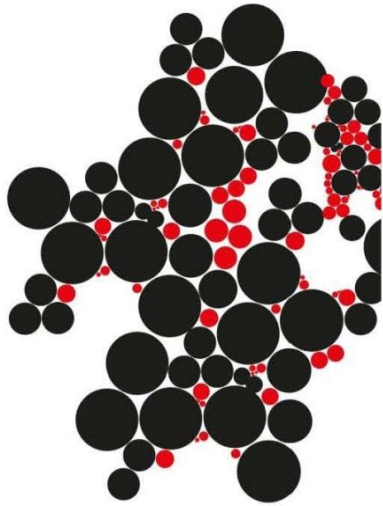MASTER THESIS

INFLUENTIAL FACTORS IN IMPLEMENTATION OF TEACHER PROFESSIONAL DEVELOPMENT PROGRAMS IN RURAL SCHOOLS

A case study at schools of Yayasan PESAT Papua (PESAT Foundation of Papua) in Nabire, Papua Island, Indonesia

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Abstract

Teacher professional development (TPD) is carried out with the assumption that it leads improvement in various aspects of schools work and is considered to be very important. Since there were several contextual factors that influence the implementation of TPD in rural schools, it is required to know the influential factors to understand how to implement an effective and sustained TPD. Yet, in developing countries like Indonesia, there is a lack of such kind of knowledge.

Therefore, this study, held in Nabire town in Papua Island, explored the influential factors in the implementation of current TPD program (KKG/MGMP) in Indonesian rural schools. The study employed the case study strategy with a qualitative approach. Triangulation was also applied in order to analyze the findings with a purposive sampling combined with convenience sampling. Accordingly, interviews, focus group discussions, observation, and documentation were used as methods of data collection.

The findings of the study show that school/organization, have limited support regarding the implementation of TPD. In contrast, the principals provide more supports along with teachers' high willingness to involve in TPD. Additionally, the findings reveal that the implementation of current TPD program at Nabire district is to have a very low contribution to professional development of the teachers.

Hence, it is concluded that if the implementation of TPD has to bring better improvement in the rural schools, the organizational support, and the accountability system of the implementation of KKG/MGMP sessions should be re-managed. Moreover, the principals are also encouraged to be more active to recognize the needs of the teachers and establish a school-wide TPD programs.

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"I can do all things through Him who gives me strength." (Phillipians 4:13)

Thank You, Almighty God, for helping me to do what I have done!
To You, my God Jesus Christ, be all the glory and honor.
Again, You show me how awesome You are in my life! Yes, I am captivated in Your love.

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In His grace, **Bertha Natalina Silitonga**.

List of Abbreviations

TPD _____ Teacher Professional Development

MoEC _____ Ministry of Education and Culture

MoNE _____ Ministry of National Education (the old name of MoEC)

BERMUTU _____ Better Education through Reformed Management and Universal Teacher Upgrading

KKG _____ Working groups for primary teachers (Kelompok Kerja Guru)

MGMP _____ Working groups for subject teachers in secondary schools (Musyawarah Guru Mata Pelajaran)

YPP _____ Yayasan PESAT Papua (PESAT Foundation of Papua)

RPP _____ Lesson Plan (Rencana Pelaksanaan Pembelajaran)

SD _____ Primary school (Sekolah Dasar)

SMP _____ Junior high school (Sekolah Menengah Pertama)

SMA _____ Senior high school (Sekolah Menengah Atas)

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Chapter One

Introduction

The first chapter in this study provides the introduction to this study. It is organized into six sections. Section 1.1 and 1.2 describe the introduction as well as the background of the study. Section 1.3 explains the context in which this study took place. Section 1.4 presents the problem statement and the research questions. The purpose of the study is presented in section 1.5. Eventually, the chapter ends with section 1.6 which gives an overview of the following chapters.

1.1 Introduction

It is widely believed that TPD has an important role for the quality of education. Teacher professional development (TPD) can be defined as activities that develop an individual's skills, knowledge, expertise and other characteristics as a teacher, which are intended to be of direct or indirect benefit to the individual, group or school, and, which contribute through these, to the quality of education (Thomas R. Guskey, 2002). Similarly, literature on the improvement of the teaching profession suggest that TPD is a necessity for better teaching and better schools (Fullan, 2007; Süleyman Sadi, 2010). Indeed, teacher professional development is essential to improve school improvement as well as curriculum improvement. Figure 1 shows the relationships among the three elements.
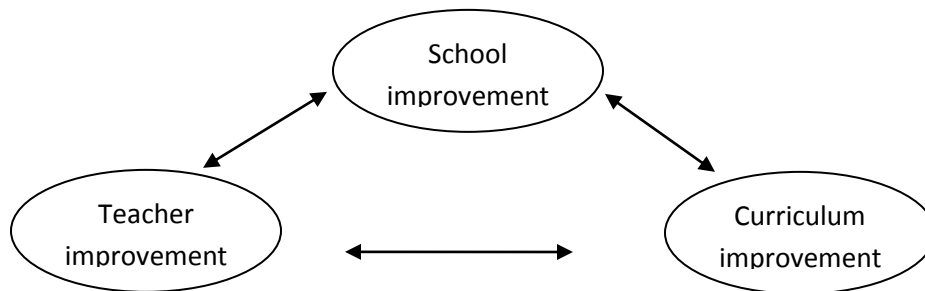
Figure 1.1 Interrelated relationships among school, teacher, and curriculum improvement

TPD practice has been carried out widely in developed countries' education system. Quite a number of studies have also been conducted regarding the TPD in schools; yet, TPD for rural schools with their own characteristics has lacked attentions and support (Karen Eppley, 2009; H. Raval, McKenney, & Pieters, 2012; Seltzer & Himley, 1995). Rural schools meant in this study are the schools in a disadvantaged context which are lacking many supports to perform well. Some characteristics of them are a lack of the number of qualified teachers, a lack of supplies of teaching and learning material, and insufficient access to gain professional support.

Concerning the lack of the number of teachers in rural school, many studies show that teachers in rural schools were either beginners or inexperienced in teaching (Goos, Dole, & Geiger, 2011; Rodríguez, Sánchez, & Armenta, 2010; Sharplin, O'Neill, & Chapman, 2011).. The high need of qualified teacher requires a support from the expertise for a teacher professional development (Mitchem, Wells, & Wells,

2003). The low mobility and flexibility of teachers in a rural area (Beswick & Jones, 2011) together with little access to get external support (Goos et al., 2011) has added more teachers' disadvantages in rural areas. Hence, a professional support has become a great need of teachers' (Bansilal & Rosenberg, 2011; Goos et al., 2011; Panizzon & Pegg, 2008; H. Raval, 2010)

1.2 Background of study

1.2.1 Teacher quality in Indonesia

Indonesia, as many other developing countries, is also struggling with its teacher quality. The low competency level demonstrated by many teachers, and predominantly those who were teaching at remote and disadvantaged provinces, was particularly worrisome (World Bank, 2006). It is reported that 37.3 % teachers in secondary school (SMP, SMA, SMK) is still unqualified. Meanwhile, for elementary (SD) teachers the percentage is getting higher, 49.3 % (Balitbang, Depdiknas). Teaching is considered to be not an important profession in term of *salary and benefit*. Teachers with the third level diploma (D3) or with a university degree earned 18 and 37 percent less respectively than other paid workers with the same level of education. Therefore, it is not surprising that currently only 55 percent of primary school teachers, 79 percent of junior secondary school teachers, and 70 percent of senior secondary school teachers have the required education levels of D2, D3, and S1 (university level) (World Bank, 2006).

According to World Bank (2007), average Indonesian teachers' salary as multiple of GDP per capita is low compared with neighboring countries. According to UNESCO estimates, an Indonesian primary school teacher earns US$ 1,002 to US$ 3,022 per annum, a mere 50 percent of GDP per capita. In comparison, primary school teachers in the Philippines and Thailand earn over twice as much as GDP per capita, in relative terms a fourfold greater salary than their Indonesian counterparts.

Hence, in order to promote professional development for teachers, government endorsed the law of school and higher educator (In Indonesian: UU nomor 14 tahun 2005) and the government regulation of national education standard (PP RI nomor 19 tahun 2009) which require teachers to have (a) a minimum academic qualification of at least 4 years of post-secondary education, (b) obtain practical experience as a classroom teacher, and (c) pass a certification examination that will examine proficiency in four competency domains: pedagogical, professional, personal and social before being certified as a teacher. Once they are certified, teachers will receive a professional allowance (equal to 100 percent of their base civil service salary), a smaller functional allowance, and a special allowance for assignment in disadvantaged areas (also equal to 100 percent of their base civil service salary). In total this means that under the new law, all teachers will have their salary doubled upon certification and receive a functional allowance equal to approximately a further 20–30 percent of base salary depending on their civil service grade. Teachers in remote /disadvantaged areas will benefit even more from the new law: they will have their salaries tripled upon certification, (receiving a special location allowance in addition to the professional allowance and functional allowance).

This new strategy has the potential to be a major turning point in Indonesian education. Indonesia has attempted to lift the quality of teaching/learning by raising the minimum academic qualification for teachers through a certification program. There are two ways through which teachers can obtain their teaching certificate: through a teaching certification program in a university (S1, equivalent to a

Bachelor's degree), or via competence examination. Teachers can register to the teaching certification program with the government's endorsement from the district office of MoEC (Ministry of Education and Culture). In this program there are three ways for teachers to be certified: Portfolios for teachers who have a portfolio and meet the minimum score, Education and Training for Teacher (PLPG) for teachers who do not meet the minimum score portfolios, and direct certification (PSPL) for teachers who are qualified PSPL. This certification program is encouraging professional development programs for teachers to be provided (Ma'arif, 2011).

1.2.2 BERMUTU project

With regards to professional supports, Ministry of National Education of Indonesia (before the name changed to be MoEC) through the Directorate General of Quality Improvement of Teachers and Education Personnel (Ditjen PMPTK) developed a project named Better Education through Reformed Management and Universal Teacher Upgrading (BERMUTU) on 2006. The program is funded by World Bank for five years (2008- 2013). It was intended to improve the overall quality and performance of teachers through enhancing teachers' knowledge of subject matter and pedagogical skills in the classroom

The project consists of four components as shown in the Table 1.1 (World Bank, 2006).

Table 1.1 Components in BERMUTU project

Component 1 (pre-service training)	Reforming University-Based Teacher Education. The quality of teachers entering the profession will be upgraded through development of an accreditation process to ensure that the curricula of teacher training institutions, and associated teaching methods for delivering curricula, are revised in line with international best practice. Distance learning modules will be developed in order to assist teachers to upgrade to meet certification requirements without leaving their post.
Component 2 (in-service training)	Strengthening Structures for Teacher Improvement at the Local Level. The quality of the teachers already in and entering the profession will be improved through the implementation of teacher classroom performance assessment and the professional development elements of the upgrading and certification process.
Component 3 (certification)	Reforming teacher accountability and incentives systems for performance appraisal and career advancement. The objective of this component is to develop an integrated framework designed to sustain and continually enhance the quality and accountability of teachers, post-certification.
Component 4 (coordination)	Improving Program Coordination, Monitoring and Evaluation. This component will support the monitoring of project components 1 through 3, development of an improved teacher database and a range of research and evaluation studies to document the effects of the project on teaching behavior and student achievement.

In the BERMUTU project, teacher competency for component 2 is enhanced by empowering Teachers Working Group (KKG) among primary school teachers and Subject Teachers Council (MGMP) for subject teachers in junior and senior high schools to be able to organize various activities of teacher professional development (TPD). As part of the decentralization process begun in 2001, most

responsibilities for this component were devolved from the national to the district level. Therefore, BERMUTU project as a national program allows the district to organize KKG/MGMP program. Professional development activities in this national program are intended to be carried out not only for teachers, but also principals, and school supervisors (Ma'arif, 2011). Therefore, in this study TPD acronym is consistently used to refer only to teacher professional development. The focus of this study is to identify factors influencing the implementation of KKG/MGMP program towards an effective and sustained TPD in YPP schools.
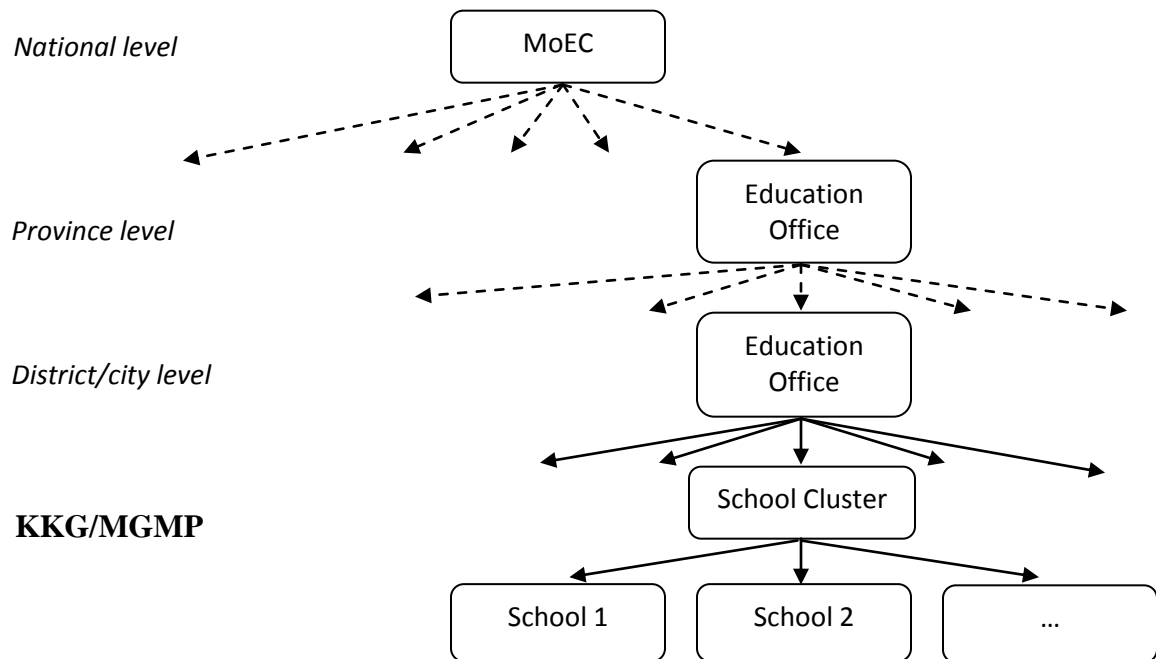
Figure 1.2 Educational system in Indonesia from national level to school level

1.3 Context

1.3.1 Nabire, Papua Island

The schools investigated in this study are located in Nabire, a small town in Papua Island. Papua is known as an island lagging behind the rest of the country. With area 6861.65 km^2, total population of Nabire district based on Census 2010 is 130,314 in this area (BPS Nabire, 2011). This region (West Papua) is known as a rich area and has potential natural resources from its sea (fishery), forest, agriculture, mining, and many else. However, poverty and disadvantages is more likely to be the portrait of its society. Many public infrastructures are not available yet, and most of all they are left behind in education compared to other areas in Indonesia.

