pupils learn	688	3.031	0.685	687	3.125	0.652
23	I am able to see how practices that work in one context might be adapted to other contexts	689	3.042	0.729	685	3.028	0.703
	GRAND MEAN	709	2.877	0.764	710	3.028	0.717

Appendix 12. Analysis of Teachers' Values and Practices for each Item Related to Schools' Organisational Learning (OL)

No.	Statement	N	Mean	SD	N	Mean	SD
1	The school leaders communicate a clear vision of where the school is going	709	3.447	0.704	713	3.520	0.611
2	Teachers have a commitment to the whole school as well as to their subject department	711	3.501	0.619	713	3.575	0.564
3	The school leaders promotes commitment among teachers to the whole school as well as to their subject department	709	3.497	0.637	711	3.532	0.597
4	Teachers have a good working knowledge of the school improvement plan	710	3.338	0.647	712	3.413	0.612
5	Teachers see the school improvement plan as relevant and useful to learning and teaching	710	3.294	0.646	712	3.329	0.622
6	Teachers development time is used effectively to realise school improvement priorities	709	3.221	0.695	711	3.267	0.625
7	The school provides teachers joint-planning time	710	3.059	0.793	712	3.216	0.661
8	Teachers are encouraged to experiment with new ideas as a way of promoting professional growth	709	3.155	0.732	712	3.322	0.634
9	Formal training provides opportunities for teachers to develop professionally	709	3.268	0.768	711	3.442	0.623
10	School system encourage impact evaluation of professional development activities)	707	3.211	0.735	711	3.319	0.640
11	Teacher-initiated networking is an integral element of staff development	709	3.068	0.739	711	3.159	0.638
12	Teachers are helped to develop skills to assess students' work in ways that move their students on in their learning	709	3.113	0.817	712	3.296	0.626
13	Teachers are helped to develop skills to observe learning as it happens in the classroom	703	2.855	0.737	711	3.108	0.649
14	Teachers regularly collaborate to plan their teaching	706	2.925	0.778	710	3.156	0.652
15	School leaders support teachers in sharing practice with other schools through networking	702	2.765	0.875	709	2.931	0.770
16	If teachers have a problem with their teaching, they usually turn to colleagues for help	707	3.105	0.706	711	3.100	0.643
17	Teachers suggest ideas or approaches for colleagues to try in class	708	2.958	1.012	710	3.023	0.650
18	Teachers make collective agreements with colleagues to test out new ideas	709	2.743	0.802	711	2.985	0.674
19	Teachers discuss openly with colleagues what and how they are learning	709	2.948	0.751	709	3.100	0.653
20	Teachers frequently use informal opportunities to discuss how children learn	710	3.027	0.681	711	3.114	0.665
21	Teachers offer one another reassurance and support	708	3.078	0.716	713	3.154	0.657
22	Teachers are helped to become more aware of professional standards	705	3.138	0.719	712	3.243	0.635

Appendix 12. Analysis of Teachers' Values and Practices for each Item Related to Schools' Organisational Learning (OL) (Contd.)

No.	Statement	N	Mean	SD	N	Mean	SD
23	Teachers are helped to see how their personal professional learning goals relate to school improvement priorities	708	3.100	0.741	712	3.237	0.635
24	Teachers are helped to achieve their professional learning goals	708	3.093	0.715	711	3.257	0.628
25	There are processes for involving all teachers in decision making	709		0.722	709	3.357	0.662
26	Teachers' professional learning is used in the formulation of school policy and goals	706	3.242	0.688	710	3.275	0.656
27	Teachers' professional learning is used in the formulation of school policy, even where this leads to a questioning of established rules, procedures and practices	703	2.994	0.718	707	3.100	0.641
28	Opportunities are provided for teachers to critically evaluate school policy	706	2.935	0.729	711	3.091	0.638
29	Teachers are actively involved in evaluating school policy	706	3.028	0.726	707	3.199	0.644
30	Teachers participate in important decision-making	712	3.157	0.743	708	3.247	0.689
31	There are processes for involving students in decision-making	710	2.637	0.848	710	2.778	0.806
32	Teachers use insight from their professional learning to feed into school's social policy development	712	3.042	0.628	709	3.102	0.595
33	Teachers as well as pupils learn in this school	710	3.448	0.612	710	3.448	0.576
34	Teachers believe that all pupils are capable of learning	712	3.475	0.607	708	3.412	0.691
35	Pupils in this school enjoy learning	712	3.201	0.656	709	3.332	0.702
36	Pupil success is regularly celebrated	711	2.865	0.818	707	2.880	0.846
37	Teachers discuss with colleagues how pupils might be best to help	711	3.142	0.689	709	3.207	0.706
	TOTAL	710	3.118	0.728	710	3.222	0.654

The End