Figure 1.3 Map of Indonesia with red spot of Nabire
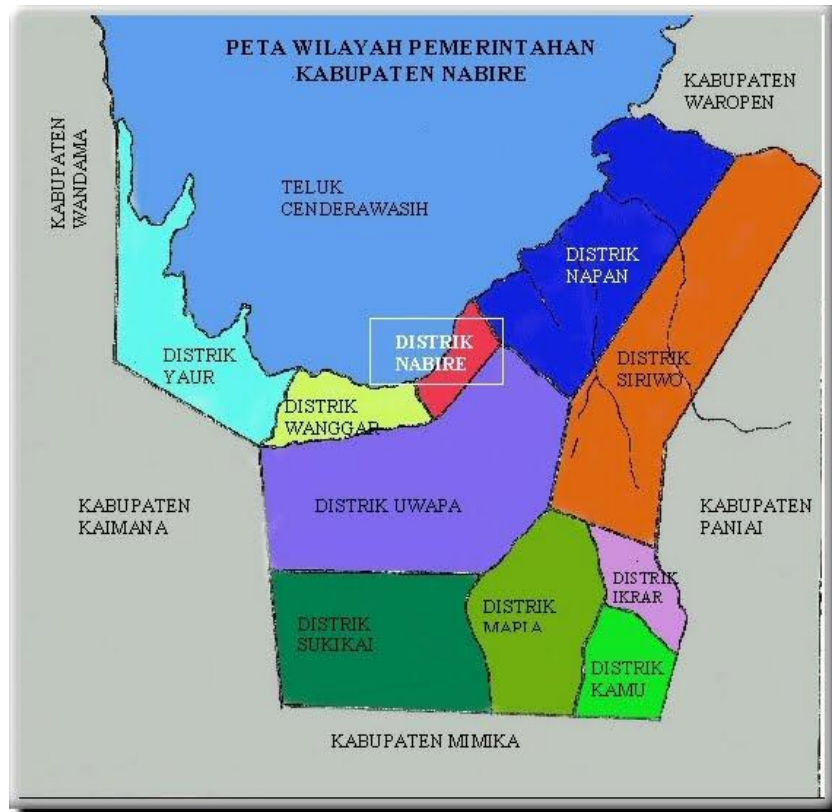
Figure 1.4 Map of Nabire district

1.3.2 Yayasan PESAT Papua (PESAT Foundation) and schools

The schools studied are organized under Yayasan PESAT Papua (PESAT Foundation in Papua). Yayasan PESAT (PESAT Foundation) is an organization established in 1987 as a response to the mission to develop villages in Indonesia. Its service in education is reaching children who live in

villages, remote and disadvantaged areas. PESAT has established not only formal schools (kindergartens, elementary, junior and senior high schools), but also provides teachers to teach at schools with teacher shortages. Its branches widely spread over Indonesia, particularly in remote areas. One of them is Yayasan PESAT Papua (YPP) in Papua Island, one of disadvantaged areas in Indonesia.

YPP started working in Nabire on 17 July 1995, with the establishment of Anugerah Kindergarten in Karang Tumaritis that was managed together with Association of Indonesian Christian Women (PWKI) in Nabire. Still in the same year the management of the Anugerah kindergarten was handed to PWKI Nabire. Later, YPP initiated two kindergartens in Nabire and followed by a junior high school and a senior high school. Currently, there are five YPP's schools in this town: 2 kindergartens, 1 elementary school (SD Kristen Agape), 1 junior high school (SMP Anak Panah), and 1 senior high school (SMA Anak Panah). The schools are located in a neighborhood area, together with the student dormitory and teachers housing. Facilities available in the schools are limited as other schools in this area

The schools were established together with dormitories for Papuan students by Daniel Alexander, a man with great concern to help Papuan people especially in the field of education. His works through YPP schools answer the Papuan needs of quality education. The vision of YPP is *to build Indonesian generation in Nabire through education.* Mr. Alexander continuously managed to share the vision and mission to a lot of people to build Papua. By doing so, he recruited many people, mostly from Java Island and not from teacher education, to work voluntarily in Nabire particularly as teachers. These volunteer workers came to teach at schools with very limited knowledge and skills, as well as experience in teaching.

1.4 Problem Statement and Research Questions

The quality of education in the Indonesia is generally considered low. This fact is evidenced by Indonesia's low rankings on international standardized tests. The 2009 Program for International Student Assessment (PISA) results show that, Indonesian students reached 61st place out of 65 countries for math proficiency (four ranks from the bottom), while in 2006 Indonesia was in 50th out of 57 countries, (seven ranks from the bottom). In science proficiency, Indonesia placed 60th out of 65 countries, while in 2006 Indonesia was 50th out of 57 countries. In reading proficiency, Indonesia came in at 57th place out of 65 countries, compared to the 2006 result that was 49th out of 57 countries, still eight ranks from the bottom. It is believed that the low student achievement is closely related with the low quality in Indonesia. The educational attainment of Indonesia teachers is generally very low; only 37 percent hold a four-year degree. Thus, the professional development for teacher became a very essential program for the quality of national education.

Nevertheless, in most developing countries there is a feeling that many programs are implemented without deep considerations. In Indonesia teacher certification program and the additional allowances established in the teacher law have massive financial implications while the effectiveness and sustainability of teacher professional development still remains disputed. Therefore, with regard to the uniqueness of its context, a special attention for TPD program in rural school also becomes necessary.

Since many factors may influence the implementation of any planned TPD program in a real practice, this study is conducted to explore the factors influencing the implementation of TPD programs in rural schools to enable the sustainability of TPD in the future. It undertakes to understand the current TPD program in Indonesia (KKG/MGMP), other school-wide programs, classroom activities, teachers'

learning process, and organizational factors, which support or hinder the effectiveness and sustainability of TPD in YPP schools. The main research question which guides this study is:

With the goal of implementing an effective and sustained TPD in Indonesian rural schools, what factors are influencing the implementation of KKG/MGMP program in YPP schools?

Accordingly, in order to reach the main research question several sub-questions are formulated as following:

1. How did YPP teachers experience personal learning through KKG/MGMP program?
2. How are newly learned knowledge and/or skills enacted in classroom practices?
3. What role did the school and organization perform in supporting and/or hindering the implementation of KKG/MGMP program?

1.5 Purpose of Study

This study is a case study aimed at understanding the context of YPP schools in a rural area (Nabire, Papua Island) as well as other the influential factors which affect the implementation of KKG/MGMP as a current TPD program implemented there. The factors at teacher personal domain, classroom practices, and school/organization context which influence the implementation of TPD program in rural schools are investigated thoroughly based on the conceptual framework which previously constructed by a literature review.

The study results are to provide valuable inputs for stakeholders (teachers, principals, and education officers) to understand the extent of data use in the selected schools. Moreover, this study can be a reference point for similar future studies in Indonesia and other developing countries. This study might also aid in policy making, for instance, in developing ways to manage the implementation of a TPD program in the rural areas.

1.6 Overview of the Study

This study in general grouped in to five chapters. The first chapter dealt about an overall introduction of the study, the statement of the problem and research questions. In chapter two, the literature review and the description of the conceptual framework of the current study are presented. In the literature review it is mainly focused to address the question "What factors can be considered to support or hinder the implementation of TPD programs to be effective and sustained?" The third chapter described a research design which is presenting the approach, participants, instruments, data collection procedures and methods used to analyze the data. In chapter four, the findings of the study are presented based on the result of data analysis which is framed up by the theoretical framework. Lastly, in the fifth chapter of this study, discussion, recommendations, and conclusion are presented.

Chapter Two

Theoretical Framework

This chapter provides a summary of literature review related to the implementation of TPD programs in rural context. The review is presented into four sub-sections where; Section 2.1 introduces TPD and the factors involved in implementation of TPD in rural context. It is followed by the effectiveness and sustained TPD detailed in Section 2.2. Section 2.3 explained the factors in the implementation of TPD programs in several rural settings. Finally, Section 2.4 finalized the chapter by providing a conceptual framework based on the literature. It is followed by its operationalization for the current study.

2.1 Introduction

This theoretical framework is based on a review of literature on teacher professional development (TPD) programs. Firstly, the characteristics of an effective TPD program are reviewed for a better understanding toward an effective and sustained TPD. The rationale to consider the context to achieve an effective and sustained TPD is also explained thoroughly. Secondly, literatures of TPD programs operating in several different rural contexts are discussed. From the literatures, the influential factors that support and/or hinder the implementation of TPD programs were traced. Those identified factors were categorized into three categories of factors: teachers' personal domain, classroom practices, and school-wide support.

2.2 Effective and Sustained Teacher Professional Development

TPD practice has been carried out widely in developed countries' education system. Quite a number of studies have been conducted regarding the TPD in schools. This issue is studied and presented in literature in many different ways (Avalos, 2011), but the core is always the understanding that professional development is about how a teacher learns knowledge and skills and brings them into daily practice. Many researchers affirmed that TPD is a learning opportunity for teachers that would lead to the changes teachers made in their instruction/teaching practices and eventually will improve student achievement (Borko, 2004; Desimone, 2011; Garet, Porter, Desimone, Birman, & Yoon, 2001; T.R. Guskey & Yoon, 2009; Penuel, Fishman, Yamaguchi, & Gallagher, 2007). In short, TPD, instructional changes, and student achievement are related one to another.

After an examination of 13 recent lists of characteristics of effective professional development, T.R. Guskey (2003) concluded that they were varied widely and derived in very different ways with different criteria to determine the effectiveness. This confirms the complexity of effective TPD which is also defined by Garet et al. (2001) and Penuel et al. (2007). Later, by this reason of complexity, Desimone (2011) attempted to describe the effectiveness of TPD. She lists five features of effective TPD, namely content focus, active learning, coherence, duration, and collective participation. However, as she chose to focus on the features of TPD activities rather than on the types or structural aspects, this list can be considered as such a (new) consensus on the core features of TPD because in a previous study in which she also involved (Garet et al., 2001) the last two features (duration and collective participation) were categorized as structural aspects, not core features. This inconsistency, once again, confirms the complexity of the definition of effective TPD.

In his study of examining 13 lists of characteristics, T.R. Guskey (2003) cited six characteristics of an effective TPD program which were most mentioned in those lists. Later, in the next review of nine other

studies on TPD programs, T.R. Guskey and Yoon (2009) criticize some of the mentioned characteristics (school- or site-based, time provided, and the content) as well as propose other characteristics (effective workshop, sustained follow up, and careful-adaptation activities) as the characteristics of the effective TPD. This proves that there is an inconsistency and also contradiction among the criteria of the effectiveness of TPD. For this, T.R. Guskey (2003) suggests that it is needed to seek agreement on criteria for effectiveness, along with clear descriptions of contextual factors. In addition, T.R. Guskey and Yoon (2009) argue that an effective TPD in not only about the implementation of a particular set of best practices, but also from careful adaption of varied practices to specific content, process, and context elements.

Since all TPD takes place in real-world contexts, there are factors that influence whether a particular implementation will achieve the desired results or not. Even a similar program may achieve different results. To explain how the difference of contexts affects TPD, (T.R. Guskey, 2003) compares two types of schools: schools in economically depressed with un(der)qualified teachers and schools in more affluent communities with well-qualified teachers. He stated that the disadvantaged schools may benefit greatly and be improved more than in the advanced schools. The improvement meant is definitely about how teacher learns, teacher's instructional changes, and student achievement (Borko, 2004; Desimone, 2011; Garet et al., 2001; T.R. Guskey & Yoon, 2009; Penuel et al., 2007). Hence, the implementation of TPD programs is profoundly influenced by the contextual differences. Similarly, Borko (2004) suggests that both the individual teacher as learners in TPD programs and the context should be taken into account. However, rural schools with their own characteristics of context have lacked attentions and support (K. Eppley, 2009; Fry & Anderson, 2011; H. Raval et al., 2012; Rodríguez et al., 2010). From this fact, it can be concluded that the implementation of TPD program in rural areas should be aware of its particular context and, therefore, factors that support and/or hinder the implementation of a TPD program should be taken into account.

2.3 Factors in the Implementation of TPD Program in Rural School

From the literature review, several factors were identified. These influential factors in the implementation of TPD programs in rural schools are characterized in three categories: teachers' personal level, classroom level, and school/ organization level. Each factor has potentially been enhancing and hindering effects, which need to be taken into consideration before and during the implementation of TPD (H. Raval et al., 2012).

2.3.1 Factors in teachers' personal domain

The first and the foremost, the very important outcome of a TPD program is a process of teachers' personal growth (Bryan, 2011; Desimone, 2011; Goldschmidt & Phelps, 2010). By focusing on teachers as the central and key persons in the TPD programs, it is necessary to consider the factor of the needs of teachers' learning (Bredeson, 2002; Knight, 2002; Harini Raval, McKenney, & Pieters, 2010). Many TPD programs in rural schools have similar goals, which are about to enrich teachers' ability and to improve teaching practices. Some TPD programs were held to enable teachers to adopt new knowledge (Goos et al., 2011; Panizzon & Pegg, 2008) or merely to overcome the lack of skills (Raval, 2010) Others are focused in teaching practices, which starts from planning to the implementation across the curriculum (Bansilal & Rosenberg, 2011; Goos et al., 2011).

As adult learners teachers develop their knowledge, beliefs, and attitudes from their personal learning and experiences. Therefore, TPD should be employed according to adult learning principles (Raval, 2010) and focus on the need of teachers (Beswick & Jones, 2011; Chval, Abell, Pareja, Musikul, & Ritzka, 2008; Goldschmidt & Phelps, 2010; Penuel et al., 2007). The need itself is strongly influenced by teachers' academic and teaching background, relevant knowledge, and the coherence with other school programs. An early-career teacher undoubtedly needs more guidance than an experienced teacher. Likewise, teachers with different background, as well as different views of learning approach (Beswick & Jones, 2011), must have different needs.

Irrelevant content of TPD programs is argued as one of the factors that makes most TPD experiences fail to make an impact (Fullan, 2007). Therefore, instead of having topics of TPD, which were selected by outsiders, an analysis of needs should be performed prior to setting up the relevant interventions. Teachers' beliefs and attitude, including their excitement (Bansilal & Rosenberg, 2011; Beswick & Jones, 2011; Panizzon & Pegg, 2008) and willingness (Bansilal & Rosenberg, 2011; Raval, 2010) to adopt new strategies and implement a new knowledge, are determined in this level. Additionally, reflective practices, as a part of teachers' personal learning, and positive attitudes are also considered to be supporting factors for the teachers to be willing to do changes in their teaching practices in classroom (Bansilal & Rosenberg, 2011; Beswick & Jones, 2011; Goos et al., 2011; Panizzon & Pegg, 2008; Raval, 2010). According to Desimone (2011), reflective practices is the most powerful learning experience for teachers

2.3.2 Factors in classroom practices

At the classroom level a TPD program ideally resulted in an enrichment work of teaching and new experiences added to classroom practices (Harini Raval et al., 2010). This improvement of teachers' practice and knowledge are always related with student achievement (Goldschmidt & Phelps, 2010; Penuel et al., 2007) as a salient outcome of a successful or the effectiveness of a TPD program. Thus, it is essential to consider the factors involved in this classroom level.

Several studies on TPD program in rural schools reveals that a TPD program was expected to improve the quality of teaching and learning in the classroom (Belay et al., 2007; Bryan, 2011; Chval et al., 2008). In this level teachers will adopt new knowledge and strategies obtained from TPD programs into practices (Donnelly & Argyle, 2011). A lack of classroom resources/equipment and troublesome technologies were mentioned as hindering factors to bring new knowledge and skill into teaching practices (Bansilal & Rosenberg, 2011; Beswick & Jones, 2011). Moreover, some problems with regards to classroom management were also found as hindering factors: class size and student characteristics (Bansilal & Rosenberg, 2011). The class with large number of students causes the excessive noise during the lessons. Meanwhile, students' characteristics are usually about their academic ability and attitude that mostly influenced by their socio-economic background, such as poverty (Bansilal & Rosenberg, 2011).

From their study, Ingvarson, Meiers, and Beavis (2005) affirms that the change in classroom practices would also unlikely to be optimal without sources of timely and insightful feedback on what teacher is doing. During the implementation of the TPD programs in rural schools, routine supervisions and feedbacks are also provided to teachers (Beswick & Jones, 2011; Goos et al., 2011; Panizzon & Pegg, 2008; Raval, 2010). The sources of these can be the principals, the experts/ facilitators, or the

colleagues. Supervision and feedback can be performed by doing observation, mentoring, or any other informal interaction in school. For a sustainability reason, regular supervision and feedback given can also increase teachers' confidence to actively embrace teachers' learning habit in their daily works in school (Desimone, 2011; Goos et al., 2011; Raval, 2010).

2.3.3 Factors in school and organization context

In a broad view, a TPD program was expected as an intervention that considerably supports school development (Crockett, 2002; Day & Sachs, 2004; Desimone, 2011). Hence, it is necessary for the school to provide its full supports to allow an effective and sustained TPD occurs.

Owston (2007) mentioned that every innovation in a school gets benefits from the leadership and a supportive organizational environment (e.g. school policies, facilities, school culture, professional learning community, and school support). Thus, to be effective and sustained, a TPD program in rural context, which also closely related with changes, has to rely on these organizational factors. Rural school, as an organization, should provide its support for the implementation of a TPD program. Indeed, any national educational policies inevitably would affect the implementation of any program in the rural schools. These policies are operationalized into and associated with all school-wide activities, including the TPD programs. In short, the implementation of TPD in rural schools will definitely be influenced by school policies (H. Raval et al., 2012; Song, 2008). Therefore, any support, decision and problem solution towards the implementation of a TPD program in a rural school are depending on the leadership and the school management.

From several TPD programs discussed in previous chapter, the principals, on behalf of school management, took the responsibility to provide school support during the implementation of TPD programs. It is about the decision of teachers' participation (Beswick & Jones, 2011; Panizzon & Pegg, 2008; Raval, 2010) which means a re-arrangement of teaching schedule should be made if necessary and time scheduling for the TPD program itself (Beswick & Jones, 2011). It was also about to provide facilities or tools needed for the follow-up and feedback for the teachers on the enactment of new knowledge and skills obtained from the TPD programs (Beswick & Jones, 2011). Furthermore, in a very rare case, modifying the school policies also can be crafted by the leader to scaffold the implementation of TPD programs (Raval, 2010). Therefore, it can be concluded that the role of leadership is a very important factor in the implementation of any TPD program.

Learning as individual activities differs with learning with others. Thus, a learning community formed by teachers in school which known as professional learning community (PLC) in a school may also influences the implementation of TPD in term of teachers' learning (Crockett, 2002; Penuel et al., 2007). From the TPD programs executed for the rural teachers, it was reported that there were shifts in teachers' positive attitude (excitement) when they worked collaboratively with the colleagues as well as the expert, shared their experiences in the whole group of teachers in a TPD program, and gained feedback either from the principal or the colleagues (Beswick & Jones, 2011; Goos et al., 2011; Raval, 2010).

A PLC can also be considered as a mediating factor needed to bridge this level with the classroom level (Ingvarson et al., 2005). In this community, sharing and learning are the most important activities. As this community becomes a part of school culture, a sustainability and long life learning will occur (Fiszer, 2004; Owston, 2007). Likewise, it was affirmed that by having a professional learning

community (PLC) the sustainability of changes resulted in TPD programs in the rural schools is feasible to happen (Beswick & Jones, 2011; Raval, 2010)

2.3 Conceptual Framework and Operationalization

2.3.1 Conceptual framework
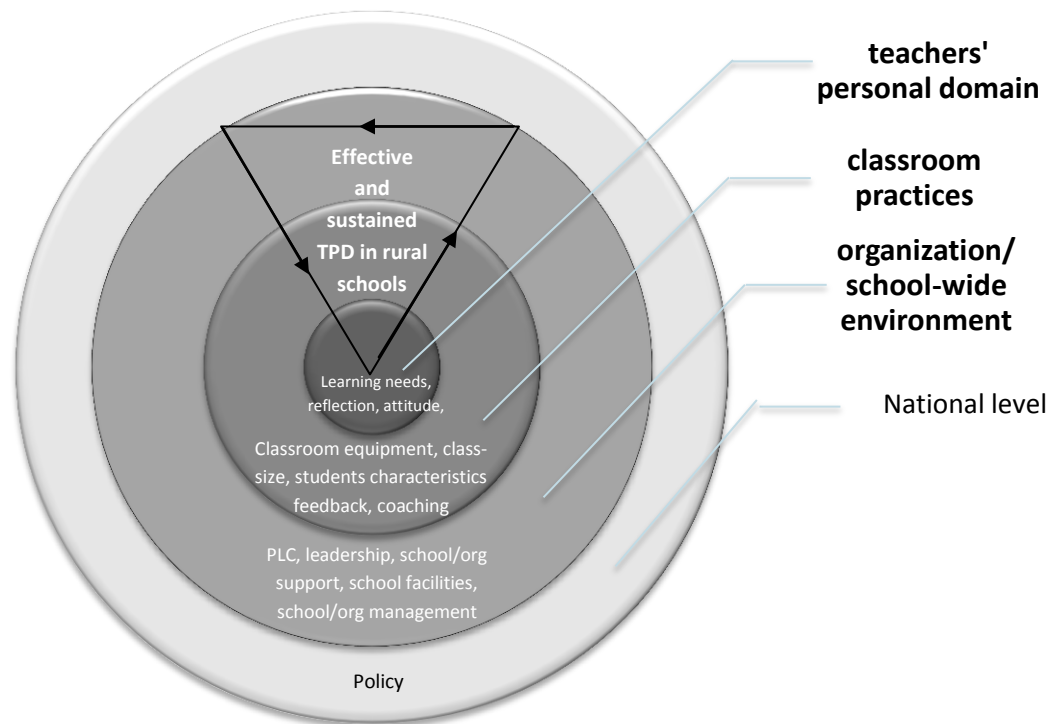
Figure 2.1 Influential factors in the implementation of TPD program in rural schools
(based on literature)

The conceptual framework shown in Figure 3 has four circles to illustrate the factors influence the implementation of TPD programs in a rural school. The smallest circle is teacher personal domain, followed by classroom practices, then a bigger scope of institutional environment, and at the last, national level is the widest circle.

Although it is not mentioned in the literature reviewed as the influential factor, it is believed that the national level has great influences. In this level many policies are initiated, including policies of teacher and professional development. The policies concerning the rural areas are also established in this level. Those policies become a basis and affect the implementation of TPD programs in districts and school level. Furthermore, the changed or new policies would also affect the effectiveness of the national TPD program.

At the institutional/school-wide environment, there are four essential factors that can influence the implementation of TPD programs in a rural school. As mentioned previously, the bigger scope of the national level influences this institutional level. School facilities, school management, professional learning community (PLC), and leadership affect how a TPD program in rural school is implemented effectively and eventually sustained in a longer period of time. Those four factors are situated in such an environment which affects the enactment of changes in classroom practices.

The classroom practices consist of several factors that affect how teachers do changes in their teaching practices based on the learned knowledge and skills from a TPD program. The availability of classroom equipment, class-size, and the uniqueness of student characteristics in rural school affect the way teachers enacts the changes desired. In addition, the ongoing coaching/supervision as well as feedback provided to teachers also influence the sustainability of the effect of changes initiated in the rural school. At this level the effectiveness of a TPD program is achieved in the forms of changes in teachers' capacity (knowledge and skill), attitude, and belief which are represented in their teaching practices in the classroom.

At last, teacher personal domain is placed as the core of the conceptual framework. There are three main influential factors at this level, namely learning needs, reflective practices, and attitude. The learning needs of the teachers in rural school definitely differ from teachers in more advanced area. The learning needs are influenced by their working environment in the aforementioned bigger scope. With many limitations and the uniqueness characteristics of rural school, the reflective practices is important to carried out. The decisions of how the teaching practices would be conducted are determined through the reflective practices. Teacher attitude is also the influential factor of the implementation of TPD programs. Positive attitudes of teachers would likely generate positive and ongoing changes in their teaching practices. This is a promising factor for an effective and sustained professional development of teachers in a rural school.

In addition, the triangle illustrates the continuous process and effects resulted from the three smallest circles. To achieve an effective and sustained TPD program all factors in teacher personal domain, classroom practices, and school environment should continuously be taken into account during the implementation. For this reason, the national level can be assumed to have less influence during the implementation stage compared to the establishment of policies.

2.3.1 Operationalization of conceptual framework

They are significant factors which influence teacher learning and practice, as represented in the conceptual framework in Figure 2.1. Therefore, in this study all factors mentioned is gathered in order to understand the factors that support and/or hinder the implementation toward an effective and sustained TPD in YPP schools.

At the core level, YPP teachers were studied to understand their learning needs, reflective practices, and attitude towards the students, personal learning and changes in teaching practices. Their perceptions towards KKG/MGMP were also investigated. The lesson plans were examined to gather information about content and pedagogical skill involved in teaching practices. The activities that describe an active learning as intended to be the outcome of KKG/MGMP were noted.

At the classroom practices in terms of classroom equipment, class size, student characteristics, coaching or supervision by principals, and feedback gained were studied.. Additionally, perception of the

principals and YPP staff s were studied to understand how they support or hinder the enactment of changes in teaching practices.

At the organization/institution level, the principal's support to teachers in term of follow-up activities after KKG/MGMP sessions was considered as the factors form the school-wide environment within which teachers operate. Along with it the supports from YPP and head of education office at Nabire district were also studied. It is to be noted that in the context of Indonesian educational system and KKG/MGMP program, this level is not taken into account. Decentralization system allows a district to manage KKG/MGMP program, therefore, this study of factors that influence the implementation KKG/MGMP program may disregard the contextual factors in national level. Subsequently, this conceptual framework is used to frame up the instrument for data collection and the data analysis in this study.

Chapter Three

Research Methodology

This chapter provides the design of the research and the different methods used to collect data. This chapter is divided in to seven sections. In the Section 3.1 the research design is explained, whereas in Section 3.2 the approach of this study is detailed and followed by the selection of research site in Section 3.3. The selection of participants is clarified in Section 3.4.Section 3.5 focused on the different instruments used for the study and in Section 3.6 the issues of validity and reliability for this study are explained. Section 3.7, as the last section, explains the methods used to analysis the data.

3.1. Research Design

The selection of research design should be based on the nature of the topic intended to be investigated and the research questions. As stated earlier, the purpose if this study is to explore the influential factors in the implementation of TPD programs in rural schools. It is believed that such kind of research that concentrates on one thing, focusing on it in details, would be a case study (Thomas, 2011; Yin, 2003). In other words, the case study strategy is employed because of these reasons: the type of questions means to explore a contemporary event (TPD) and it is without any researcher's intervention. A definition from Helen Simons as stated by Thomas (2011), also sums up the reasons of employing the case study in this study, as following:

> *Case study is an in-depth exploration from multiple perspectives of the complexity and uniqueness of a particular project, policy, institution, program, or system in a 'real life' context. It is research-based, inclusive of different methods and is evidence-led. The primary purpose is to generate in-depth understanding of a specific topic (as in thesis), program, policy, institution or system to generate knowledge and/or inform policy development, professional practice and civil or community action.*

Therefore, the case study can be considered as a comprehensive research strategy covering the logic of design, data collection techniques and specific approaches to data analysis. This study undertakes to understand the factors at the teacher, classroom, and school/organization levels in the implementation of TPD in Indonesia's rural schools, including current TPD program (KKG/MGMP), other school-wide programs, classroom practices and teachers' self-learning process. By focusing on a single topic (TPD) this study has a rationale to be a single case study. Another rationale for employing a single case is the specific context/environment that represents a typical of rural area among many areas in Indonesia. This single case can represent a significant contribution to knowledge and theory building. Such a study can even help to refocus future investigations in an entire field of rural areas (Yin, 2003); in this case, it is in Indonesia. There were 3 schools investigated for this TPD study: an elementary school (SD Kristen Agape), a junior high school (SMP Anak Panah) and a senior high school (SMA Anak Panah). For next, the elementary school (grade 1-6) will be mentioned as the primary school, while the junior high school (grade 7-9) and the senior high school (grade 10-12) as secondary schools. It means that within a context (rural schools) there were two embedded units of analysis (primary and secondary teachers) being analyzed. Consequently, an exploratory single case in which embedded multiple units of analysis is applied in this study.

A literature study is conducted to gather an initial understanding from many previous studies' findings of influential factors that support or hinder the implementation of TPD programs in rural schools. The result of this study is used as a conceptual framework to investigate the implementation of current TPD programs in the field. From previous studies, the factors in implementation of TPD in rural areas are specified into three levels: the teacher, classroom, and school/organization levels. Later, the researcher will do a logic linking data to the theory in literatures. It means that the researcher looks at the case retrospectively because the researcher looks at something that happened in the past (Thomas, 2011; Yin, 2003). Pattern matching, whereby several pieces of information from the similar case may be related to data gathered, and explanation building, which based on pattern matching, may also be employed as a part of exploration and interpretation on data. Looking at influential factors in implementation of TPD also means that researcher looks at nested aspects of it (Thomas, 2011). The three levels (the teacher, classroom, and school/organization levels) are the nested elements of influential factors in this study. The findings are interpreted in terms of relating the factors in the field to the factors identified from literatures. The findings are either the identified factors, which schools dealt with or not, and also new factors that have never been discussed in the previous studies. Later, these new factors can be added to theoretical understanding and building. Both identified and new factors which schools not dealt with yet can be considered as the factors proposed for the improvement of TPD practices at the schools.

3.2 Approach of the Study

Although case studies can be based on any mix of quantitative and qualitative evidence, the researcher employed only a qualitative approach for this study. Qualitative research was defined as any kind of research that produces findings, which quantitatively cannot be obtained, from real-world settings (Golafshani, 2003). Instead of causal determination, prediction, and generalization of findings, the aims of qualitative approach is to provide illumination and understanding of complex human issues in a specific context (Marshall, 1996). To understand phenomena in context-specific settings, qualitative methodology is considered best in approaching the empirical world for these following reasons (Taylor & Bogdan, 1984, p. 5): (1) qualitative researcher looks at settings and people holistically, (2) qualitative researcher develop concepts and understanding from data, rather than collecting data to assess hypotheses or theories, (3) qualitative researcher views things from respondents' own frame of reference and sets aside his or her own perspective, (4) all perspectives in qualitative research are valuable, (5) qualitative methods embrace all people's words and human experiences, (6) validity is emphasized because all data gathered is first-hand, (7) all settings and people are worthy of study, (8) qualitative research is flexible in how the study can be conducted. In this study, the qualitative dimension refers to data collected from YPP staffs, school principals, and (primary and secondary) teachers.

3.3 Selection of Research Site

It is known that the ideal research setting is one with easy access, immediate rapport with respondents, and direct data collection which fit research interest. Unfortunately, such settings seldom exist. Therefore, the researcher must negotiate access, gradually win trust, and slowly collect data that only sometimes fit the interest (Taylor & Bogdan, 1984, p. 19).

The research site for this study is Nabire, which is located in Papua Island, Indonesia. The city was selected based on the following reasons. Firstly, it is in Papua Island as one of the best representative of rural areas in Indonesia. Secondly, this city is one of accessible cities in Papua Island. The rural schools chosen for this study are private schools under Yayasan PESAT Papua (YPP / PESAT Foundation in Papua). Since they are not public schools, which are not under government management, bureaucracy

issue was not likely to happen. In other words, YPP's schools were chosen for the accessibility reason and availability to provide the data needed. Furthermore, since the researcher and the founder (Mr.Daniel Alexander) know each other very well, it was easy to build the settings, have an access, and win trust. These rationales lead YPP's schools to be the best selection for this study.

3.4 Sampling

The aim of this study is to collect a rich documentation describing the factors influencing the implementation of TPD programs in rural school context to be effective and sustained. Choosing someone at random to answer a qualitative question is inappropriate because some informants are 'richer' than others and such these people are more likely to provide valuable information related to the research questions (Marshall, 1996). Therefore, in this study the researcher selected the informants in a nonrandom manner.

When researcher actively selects the most potential informants to answer the research questions, known as purposive sampling, a developing framework of variables was also used as a basis and involved in sampling. In terms of time, effort, and availability of participants (due to teachers' workload in teaching and other participants' responsibility) an element of convenience in this study was also considered. Therefore, purposive combined with convenience sampling in which participants would be selected in a nonrandom manner is employed for this study.

3.4.1 Principals

During the data collection time period, each principal of three YPP's schools were also interviewed to gather their perceptions about support offered to enable teachers to participate in KKG/MGMP, to adopt newly knowledge and skills into classroom practices, and to sustain the changes.

3.4.2 Teachers

It may be advantageous to gather data from different perspectives. Thus, there are two types of teachers that participate in this study: the experienced and the early career teachers. For this study, the experienced teachers are the teachers with more than 5 years in teaching, meanwhile the teachers with experience for 1 to 2 years will be categorized as the early career teachers. From each school level (primary and secondary), eight teachers interviewed. In total, there were 16 teachers interviewed. Six teachers were also participated in each focus group (KKG and MGMP participants) discussion.

3.4.3 YPP Staffs

Two staffs of the YPP organization in the YPP office were interviewed with regards to their perception about TPD programs and the support provided to YPP's schools related the professional development of teachers.

3.5 Instruments of Data Collection

The goal of the field study is to gain an in-depth understanding of the rural schools and the critical considerations in the implementation of teacher professional development in YPP's schools. Later, based on these understandings implications for practices is concluded. This generates practical recommendations for an effective and sustained TPD programs in the future. The field research will be executed by using different procedures: focus group discussion (FGD), interviews, examination of artifacts (documentation), and observation at schools and participants to confirm or complement data gathered from interviews.

3.5.1 FGD objectives

This study employs FGD because it provides an opportunity to observe interactions between participants without any researcher's intervention. FGD is very useful to understand issues with consensus and variation among members of the discussion, to obtain group attitudes and perception by initiating the participants for active discussion. . It is also an effective method in providing the range of perspectives that exist within the participants (Family Health, Mack, Woodsong, & Estados Unidos Agency for International, 2005). Moreover, (Flick, 2009), state that the use of FGD led to the production of opinions expressed and exchanged in everyday life and tool for reconstructing individual opinions more appropriately.

Focus group discussion will be conducted after in-depth interviews to meet and uncover differences in perspectives among teachers as well as the factors that influence these perspectives. There are two FGDs conducted for this study, one for KKG participants (primary teachers) and the other one for MGMP participants (secondary teachers). Several questions about teachers' perceptions on the implementation of KKG and MGMP and expectations for the better TPD programs in the future are the main objectives of FGD (see Appendix D). Focus group discussion (FGD) will be conducted face to face by taking notes and audio-taped by using a portable voice recorder.

3.5.2 Interview guide

Semi-structured interviews, as the best combination between both structured and unstructured interviews (Thomas, 2011, p. 163), was used to collect data because this process also allows the researcher to gain detailed insights about the phenomenon under study. The structure is provided by an interview guide, which is a list of issues that the researcher intends to cover. In this study, interview was used to collect data from all potential informants that either contribute to or involve in TPD in the schools: YPP staffs, school principals, teachers, and the head of education district office. Accordingly, four interview guides were prepared for all participants. The four interview guides consist of common questions that are targeted at responding to the research questions based on the conceptual framework. This helped the researcher to triangulate all information that was collected from different sources on the same issue.

Interview guide with open-ended questions will be used. The purpose of the guide is to ensure consistent coverage of topic areas, but there is nothing wrong in varying the order of the questions. As noted previously, there will be four groups of respondents interviewed: head of education district office, principals, teachers, and YPP staffs. The interviews were conducted face to face by taking notes and audio-taped by using a portable voice recorder. For principals, teachers, staffs, and the head of education office, the interviews took place in working or school hours. Teachers' working load may constrain the interviews; therefore, on their approval the interviews after school were also executed to collect the data.

3.5.3 Documentation list

Documentation was conducted to gather complementary data needed for a better and comprehensive understanding. For this study, a lesson plan from a science class observed and several monthly reports of schools were analyzed and summarized. Documents required for the study were either printed out or photo-copied. However, the lack of electronic tools in the rural area and the sensitive nature of data prevented printing out or photo-copying the documents. Therefore, either re-typing or summarizing all information needed was executed to deal with the problem.

3.5.4 Observation guide

Observations were conducted at school, in class session, and one of TPD meetings. The observation guide which consists of various items, was used for taking notes. This tool was used to understand the teacher learning, classroom practices, and school-wide environment. In this study, the researcher participated in a KKG meeting to observe the process and the environment of teacher learning during the TPD session (see Appendix H). For school-wide environment, physical infrastructure and daily interactions (teacher-student, teacher-leader and teacher-teacher) were observed (see Appendix J). Meanwhile, a class observation was conducted to understand the classroom environment and the enactment of teaching practices (see Appendix I),.

As Table 3.1 indicates, each research question is answered by more than two data collection instruments to ensure triangulation of data.

Table 3.1 An overview of research questions, instruments and data sources

Research questions	Instruments								
	Documentation		Interviews			Focus Group Discussion	Observation		
	Lesson plan	School report	Teachers	Principals	YPP staffs		In class	At neighborhood (schools and dormitories)	TPD session
How did YPP teachers experience personal learning through KKG/MGMP program?	x		x	x		x			x
How are newly learned knowledge and/or skills enacted in classroom practices?	x		x	x	x	x	x		
What role did the school and organization perform in supporting and/or hindering the implementation of KKG/MGMP program?		x	x	x	x	x		x	

3.6 Issues of Validity and Reliability

As mentioned earlier, the study uses qualitative data. Validity in this study has been built since in the process of research designing, during data collection, and data analysis (Yin, 2003). The use of theory in this study during process of research designing is considered as a way to maintain external validity. To maintain the validity, during the preparation of the instruments the researcher tried to consult the relevant theories and instruments so as to select and include more relevant items.

Most of information is first-hand that makes the study stays closer to the empirical world. Moreover, the data were described in-depth using the words of respondents. On top of that, interviews and FGD were held with respondents in the national language of respondents (bahasa Indonesia), to avoid language

barrier and to gather intended data. Triangulating data collected through interview, FGD, observation, and documentation was hopefully believed to amplify the internal validity of the research findings.

The reliability of data in this qualitative research can be assured through procedures of data collection which are appropriate and fully explained (Hittleman & Simon, 1997, p. 196). As far as qualitative data is concerned, in the first place the researcher follows the principle of honesty (Bogdan & Biklen, 2007). Additionally, a colleague was also involved in reading, coding, and categorizing 4 out of 21 interview transcriptions. The agreement between two raters (the researcher and the colleague) is computed by using Cohen's Kappa index. This statistic is used to assess inter-rater reliability in coding qualitative/categorical variables. The result of inter-rater reliability for data analysis (coding) is shown below.

Table 3.2 Cohen's Kappa index for inter-rater reliability for data coding

Number of statements	122
Frequency of agreement	80.3 %
Measure of Agreement (Kappa index)	0.691

From Table 3.2, it can be identified that there are many agreements (80.3 % of total) in coding 122 statements. Kappa's agreement level between the researcher and the other rater is also satisfactory. Thus, the result might suggest that the researcher can conduct the rest of data analysis using the same manner.

3.7. Methods of Analyzing Data

This exploratory case study undertakes to understand the influential factors at the teacher, classroom, and school/organization levels in the implementation of KKG/MGMP in Indonesia's rural schools.

For this study, data gathered from interviews, FGDs, observation, and documentation were qualitatively analyzed. Interviews are considered to be the main sources and FGDs are for gaining new and different perspectives from participants' interaction during discussion. Meanwhile, the observations are for and documentation to confirm the observations.

In this study, the notes were taken by the researcher regarding the interactions and different perspectives observed during discussion. The observation notes were qualitatively analyzed to complement the data gathered from interviews. The notes taken during a KKG meeting were focused on tutor's competence, learning process, and learning environment that support or hinder teachers' personal learning. Meanwhile, the notes taken during a science class observation was analyzed to examine teaching approaches used, teacher-student interaction, and student engagement during the lesson. Furthermore, the observation on schools and dormitories environment was conducted to understand the interactions and daily activities in the neighborhood regarding the TPD issue. Review on lesson plan was also conducted to examine the approach used and to confirm data gathered during observation in the science class. Additionally, school reports were analyzed to examine many aspects observed (e.g. facilities, number of students, number of classrooms, etc.). Several findings from these school reports are shown in several appendices (appendices K, L, M, N, and O).

Interviews transcriptions as the main sources of data in this study were analyzed according to the conceptual framework. Factors that involve and influence the implementation of TPD in rural areas, which have been identified in previous studies, were specified into three levels: the teacher, classroom,

and school/organization levels. This conceptual framework helped the researcher to keep track of emerging data and take notes during and after each interviews.

Below several steps were used to analyze the relevance of data to the research questions together with other data. The steps are adopted from two methods of analyzing interview transcript (Burnard, 1991; Taylor & Bogdan, 1984), the coding manual (Saldaña, 2009, p. 12) and the rationales of triangulation (Mathison, 1988) as following:

3.7.1 Transcription

All taped interviews are transcribed completely in original language (bahasa Indonesia) to maintain the real meaning. Everything that is said in an interview is said in Papuan (Indonesian) context, thus the translation can be postponed to the next steps to avoid the bias of word choices and language style during translation.

3.7.2 Repeated reading

Firstly, transcripts are read through and notes, underline, or highlight made throughout the reading. The aim here is to become immersed in the data and come up with a list of general themes that can be called as temporary construct. Secondly, transcripts are read through again using the list of temporary constructs from the first reading together with field notes during and after each interview. Listening to the tapes can be done as well to gain more from the real context.

3.7.3 Coding

Coding is an interpretive act and definitely not a precise science. In this study, the researcher uses preliminary knowledge from literatures (conceptual framework) and research questions to do coding. All open codes were written in English to provide better inputs for the next steps (see Appendix F).

3.7.4 Categorizing

In this study, the codes were sorted into categories. The table of final categories generated in this step was generated based on conceptual framework of this study (see Appendix F).

3.7.5 Adjustment (rereading, recoding, and recategorizing)

Transcripts were re-read alongside the final categories and field-notes taken during data collection to establish the degree to which the categories cover all aspects of interviews. In this step the researcher also looked for emerging themes. Reading, coding, and categorizing were executed again once more. Adjustments were made as necessary.

3.7.6 Themes drawing

Once all final categories were listed together, the next step was to classify the factors into three levels of factors. As mentioned before, these three levels of factors are the issues in this study: school/organization, classroom practices, and teachers' personal domain (see Appendix F).

3.7.7 Information leveling

There are various ways to show the interconnections between and within themes. Leveling the information into three levels of information (convergence, inconsistency, and contradictory), together with other data sources and methods, is used in this study as the appropriate ways to explain the comprehensive findings.

3.7.8 Factors-mapping

In the same line, factors-mapping is the best way to develop concepts and theoretical propositions from the findings. The real findings are brought through this step to the abstract (concepts) (Saldaña, 2009, p. 12). Together with literature reading and information leveling, factors-mapping focuses on finding the missing factors and identifying the new factors. Then, the missing factors in the implementation of TPD in this study will be proposed as factors for TPD improvement or sustainability. On the other hand, the new factors identified from the findings contribute to develop theoretical propositions of implementation of TPD in rural school.
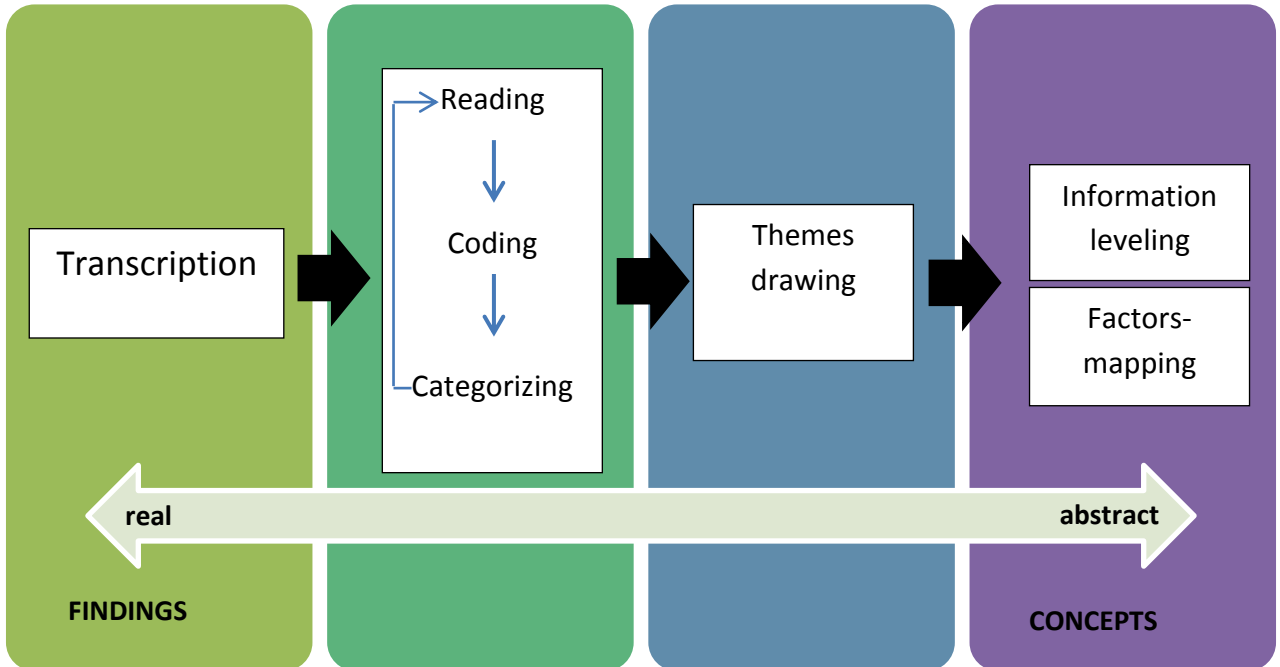
Figure 3.1 Illustration of methods of analyzing the findings (adapted from Saldaña (2009) p.12)

Chapter Four

Findings

In general, the factors from each level are investigated based on the conceptual framework as presented in Chapter 2. This chapter presents the results from the current study. The results are organized in four sections to answer the sub-research questions. Section 4.1 describes the experience of teachers' personal learning and perceptions of the teachers towards learning and teaching practices. It also details the learning needs, learning practices, and professional attitude of the teachers. Section 4.2 details the findings for the enactment of newly learned knowledge/skills of the teachers. They include the availability of teaching equipment, student characteristics, teaching approaches, and coaching/supervision conducted as well as feedback provided. Section 4.3 describes the conditions of school and (YPP) organizational environment under which TPD program carried out, including the facilities, management, leadership, and the community. Lastly, Section 4.4 summarizes the findings in a tabular format.

4.1 How did YPP teachers experience personal learning through KKG/MGMP program?

In response to being asked about their experience of personal learning through KKG/MGMP, many of teachers gave a broad listing of statements. In this section, the responses during interviews, FGDs, a review on a lesson plan, and data gathered from an observation of one of KKG meetings are categorized into three main factors. The main factors are learning needs, learning practices, and professional attitude. These three factors are described in the next three sub-sections, followed by a summary of other interesting factors.

4.3.1 Learning needs

Being asked during interviews about the perceived benefits when participating in the KKG/MGMP, some secondary and primary teachers said that they learn something. They perceive learning experiences in the KKG/MGMP meeting through sharing and discussion among participant teachers from other schools. For secondary teachers, the material or tools (usually RPPs for many subjects) obtained during the MGMP meeting were also considered to be relevant to the teaching needs by doing prior adjustments to school context. However, the majority of secondary teachers mentioned that they want to know more than an RPP.

In contrast, other teachers interviewed said that they do not feel the benefits of KKG/MGMP. FGDs revealed the differences between the primary and secondary teachers. The secondary teachers consider that MGMP tends to disrupt the teaching hours because it is always held during school hours, while the primary teachers said that the topic delivered during the meeting is not matched with the grade they have to teach at school. For instance, on the last KKG meeting they participated, the teachers of lower grade (grade 1-3) were given a topic of Math for higher grade (grade 4-6).

Furthermore, the findings from interviews reveal that MGMP tends to be executed only once an academic year before either the first semester exam or the (high-stakes) national exam (UAN). The teachers interviewed perceive that a professional development of teachers in content or teaching methods is not a priority in MGMP. In other words, the focus of MGMP is not the learning needs of teachers but only administrative needs of government. For instance, in MGMP meeting teachers were gathered to make questions for exams and construct yearly plan of lessons (RPP). Therefore, MGMP activities experienced by secondary teachers are not for professional development, but are merely for

completion of administrative report of government (education office at Nabire district). As one Social Science teacher commented:

> *The focus in the (MGMP) meeting was mostly about to make questions for exams. I do want to learn new things, but learn nothing. Many teachers were participating there for the sake of 'reward', not for their professional development. (NT3)*

The school reports show that most of teachers at YPP schools do not have teacher education background (see Appendix N and O). In line with it, the teachers interviewed said that they need more knowledge and skill to be a better teacher. For them, subject content is always necessary to learn, as well as the appropriate method to deliver the content. However, the most important thing they want to know is how to handle students with 'special' characteristic since the majority of the teachers are from other islands (see Appendix N and O). In the words of one respondent:

> *I really want to know specific methods for Papuan children. They tend to be uncooperative and rebellious. (NT4)*

Moreover, the teachers with teacher education background also admitted that there is a knowledge gap between the college (theoretical ideas) and the classroom (real practice) which should be dealt with. They noticed that KKG/MGMP never bring this issue to the forum. The respondents also consider that their participation in KKG/MGMP meeting is insufficient; they want to have more training with a more prepared and competent tutor/facilitator.

> *To be beneficial, the tutor of KKG/MGMP should be competent in the topic (s)he talks about. Otherwise, they will get all participants confused and come back to school with nothing. (ST4)*

4.3.2 Learning practices

From one of KKG meetings observed in the head of school cluster, it is found that the primary teachers are exciting to participate. In the full-day meeting there were some collaborative works (see Figure 4.5), yet not effective, conducted among the participants. According to the respondent who participated, the tutor performed not well and incompetent in the topic. Thus, they considered that they learn almost nothing from the KKG workshop. Moreover, the participants also admitted that during the meeting they felt demotivated and unsatisfied. They only did what the tutor asked, but still did not understand about the content.

Figure 4.5 A collaborative work in a KKG workshop meeting

Although learning practice is very limited during the KKG/MGMP meeting, all teachers admitted that they always do it in many ways by themselves. These self-seeking activities are usually carried out during their individual preparation time. Books, television, newspaper, exemplary lesson plan, and internet are some media used to help them to learn and be ready to teach. In addition to those media, a teacher said that she learns also from feedback given to her after being supervised. Observation on other (senior) colleague and sharing moments between teachers are also another options of learning activities.

Teachers' willingness to learn more new things and improve their ability is demonstrated continuously. It is obviously discovered by their experiences. Three commented in interviews:

> *Books from schools are insufficient. When I went for holiday to Java (island) or to Manado (city) I bought some books to update myself. (ST2)*

> *Books are rarely available in Nabire. I always look for new books and other information when I went to Java in holiday season. (ST5)*

> *I asked my friends in Jakarta to send me some books of games activities in English version. I have used them for my (English) lesson. (ST10)*

Learning from their own teaching practices, known as a reflection, is also common for many teachers. They do reflective practices during teaching by using trial and error. They stated that trial and error is the best way to learn individually and find the best teaching method. An experienced secondary teacher commented:

> *I gained knowledge and skills through trial and error. Experience has taught me many things, including teaching methods and suitable approaches to handle children with complex problem here in Papua. (ST10)*

Additionally, a principal indicated that instead of reading, teachers learn more from examples and practicing. She commented:

> *Reading is not a habit for teachers here yet, they prefer to speak and discuss the information. They are practical; like to see an example then have discussion about it. (P3)*

Similarly, a primary teacher noted that they like the experience when they visited a school in Malang and saw teaching examples there.

> *When we had an annual national meeting of YPP in Malang, the school organized a field study to one of schools there. We enjoyed it and learned much from teachers' activities there. (ST5)*

Participation in KKG/MGMP is also considered as a way to have professional learning. All principals claimed that all teachers are involved in KKG/MGMP. However, a new (inexperienced) teacher commented that participation in KKG/MGMP is only for experienced teachers. There are two possible reasons for this: the assignments from principals are not distributed well among teachers or the very minimum meeting of KKG/MGMP that causes the very limited teacher involvement.

4.3.3 Professional attitude

A professional attitude meant here is in learning as well as teaching practices. The majority of respondents in this study claimed that they are participating in KKG/MGMP. According to them,

teachers' attitude does not automatically change to be better because of their participation in the KKG/MGMP meeting. Furthermore, they noted that the professional attitude, with interrelated learning and teaching attitude, is depending on the person. With regard to this issue, one of YPP staffs commented:

> *A teacher must not stop learning. Once (s)he stops to learn, (s)he can't teach. I believe that the teachers here, either the beginners or the experienced ones, have a great willingness to learn because they want to improve their teaching ability. (Y1)*

From the interview, it is discovered that the teachers has positive attitude towards learning and teaching. All of them mentioned that they want to be improved. Thus, they came with a list of action to show their enthusiasm: discussion with colleagues, asking for help to more experienced teacher, asking for principal's advice, or trying new thing to solve the problem in classroom immediately.

In brief, the teachers demonstrated an initiative action to learn do changes in their teaching practices. Below an experienced teacher told her experience in learning and teaching:

> *For the first time, I got information about class action research from a meeting in education office. Then, I looked for the book to learn more, although it's not mandatory to be implemented in our school. From that book, I learn the function of the class action research and relate it to my students' attitude and ability. Later, I found that by using that knowledge I have a better understanding of how my teaching methods influence students' engagement in lesson. (ST8)*

Likewise, a new (inexperienced) teacher commented:

> *I do learn from this academic year and I will make changes for next year. As a new teacher, I perceive my teaching activity relating to a learning process. (NT5)*

4.3.4 Others

Living in a rural area is neither easy nor comfortable. Many teachers, especially who are not in PNS status (see Appendix L), in YPP schools have a job-side to survive. This financial-safety issue emerges because of a limited salary and benefit given to the teachers. Some of them use their spare time to teach in other school or to be a private teacher. Others are doing a joint business in home-made food. These activities obviously take their time after school hours and put them in tiredness (see Appendix L). It may be assumed that in that condition they have not sufficient time to learn new things or even to do preparation before teaching. Some of interviewee mentioned this issue as another distraction in teachers' personal learning. For them this is such a dilemma; they appreciate teaching because of the 'calling', but they need a side job for their living. Thus, an increase in salary is considered to be effective in this case to let teachers focus only for teaching without any worry for their living. A principal commented:

> *Yes, of course, the salary influences teachers' motivation; their motivation affects their (personal) learning and, eventually, their teaching in the classroom. (P3)*

By the same token, a teacher explained:

> *The teachers have not focused 100% to their teaching responsibility yet. This is because of insufficient salary achieved from YPP. Their time to learn and teach is often taken by their*

activities to support their families. As time goes by, the living needs and cost of family is increasing; a teacher must do something (for that). (ST2)

Another interesting finding can be found from the experienced (senior) teachers who have stayed for more than 5 years with many disadvantages. They committed to stay and serve Papuan people in education by being an educator without any worry of their lives. One of principals commented:

We love togetherness. Even though our salary is not sufficient, we can always share everything. There is a joy in this situation. Yes, we are living in the same boat. (P1)

4.2 How are newly learned knowledge and/or skills enacted in classroom practices?

Many comments were given by principals and teachers during interviews in response to being asked about teaching practices in classrooms. The data collected from interviews, FGDs, class observation, and a review on lesson plan are categorized into five factors. The five factors are teaching equipment, student characteristics, coaching/supervision, feedback, and teaching approaches. These five factors are described in the next five sub-sections, followed by a summary of other interesting factors.

4.2.1 Teaching equipment

To enact changes in classroom is very problematic for the teachers. Class observation revealed that teaching equipment is not sufficiently available. The only teaching tool which teachers always have with them is the RPP. Indeed, a good practice is shown by teachers as lesson plan (RPP) was modified to be relevant to school context and needs. This should be made to avoid a gap caused by the contextual difference among participant teachers (schools) in MGMP.

Although some respondents noted that they have many good books from donations, they admitted that they get less benefit from the books because of their lack of English proficiency. Moreover, the books that probably can be used by the teachers are always collected in the library. Every time a teacher uses some books in a teaching activity in the classroom, they should always be returned back to library. Likewise, other media are also placed in the principal room (LCD projector) and the language laboratory (CDs, cassette, television). In general, no other thing is available in the classroom except tables, chairs, and blackboard (for primary classrooms)/whiteboard (for secondary classrooms).

The majority of respondents said that if the teachers need any teaching tool which is not available at school, then teachers usually provide themselves with their own hand-made tools. In other words, they have to make it at home and bring it to school. Furthermore, it is discovered that not all of available tools/equipment at school can be used at this moment. Some essential tools for learning, such as blackboards, are in a broken condition (see Appendix K)

4.2.2 Student characteristics

The Papuan students in schools were reported to have low performance in academic achievement as well as motivation. Most of the students, particularly the students who live in the dormitories, come from remote area in Papua. Initially, they do not know the national language. Then, by schooling they are started to learn and use Bahasa Indonesia. Their families are working as farmers and live in inadequate sanitation and health. Ironically, the Papuan people live in poor conditions in their rich land of minerals and forest.

Indeed, an uneven distribution of national development in Indonesia becomes the portrait of their villages. This condition has made most of the parents and extended families have limited opportunity to pursue an education. Thus, having no role model in their family apparently influences their motivation. Therefore, the teachers and, especially, the dorm staffs always take the role of being parents for the students. Most of them found that the low motivation of the students is the most challenging and problematic issue in their teaching practices besides the fact that the students cannot afford the school text books.

Moreover, those characteristics also affect the willingness of students to accept new things introduced in class. Although they would eventually accept the changes, in the beginning the students usually demonstrate their reluctance. A teacher commented:

> When they find changes, they are very slow to accept that. They always need more time to adapt and understand. Then, they will accept it. (ST9)

4.2.3 Coaching/supervision

Coaching is often conducted informally compared to supervision. From school observation and school reports examined, there is no specific tool or time arranged by school management for coaching, while the supervision is rarely scheduled and using an instrument as a guide. Moreover, some teachers claimed that they often solve their difficulties by themselves without any help from others. Yet, most of teachers reported that the coaching usually takes the form of everyday informal interactions. For instance, prior to implementing changes in the classroom, if necessary, some teachers request for principal's approval. In addition, if a new (inexperienced) teacher finds any difficulty in teaching then the teacher will ask for help to the principal as well as the experienced teachers. Two commented:

> Sometimes I have trouble because what I experienced in the classroom is not what I expected before. Then, I asked for help to a senior teacher of the same subject. (NT4)

> When I got any problem in my teaching… If it's about student attitude, I come to Student Affair Department. If it's subject content, I discussed it with my colleague; I can come to her house for sharing. (ST5)

In fact, KKG/MGMP is closely related with coaching and supervision activities from education office as the organizer of KKG/MGMP. Yet, both coaching and supervision is conducted not in the KKG/MGMP. All principals claimed that they have a great concern in TPD issue, but most of the teachers reported that the initiation of many TPD activities is always from government (educational office). In addition, a visitation for supervision from education officer is always for administrative purposes. Two teachers commented:

> It is rare to be supervised by the principal or a colleague. When a government (education) officer comes, they only come to check my administrative teaching tools (lesson plans). (ST9)

> Supervision from government officer is always about the completion of my RPP and to visit my class. Later, I will get the feedback report from principal. (ST3)

4.2.4 Feedback

Feedback is usually given by the supervisor after a teaching session being observed. The majority of respondent in this study mentioned that the teachers demonstrate a positive attitude in response to any

feedback given. Afterwards, the teachers will improve their teaching practices based on the feedback. A principal commented:

> *The feedback given to teacher is more about the teaching environment: how the teacher deals with students' response (interactions) and how the lesson runs, not the weaknesses of teacher. (P2)*

Furthermore, it is also discovered in FGDs that the teachers prefer to obtain the feedback from informal and everyday interactions. The teachers perceive that feedback resources can be everyone at school: the colleagues, the principal, and the students.

4.2.5 Teaching approaches

Being asked about teaching approaches practiced, the respondents mentioned several methods as their teaching practices. As mentioned earlier, trial and error is the best choice of teaching method chosen by most of the teachers. By doing trial and error, the teachers can try many new things to find the best suited one to their next changes. Both principal and teachers agree that for trial and error method a teachers' creativity is needed, especially with regard to many limitations. They commented and gave some examples of creative teaching:

> *Mathematics is not such an interesting subject for the students because they often gain a low score. I really want to know how to present the lesson attractively, for instance by using an LCD projector. (NT4)*

> *For instance, if the school can't afford to buy a microscope because it is quite expensive, then a teacher can deal with this situation by using a picture. Teacher can show the students a picture of a microscope, and then provide them explanations of how it works. As soon as the budget ready, the school can buy it and the students already have a prior knowledge about it. (P2)*

> *I am a Biology teacher, but I should also deal with their low ability in reading. By using Biology material, I am also teaching them how to read correctly. (P3)*

> *I saw a class with cooking activities in English session. They did conversation in English during that fun activity. (P2)*

In addition, one of experienced teachers mentioned the class action research as another alternative method she applied. Meanwhile, others stated that contextual teaching, which emphasizes an adjustment to the school context and students' needs, is the best way to teach in classroom. Nevertheless, above all, the principals as well as the teachers agree that they practice a parental teaching at school. They said that interactions in the classroom are expected to be more than an academic relationship. One of principals commented:

> *I like interactions in our schools. We are not only the teachers, but we have a parenting role as well. There is personal bond built in here. (P2)*

Similarly, a teacher also stated:

> *I get such a satisfaction when I can make students understood on my lesson. For me, it is a combination of knowledge, an art, and a calling in teacher's heart. (ST7)*

From findings form an interview, there was a teacher experienced that a colleague taught her how to teach by using slides (PowerPoint). She was very enthusiastic that attempted to use it for her next science teaching. With regard to the enactment of new learned knowledge and skill, an observation in her classroom revealed some interesting both positive and negative findings. It is found that the teacher tended to use teacher-centered approach. It indicated by the less contribution from students, one way direction of communication, and too much time spent for taking a note. Nevertheless, many positive things were also found during the observation. The teacher could arrange the information of her lesson in a systematic way. If it is necessary, she can repeat the previous slides to get the students understood. By using the PowerPoint she provided many interesting and colorful picture that can attract students' attention (see Figure 4.4). She also tried to have a good discussion with students, but the students seemed very happy and cannot articulate their opinions well upon those new things and learning experience.

Figure 4.4 The enactment of newly learned knowledge/skill of PowerPoint in a science class

4.2.6 Others

From the observation and interviews, there are also three interesting findings revealed. The three interesting factors are extra lesson, limited budget, and reticent behavior. First, the extra lesson is chosen by many primary teachers as a way to scaffold students' low achievement. Thus, the teachers often invite the low students to come on Saturday for extra teaching for free. This should be noted that, this practice cannot be carried out in secondary schools because the school days there are from Monday to Saturday. However, for national high-stakes exam, it was observed that the teachers also provide extra lesson every day, including Sunday.

Second, all of respondents in this study mentioned funding as the most problematic issue in the schools. Moreover, the principals of secondary schools said that the schools' budget fully relies on YPP. This makes the changes cannot be implemented immediately because they have to carefully manage their limited budget. If necessary, to support the changes desired, the school will propose new budget for the subsequent proposal to YPP. As a teacher noted:

If teacher initiatively ask for any stuff, the school must do its best to provide it. (ST10)

However, concerning the needs of classroom equipment that can support their teaching activities, the teachers tend to show reticent behavior. Two teachers responded:

I don't have any courage to ask for any additional books I need. I feel sorry for schools' limited fund. (ST7)

I have asked teaching aid for Geography lesson. Until now, I still don't get it. I can't ask again, I know the school is lacking the money. (NT3)

4.3 What role did the school and organization perform in supporting and/or hindering the implementation of KKG/MGMP program?

In response to being asked about school and organization roles many comments from interviews were given by the teachers, principals, and YPP staffs. Then, together with information gathered through schools/dormitories observations, school reports, and focus group discussions, the comments are categorized into four factors. The four factors are facilities, management, leadership, and community. These four factors are described in the next four sub-sections, followed by a summary of other interesting factors.

4.1.1 Facilities

The reports show that the first school (the primary school/SD Agape) was built on 1996. Initially, this school is intended for Papuan students from Sugapa, one of the most remote areas in Nabire district, who live in the dormitory. After several years, this school has become one of the best primary schools in Nabire district and many parents were interested to send their children to this school. Therefore, the students of this school are not only from the dormitory but also from local Nabire resident. However, the school policy for the local students differs from the dorm students. The local students have to pay a school fee; meanwhile, it is fully free for the dorm students.

As the primary students graduated for the first time on 2002, the junior high school (SMP Anak Panah) was established followed by the senior high school (SMA Anak Panah) on 2005. The three schools were located in one neighborhood nearby the dormitory. Physically, the secondary schools (SMP and SMA Anak Panah) look better than the primary school (SD Agape). It is because the primary school is the oldest building and also the secondary schools are just renovated recently.

From the observation there are two laboratories provided in secondary schools. The language laboratory, established by education office of Nabire district, and science laboratory, which looks more like a classroom rather than a lab with several (insufficient) equipment for science experiment. Since most of the teachers in SMP also teach at SMA, the use of laboratories can be shared without any difficulty. The library is also available, yet the very limited number of books (see Figure 4.2) and the insufficient and outdated content are hardly to help teacher in their teaching. The secondary schools also used to have an internet connection, provided by government through education office at Nabire district. Unfortunately, the connection has been downed for months because of the management issue with the company of internet provider at national level. In addition, sport fields for basketball (indoor) and volleyball (outdoor) are available in a good condition and shared among the three schools.

Figure 4.1 School building of SD Agape, Nabire

Figure 4.2 Library room at SMA Anak Panah, Nabire

As mentioned previously, the schools are managed together with the dormitories. YPP leader, Eliezer Edo, stated that the purpose of having schools and dormitories is for a comprehensive education for all students who come from remote areas. In schools, the students learn many subject from the teachers while in dormitories, they continue to learn through daily activities together with the dorm staffs who also the teachers at schools. By this way, the students' development can be observed and controlled by the teachers. One of YPP dormitories is shown by Figure 4.3.

Figure 4.3 Dormitory building of Asrama Agape, Nabire

4.1.2 Management

From the interviews and the FGDs, two issues of management were revealed, namely teacher turnover and funding. For the first issue, the majority of respondents said that the rate of turnover teacher is high in YPP schools. Many said that this problematic issue is such an inhibitor of an effective learning of students. To deal with this problem, the principal assigned another teacher to teach temporarily until a new teacher recruited, as one commented:

> *I assigned an available teacher to teach temporarily until the school year ends. This is to minimize the psychological impact to students. New teachers will be hired to teach starting from the beginning, not in the mid of school year. (P2)*

With its limited connections the schools are not able to recruit new teachers. Therefore, YPP always takes this role to help the schools by providing new teachers (volunteer) every school year. As mentioned earlier, teachers' salary becomes the most problematic issue that makes a teacher leaves and looks for better well-being in another school. A senior teacher considered this issue happens because of internal management of YPP. He noted:

> *The foundation (YPP) should restructure its internal system to be more focused on teachers' well-being. It is a time for YPP to be involved in schools operationalization; giving schools a full responsibility at this moment is not wise. (ST7)*

For the second issue, it is revealed that the biggest financial resource of YPP comes from donators. It means that YPP funding is not stabile in each month. While secondary schools funding still fully relies on YPP, the primary school is already able to support itself with several donations, its "koperasi sekolah" and school fees gathered from the local students. Koperasi sekolah is a non-profit community organizations and businesses at a school that are owned and managed by the members (principal, teachers, and staffs). The members will use its services as consumers, as well as work there as workers. Later, all the profit gained is fairly shared among the members. In other term, it can be consider this as "one for all, all for one".

> *YPP fund is not sufficient for us. Thus, we attempt not to be dependent on YPP financial support. This "koperasi sekolah" is the best support we have. YPP has no contribution in primary school now. (P1)*

> *We move independently, we support our lives with our "koperasi sekolah". Hopefully, by the increase of shared profit we gained, we can more focus on our teaching responsibility. (ST2)*

FGDs also revealed that with its limited funding, YPP has to support the schools, the dormitories, the teachers, and also other students, the scholarship receiver, in higher educations. YPP has also managed to give scholarships to its teachers to pursue a higher academic degree. Surprisingly, with YPP approval, many of them left the school later after being graduated to teach in higher education/universities. Other institutions may apply such a contract agreement for their scholarship receiver, however, in YPP there is no specific regulation about its teachers after being graduated. Usually, the decision of staying or leaving depends on the teacher himself/herself.

4.1.3 Leadership

All teacher respondents stated that the principal supports the teacher to participate in KKG/MGMP meetings. Rescheduling their teaching schedule is an example of support given to teacher. By doing that, the teacher would have no worry to leave the school and their sessions are not wasted when they participate in KKG/MGMP. If the teachers have to travel, then the principal usually instruct the finance department to support them with transportation allowance.

All principals also show their positive perception on changes and teacher learning.

> *Changes are needed by the teacher; the world is changing. (P3)*

> *Changes should be viewed positively. Attitude and professionalism changes are the most important things for teachers. (P2)*

> *If it is not possible to send all teachers to participate in MGMP meeting, then I would try to assign a teacher with the best ability to transfer his/her knowledge to other teachers. (P3)*

Moreover, the principals and the YPP leader demonstrated their role as the main motivators for teachers.

> *I always motivate the teachers so they don't lose heart. (P3)*

> *YPP will continuously support the teachers by reminding them that they have special potential and talent inside. Not only motivation, YPP also supports the teachers who are willing to pursue a higher academic degree. (Y1)*

In addition, the leaders also perceived themselves as the role model for the teachers.

> *Leaders' lives will influence the teachers as YPP members. Leaders are the role models, as a good example to follow. (Y1)*

4.1.4 Community

All teacher respondents, as well as the principals, noted that they always have a meeting in the beginning of new academic year as a team preparation. The principals managed the formal meeting in such a manner that all necessary things delivered to the teachers. For instance, two principals commented:

> *In the beginning of this academic year (July 2011), there are five topics delivered and discussed with the (secondary) teachers. They are about teacher, counseling session, internet access, and… (P2)*

> *We had a meeting for three days prior to the first day of new school year. During those days all (primary) teachers had learned, discussed, and prepared the lessons together. They looked very enthusiastic. (P1)*

However, some teacher pointed out that the teacher meetings they experienced are mostly focused on school events or students behavior; not directly to improve teachers' professional ability.

According to the most of respondents, the informal interactions among teachers have been the frequent and "regular" teacher meetings. It was observed that the community in YPP allows this informal meeting experienced by the teachers every day. Since they live in an attached neighborhood, the interactions can take place not only at schools but also at home. Through sharing and discussion the teachers learn about many things, such as teaching practices, students' attitude, new school policy, and rescheduling.

Living in a community with a similar background as volunteers in their first coming, the teachers used to share many things one another, including their personal stories. They live with many disadvantages in which sharing is a must and privacy has no priority during a period of adjustment time. Until now, such this lifestyle also influences teachers' professionalism in working. One noted:

> *Sometimes teaching difficulty emerges because private life or personal problem is brought to working life at schools. This privacy issue definitely influences teachers' professionalism. (ST10)*

In addition, all respondents in this study agree that KKG/MGMP is a learning community for them to improve their ability. However, the minimum number of KKG/MGMP meeting is considered to be insufficient for teacher professional development. Since the teachers participated in turns, the participation of teachers is also very limited. Therefore, a new program for secondary teachers' professionalism was initiated by one of principals. The idea is to form school-wide MGMP as a professional support for secondary teachers. In this school-wide MGMP, there are several groups of teacher. Each group consists of teachers of cognate subjects. For instance, the Science MGMP consists of Physics, Chemistry, and Biology teachers. The idea is not fully implemented yet; it is still introduced and socialized to teachers. It will be implemented in stages, scheduled, and involve all teachers. Unfortunately, this good idea does not exist in the primary school.

4.1.5 Others

Besides abovementioned factors, from this study four interesting things were also found in the site. The four interesting things are dorm management, school-YPP relationship, YPP professionalism, and spiritual basis. The first, initially there were four dormitories, namely Asrama Gilgal, Asrama Agape, Asrama Yudea, and Asrama Anugerah. Last year, by a financial consideration, the four dorms were compiled to be 2 dorms only: Asrama Gilgal and Asrama Anugerah. Therefore, for two dormitories there are only two groups of student age. Some teachers noted that the new regulation to compile the dormitories has raised another problem with regard to students' psychological development. They found that lowest aged students often be mistreated and experience a wrong model from their mates in dormitory, the higher aged students.

The second, it was discovered in this study that there is almost no involvement in school operationalization. YPP provides the schools a wide space to develop. YPP will be involved as facilitator and for any urgent problem. It may be said that a full responsibility is on principals' hand. For any suggestion or input given by YPP, still all decisions are decided by the principals.

The third, the YPP leader admitted that YPP is not professionally managed. Indeed, it was observed that there is no written document plan available for an implementation or an evaluation process. The function of education coordinator in YPP is also reported not effective.

> *I can say that TPD is a part of an education coordinator's responsibility. But, the function of this department is not fully running because of too many roles of the education coordinator at this moment. (Y1)*

> *Education program from YPP is not clear. The schools are not coordinated; each school move independently with their own decision. There is no clear 'path' to follow. (ST7)*

From the observation, it can be concluded that all activities in YPP are need-driven activities. For instance, although there is no plan of the number of teachers needed for a next new school year, YPP is still ready to recruit new volunteers once the principals reported their teacher shortage.

The last, YPP is known as a Christian organization. Its spiritual basis became the ground values/foundation of many decision and management approach towards many issues including the schools and teachers. A good thing observed is this spiritual basis lead to one vision and generates a togetherness of its members (the teachers) to serve Papuan people. In contrast, this spiritual basis also inhibits the professionalism at the schools. The relationships among members are often biased in distinction between personal and professional interactions. For instance, the leaders and principals tend to be too "kindhearted" and choose not to criticize the teachers straight to the point. One commented:

> *So far, based on my observation, the relationship here is so close. It becomes too close that YPP or principals hardly to give any consequence to teacher who made a fault. Sometimes, the relationship between leader and member is also ignored because of the sense of togetherness. For me, it needs a careful attitude; at school, we should be professional. (ST3)*

4.4 Summary

In this section, the factors investigated from sections 4.1 to 4.3 are divided by both identified and new factors and their role status in the implementation of TPD program (hindering/supporting). Table 4.1 summarizes the factors.

Table 4.1 An overview of factors investigated

Factors	Identified (from literature)	New (from current study)
Has been dealt with (supporting)	- Reflective/learning practices - Positive attitude - On-going coaching - Good leadership - Supporting community	- Commitment - Creative and parental teaching - Provision of extra lesson
Has not been dealt with (hindering)	- Teachers' learning needs - Insufficient teaching equipment - Limited facilities - Low salary (rare) supervision - High teacher turnover	- Lack of fund - Reticent behaviour - Low organizational professionalism

Chapter Five

Discussion, Recommendations, and Conclusion

The main purpose of this chapter is to discuss the research methodology and findings on Chapter 4 and come up with recommendations for stakeholders and further research. This chapter starts with the recapitulation of findings in section 5.1. The findings are recapitulated according to the sub research questions in a tabular format. Section 5.2 presents the conclusion of the study answering each sub research question. Section 5.3 presents the recommendations for the teachers, schools, organization YPP, and education district office as well as for further research. The chapter ends with stating the scientific relevance of this study in section 5.4.

5.1 Recapitulation of main findings

This study was undertaken to identify the factors influencing the implementation of TPD program in YPP schools. Framed up by three levels of factors (teacher personal domain, classroom practices, and organizational environment), this study aims to understand the supporting and hindering factors for the effectiveness and sustainability of TPD in YPP schools. Main findings as shown in Table 4.1 revealed that there are more many factors hindering factors compared to the supporting ones.

5.1.1 How did YPP teachers experience personal learning through KKG/MGMP program?

The findings for this question are summarized in the form of the perceptions of the respondents towards teacher learning through both personal and KKG/MGMP activities. Table 5.1 summarizes and divides the findings, either supporting or hindering, for teacher personal learning.

Table 5.1 Summary of findings on teacher personal learning

Factors	Supporting	Hindering
Learning needs	• All teachers mentioned that they want to learn more about subject content, the appropriate method to deliver the content, and the most important thing is how to handle Papuan students. • They want to know more than about a lesson plan (RPP) • The majority of respondent said that they are eager to experience more training, not only KKG/MGMP meeting.	• The topic delivered during the KKG meeting is not matched with the grade they have to teach at school • The focus in the (MGMP) meeting was mostly about to make RPP and questions for school exams. • KKG/MGMP participants with "reward" motivation tend to be passive and demotivated the meeting
Learning practices	• High willingness to learn more new things are demonstrated by the teachers, they are always exciting to participate in KKG/MGMP • All teachers admitted that they practice an independent learning	• They mentioned that the unprepared KKG/MGMP meeting and incompetent tutor are to hinder the learning • Some teachers prefer to have discussion rather than reading books.

Factors	Supporting	Hindering
	(self-seeking and self-learning). They spend time to find books and information during holiday in other cities. • They consider every experience (e.g. teaching, supervision, observation, informal sharing moments,) as learning experiences. • The teachers perceive trial and error as a way to find the suitable method.	• The teachers have limited access to learn better teaching activities from other better school.
Professional attitude	• The teachers has positive attitude towards learning and teaching. All of them mentioned that they want to be improved. • Discussion with colleagues, asking for help to more experienced teacher, asking for principal's advice, or trying new thing are some actions mentioned to deal with any difficulty. • Both experienced and new (inexperienced) teacher demonstrated an initiative action to do learn new things.	
Others	• Living for years with low salary and benefit in disadvantaged area, the experienced teachers demonstrate a high level of commitment in teaching the disadvantaged students.	• All respondents mentioned that they receive a low salary. To deal with living cost, many of them have a side job. Thus, they have not sufficient time to learn new things or even to do preparation before teaching. This put them in dilemma.

5.1.2 How are newly learned knowledge and/or skills enacted in classroom practices?

The findings on this question were gathered in the form of the perceptions of the respondents towards the changes in teaching practices and classroom environment as the result of teacher learning. The enactment of newly learned knowledge/skills was also studied through an observation on a science class when a teacher attempted to enact the newly learned knowledge/skill on PowerPoint. Table 5.2 summarizes both supporting and hindering findings for an enactment of changes in the classroom practices.

Table 5.2 Summary of findings on classroom practices

Factors	Supporting	Hindering
Teaching equipment	• To support their teaching practices, the teachers are willing and creative to provide themselves with a self-made teaching tool.	• Teaching equipment is not sufficiently available. The only teaching tool that teachers always have with them is the modified RPP • The use of books and media are limited; taking the books and media every time teacher needs is too much effort. • Some essential things in classroom, such as blackboard, student chair and table, are broken. • Most of respondent showed a "you don't know what you don't know" phenomenon by saying that all things school provided are sufficient for their teaching
Student characteristics		• Papuan students in schools were reported to have low performance in academic achievement • The students also perform low motivation because they gained low support from parents/families • Most of the students cannot afford school text books. • They tend to be reluctant to new things/changes
Coaching/supervision	• On-going coaching is available for teachers. They can come to the principle or colleagues for help in the form of every day interactions.	• Supervision is rarely scheduled. • Supervisions are mostly conducted as an inspection of teacher's administrative teaching tools
Feedback	• The teachers demonstrate a positive attitude in response to any feedback given. • The teachers are willing to improve their teaching based on the feedback provided.	

Factors	Supporting	Hindering
	• The teachers mentioned that they perceive the feedbacks from many resources: the colleagues, the principal, the parents, and also the students	
Teaching approaches	• The teachers demonstrate a creative teaching by doing trial and error to find the best suited method. • To deal with the student characteristics, teachers are taking role as parents and apply a parental teaching at school.	• Teaching activity in the classroom tend to be a teacher-centred approach.
Others	• Many primary teachers give an extra lesson for free every Saturday (off-day) to help the slow learners. Their voluntarily works are fully demonstrated from this routine activity.	• Budget for new or better equipment is very limited, especially for secondary schools which still fully relies on YPP fund. • Concerning the limited budget of schools, the majority of respondents (both primary and secondary teachers) tend to show reticent behaviour. The most mentioned reason for this inferiority is that they feel sorry for schools' lack of finance.

5.1.3 What role did the school and organization perform in supporting and/or hindering the implementation of KKG/MGMP program?

The findings on this question were also gathered in the form of the perceptions of the respondents as well as the observation data on school daily activities. The role of the schools and organization in supporting and/or hindering the implementation of TPD is shown by Table 5.3.

Table 5.3 Summary of findings on school and YPP environment

Factors	Supporting	Hindering
Facilities	• Schools and dormitories buildings are nearby (one neighbourhood) • The use of laboratories are shared among secondary teachers	• The insufficient room and equipment for science laboratory • Library's collections are in an insufficient number and out-dated content.

Factors	Supporting	Hindering
	• Indoor (basketball) and outdoor (volleyball) field are available in a good condition and shared among YPP schools.	
Management	• YPP is always willing to help its schools to do recruitment • Primary teachers initiated an idea to have "koperasi sekolah". This idea can support their needs without any contribution from YPP.	• Teacher turnover is considered high because of several reasons. The low salary becomes the most mentioned possible reason for teacher's resignation. Other is because YPP has no specific regulation related to teachers who pursue the higher education. After being graduated they do not have to back to YPP schools. • YPP funding resources are not stabile every month; it depends on donators.
Leadership	• The principals provide full support concerning teachers' participation in KKG/MGMP meeting. Rescheduling the lesson is one of support given to the teachers assigned to leave the school. • All principals show their positive perception on changes and teacher learning. • The principals and the YPP leader demonstrated their role as the main motivators for teachers. • The leaders also perceived themselves as the role model for the teachers.	
Community	• A teachers meeting is available for teachers to discuss and prepare things before the first day of school started. • The interactions can take place not only at schools but also at home. Through sharing and discussion the teachers learn about many things, such as teaching practices, students' attitude, new school policy, and rescheduling.	• Some teacher pointed out that the teacher meetings they experienced during a school year, except the preparation meeting, are mostly focused on school events or students behaviour; not directly to improve teachers' professional ability • One of respondents stated that sometimes teaching difficulty emerges because private life or

Factors	Supporting	Hindering
	• A new school-wide program, as a professional support for secondary teachers, was initiated by the principal. In this school-wide MGMP, there are several groups of teacher. Each group consists of teachers of cognate subjects (Physics, Biology, and Chemistry as one group).	personal problem is brought to working life at schools. A privacy issue may influences teachers' professionalism. • The minimum number of KKG/MGMP meeting (only once a year) is considered to be insufficient for teacher professional development.
Others		• The new regulation of dorm management has raised another problem with regard to students' psychological development. Teachers found that lowest aged students often be mistreated and experience a wrong model from their mates in dormitory, the higher aged students. • School-YPP relationship There is almost no involvement in school operationalization. • The YPP leader admitted that YPP is not professionally managed. There is no written document plan available for an implementation or an evaluation process. The function of education coordinator in YPP is also reported not effective.
	• Spiritual basis of YPP community Christianity became the ground values/foundation of many decision and management approach towards many issues including the schools and teachers. A good thing is this spiritual basis lead to one vision and generates a togetherness of its members (the teachers) to serve Papuan people. However, this spiritual basis also inhibits the professionalism at the schools. The relationships among members are often biased in distinction between personal and professional interactions. For instance, the leaders and principals tend to be too "kind-hearted" and choose not to criticize the teachers straight to the point.	

5.2 Discussion and Conclusion

The aim of this study is to identify factors that may influence the implementation of current TPD program (KKG/MGMP) in rural (YPP) schools in teacher personal domain, classroom practices, and school/YPP environment. From the interviews, FGDs, and observation conducted during one of KKG meetings, it can be concluded the current TPD program (KKG/MGMP) has a minimum contribution to professional development in YPP schools. Irrelevant content of a KKG meeting and 'questions-making' MGMP activities together with incompetent tutors are definitely fail to meet teachers' learning needs. According to Fullan (2007), the irrelevant content of KKG/MGMP meetings is the factors that would make the program fail to make an impact. Thus, from the findings, the KKG/MGMP can be considered to have a low effectiveness on building YPP teachers' capacity. Since the teachers get very low benefit from the KKG/MGMP meetings, the findings from this study indicate that as an adult learner, the YPP teacher develop their knowledge, beliefs, and attitude from their personal learning and experiences. Those self-inquiry based activities are continuing and embedded in teachers' daily life (Desimone, 2011). Thus, the YPP teachers can be considered to practice long life learning through their personal TPD activities.

In line with previous studies on TPD program in rural schools (Bansilal & Rosenberg, 2011; Beswick & Jones, 2011), a lack of teaching equipment is the biggest problem for changes in classroom practices in YPP schools. In this study, this difficulty is often mentioned, by the majority of respondents during the interviews and FGD, as the result of the lack of fund of schools. Consequently, the newly learned knowledge/skill or do changes in classroom environment cannot be enacted immediately as teachers' desire. This factor obviously can demotivate teachers who want to apply his/her knowledge/skill as soon as (s)he returned back to the school from any TPD activities.

Nevertheless, from the observation it is found that a good interaction between principal and teachers, and a collegiality among teachers provide support for teachers to do changes in their teaching practices, even for a small change. According to T.R. Guskey (2003), small changes were valued in disadvantaged schools. Coaching, supervision, feedback, sharing about teaching approaches and how to deal with student characteristic are several positive experience in the enactment of changes in the classroom. Moreover, from the findings, it is found also that none of the teachers mentioned any complaint about the class size they taught. It may because the number of students (25 students on average) (see Appendix M) is still not too many compared to other rural settings (Bansilal & Rosenberg, 2011; H. Raval, 2010).

Furthermore, the findings from this study show that there is almost no involvement of YPP in school activities. Although there is an interrelated relationship between schools and YPP, the responsibility on school operationalization fully belongs to the principals. Fullan (2007) stated that the "effective" principals caused teachers' work to improve; therefore, not surprisingly, with less contribution and not-professional management of YPP, the schools still run quite well. The high commitment and responsibility from principals and teachers become the most supporting factors. Additionally, in a wider scope, the YPP community also provides a good collegiality for the teachers; therefore, the sense of belonging and togetherness motivate the teachers to perform well. According to Borko (2004), strong professional communities can foster teacher learning practices. Therefore, a new idea of having a school-wide MGMP forum in secondary schools can be considered to be a professional learning community for secondary teachers.

The main research question of this study is "With the goal of implementing an effective and sustained TPD in Indonesian rural schools, what factors are influencing the implementation of KKG/MGMP program in YPP

schools?" Thus, to answer the main research questions, investigated factors in the three levels: Teacher personal domain, classroom practices, and school/organizational environment. Overall, it can be concluded that KKG/MGMP is not effective in YPP schools. It is found that most of supporting factors on TPD are not generated from the presence of TPD program in the schools. The capacity building on teachers resulted by YPP teachers' individual effort, not by the intervention given by KKG/MGMP.

Many factors have been dealt in the YPP schools, namely commitment, creative and parental teaching, provision of extra lesson, reflective/learning practices, positive attitude, on-going coaching, good leadership, and a supporting community. Meanwhile, for the effectiveness and sustainability of TPD programs, the following factors should be taken into careful consideration and improved better: teachers' learning needs, insufficient teaching equipment, limited facilities, low salary, rare supervision, high teacher turnover, lack of fund, reticent behavior, and low organizational professionalism.

5.3 Recommendations

This section provides several recommendations derived from the findings and discussion above. The recommendations are the constructive ideas to improve the current TPD program (KKG/MGMP) and the next program in the future. All stakeholders will be included in this part. The recommendation for further study is also provided.

5.3.1 For teachers

- For a better improvement in personal learning teachers could develop well-documented reflective practices, as their learning trajectories. The documents can be a reference in teacher meeting, preparation time, and other learning experiences.
- To deal with limited budget, teachers should be more aware of teaching tools needed in the classroom; then, teacher could list and propose them for the next school year.

5.3.2 For schools

- To deal with teachers' reticent behaviour, the principals could actively observe and ask the teachers about teaching equipment required.
- Principals could provide teacher forum in form of school-wide KKG and school-wide MGMP as a professional learning community.
- A schedule for teacher meeting is needed. In this meeting, all material gained from previous KKG/MGMP meeting, such as action class research and how to make teaching tools, is shared to all teachers to equally build teachers' capacity.
- As the school-wide KKG/MGMP established, subsequently, teaching modules to provide alternative ways to bridge the gap between materials in TPD meetings and teachers need could be developed.
- Together with YPP support, a school could organize a field-study to another advanced school. By having field study, the teachers will "know what should to know" opposed to "you don't know what you don't know" phenomenon.
- Create events to get parent involved in school activities, to gradually transfer the value of the importance of schooling as well as to increase students' motivation.

5.3.3 For YPP (PESAT Foundation)

- It is expected that YPP could manage an increase in teachers' salary to support teachers' daily lives and to avoid teacher turnover.
- With its wide networks YPP can support TPD at its schools by providing an external expertise to focus on the improvement of teachers' ability. This person could also be a bridge between YPP and school as well as strengthen the relationship between YPP and its schools.

5.3.4 For Education district office at Nabire

- The education office could build better accountability system for KKG/MGMP at the district. It is expected to be more directly involved during KKG/MGMP meetings to have better understanding of how well the meeting preparation is and how prepared the tutors are. The administrative report of the meeting cannot fully be reliable.
- The supervisions conducted by the education offices to schools are needed to be managed. The inspection of the availability of teaching tools should be treated as a part of supervision, not the main activity.

5.3.5 For further study

- The current study provides new questions that can be used for further research. The findings show that the current TPD program (KKG/MGMP) has less contribution to teachers' capacity building. The lack of competence of tutors and irrelevant content are the most mentioned reasons. A research which informs the design of capacity building for teachers in rural school possibly with the collaboration with government (education office) is can be valuable to understand the developmental process of teacher learning.
- A further study could also to quantitatively evaluate the factors investigated in this study. A survey to measure teacher's CPK (content-pedagogical knowledge), a retention test to measure the outcomes from the activities, and a review of lesson plan (RPP) produced by the teachers participating in a KKG/MGMP meeting/workshop can be several quantitative methods employed.
- Experimental tests for different TPD design that examine the impact on student achievement could also conducted to obtain the most robust conclusions about what makes TPD program effective.

5.4 Scientific relevance

The current study is to explore the influential factors of the implementation of TPD programs (KKG/MGMP) in terms of understanding the schools as well as the organization YPP in rural context of Nabire. The current study also identifies several new factors from the findings that contribute to develop theoretical propositions of implementation of TPD in rural school. Several factors as influential factors that may support and/or hinder the implementation of TPD program are the lack of fund, reticent behaviour among teachers, a low organizational professionalism in school/organization YPP, high commitment, the practice of creative and parental teaching, and a high willingness of teachers in rural schools to provide extra lesson in their day off.

Furthermore, this study is unique regarding the composition of the teachers since the majority of teachers are from other islands. This study reveals that this composition very interesting for Nabire settings where teachers are highly motived cultural strangers and the learners are less motivated. These special characteristics of teachers and students definitely allow small changes conducted to be valued. It also provides us with rich evidence regarding the disadvantaged context of the implementation of TPD

program in rural area. This study informs immediate practice for teachers, schools (principals), organization YPP, and education district office at Nabire by providing empirical evidence about the supporting and hindering factors. The current study also informs the educational decision maker at national level possible interventions which could be continued, new opportunities as well as potential threats of the implementation of TPD programs in disadvantaged settings.

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Appendix A: Interview guide for teachers

1. Name of teacher :
2. Age:
3. Educational Qualification:
4. Teaching experience:
   a) At Nabire :
   b) Elsewhere (if applicable) :
5. What subject do you teach now?
6. What are your reasons for working as a teacher in Nabire?

For assessing teachers' learning needs and expectations

7. What are the aspects that you like about
   a) your teaching tasks?
   b) your work environment?
8. What are the aspects that you find difficult about
   a) your teaching tasks?
   b) your work environment?
9. What are the aspects in which you require professional support?

Perceptions and experience of KKG/MGMP programs

10. How do you think you have benefited from KKG/MGMP programs?
11. What do you think are some dis-benefits of KKG/MGMP?
12. Do you think the content learnt in KKG/MGMP relevant?
13. During KKG/MGMP sessions:
    a. What aspects were difficult for you?
    b. What aspects were easy for you?

Perceptions about participation in KKG/MGMP programs:

14. What are organization supports to enable teachers to participate?
15. What are school supports to enable teachers to participate?
16. What do you think are some difficulties (hindering factors) to participate?

Perceptions about enactment of newly knowledge/skills in classroom:

17. What knowledge or skills have you learnt are new for your teaching practices?
18. Do you think your teaching practices have changed? What are some of the changes?
19. Do you think your classroom environment has changed? What are some of the changes?
20. What are changes in student achievement as new practices applied?
21. Do you get any school support to apply newly knowledge/skills? What are some of the support?
22. Do you get any assistance during lesson preparation or enactment in classrooms? How has it given to you?
23. Do you get any feedback and supervision after the enactment? How was your enactment evaluated?

Perceptions about sustainability of teacher professional development

24. Do you think your teaching attitude has changed? What are some of the changes? *– to assess changes in teacher attitude*
25. Do you think it is necessary to have continuous changes in your teaching practices? Why? *– to assess changes in teacher attitude towards continuous TPD*

Perceptions about challenges and opportunities for an effective and sustained TPD program

26. What do you think are hindering factors to continue doing the recent changes you made?
27. Are there any possible things can be done by teachers to improve their professional and personal learning? What are they?
28. What do you think are possible things to be done by school or YPP to improve teachers' learning? – *to know things (school program, meeting, etc.) which are not done yet.*

What do you think are possible things to be provided by school or YPP to improve teachers' learn

Appendix B: Interview guide for school principals

1. Name of Principal
2. Age:
3. Educational Qualification:
4. Teaching experience:
   a) At Nabire :
   b) Elsewhere (if applicable) :
5. Leadership experience:
   a) at Nabire :
   b) Elsewhere (if applicable):
6. What according to you is the main value of work in rural schools like YPP's school?
7. What are your current responsibilities as a principal?

Perceptions about teacher professional development
8. What are the aspects that you like about TPD?
9. What are the aspects that you find difficult about TPD?
10. What do you think are the aspects in which teachers require professional support?
11. What kind of activities do you / management undertake to support teachers in their work?

Perceptions about KKG/MGMP programs
12. How do you think teachers have benefited from KKG/MGMP programs?
13. What do you think are some dis-benefits of KKG/MGMP for teachers?
14. Do you think the content learnt in KKG/MGMP relevant for teachers?

Perceptions about teachers' participation in KKG/MGMP programs:
15. What are organization supports to enable teachers to participate?
16. What are school supports to enable teachers to participate?
17. What do you think are some difficulties (hindering factors) for teachers to participate?

Perceptions about teachers' enactment of newly knowledge/skills in classroom:
18. Do you think newly practices have been enacted by teachers in classroom? What are some of them?
19. Do you provide any school support to teachers for applying newly knowledge/skills? What are some of the support?
20. Do you provide any assistance during lesson preparation or enactment in classrooms? How has it given by you?
21. Do you give any feedback or supervision after the enactment? How was the enactment evaluated?

Perceptions about sustainability of teacher professional development
22. Do you think it is necessary to have continuous changes in classroom practices? Why?
23. Do you think newly knowledge and skills have continuously integrated in teaching practices? What are they? *– to assess changes in teaching practices*

Perceptions about challenges and opportunities for an effective and sustained TPD program

24. What do you think are hindering factors to continue doing the recent changes TPD made?
25. Are there any possible things can be done by teachers to improve their professional and personal learning? What are they?
26. What do you think are possible things to be done by school or YPP to improve teachers' learning? – *to know things (school program, meeting, etc.) which are not done yet.*
27. What do you think are possible things to be provided by school or YPP to improve teachers' learning? – *to know things (material, equipment, technology, policy, etc). which are not there yet.*

Appendix C: Interview guide for YPP staffs

1. Name of YPP staff:
2. Age:
3. Educational Qualification:
4. Working experience:
   a) At Nabire :
   b) Elsewhere (if applicable) :
5. What according to you is the main value of work in rural schools?
6. What are your current responsibilities as a staff in YPP?

Perceptions about teacher professional development
7. What do you think are the aspects in which teachers require professional support?
8. How do you think teachers have benefited from teacher professional development programs?
9. What do you think are some dis-benefits of KKG/MGMP for teachers?
10. What kind of activities do you / government undertake to support teachers in their work?
11. Do you provide sufficient time to support teacher professional learning? How?

Perceptions about KKG/MGMP programs
12. What do you know about KKG/MGMP programs?
13. Do you think the KKG/MGMP relevant as teacher professional development program?

Perceptions about teachers' participation in KKG/MGMP programs
14. Do you actively support and encourage teachers to take part?
15. What are organization supports to enable teachers to participate?
16. What do you think are some difficulties (hindering factors) for teachers to participate?

Perceptions about teachers' enactment of newly knowledge/skills in classroom:
17. Do you think newly practices have been enacted by teachers in classroom? What are some of them?
18. Do you provide any organizational support to teachers for applying newly knowledge/skills? What are some of the support?
19. Do you give any feedback or supervision after the enactment? How was the enactment in school evaluated by YPP?

Perceptions about sustainability of teacher professional development
20. Do you think it is necessary to have continuous changes in classroom practices? Why?
21. Do you think newly knowledge and skills have continuously integrated in teaching practices? What are they? *– to assess changes in teaching practices*

Perceptions about challenges and opportunities for an effective and sustained TPD program
22. What do you think are hindering factors to continue doing the recent changes TPD made?
23. Are there any possible things can be done by teachers to improve their professional and personal learning? What are they?
24. What do you think are possible things to be done by school or YPP to improve teachers' learning? – *to know things (MoEC program, meeting, etc.) which are not done yet.*
25. What do you think are possible things to be provided by school or YPP to improve teachers' learning? – *to know things (material, equipment, technology, policy, etc). which are not there yet.*

Appendix D: Focus group discussion objectives for teachers

<u>FGD Questions</u>

1. **How are KKG and MGMP implemented in YPP's schools?**

   - *Participation → adoption into practices → continuous changes*
   - *support gained from YPP/school*
   - *hindering factors to participate*

2. **What are potential factors for the implementation of an effective and sustainable KKG and MGMP in YPP's schools?**

   - *challenges for the continuity (how to deal with these?)*
   - *opportunities for the better implementation (things can be done/ provided by teachers/school/YPP)*

Appendix E: Cohen's Kappa result (Inter-rater reliability)

The result of Cohen's measurement by using SPSS

difference

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	-2	5	4,1	4,1	4,1
	-1	6	4,9	4,9	9,0
	0	98	80,3	80,3	89,3
	1	6	4,9	4,9	94,3
	2	7	5,7	5,7	100,0
	Total	122	100,0	100,0	

Symmetric Measures

		Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Measure of Agreement	Kappa	,691	,056	10,566	,000
N of Valid Cases		122			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Appendix F: Final list of categories system

Example(s) of statements	Code(s)	Categories	Themes
YPP built the schools. That's the important contribution of YPP to schools. (Y1)	School building	Facilities	**School/YPP environment**
Government built language laboratories in this school as their appreciation of what we do so far. (ST10)	Laboratories		
Library is available, all books are collected there. (ST10)	Library		
We have two sport fields: indoor and outdoor. (ST9)	Sport field		
There is no strict rule to deal with teacher resignation in the mid of school year. (P2)	Regulation	Management	
We can support the school with "koperasi sekolah" (ST2)	Funding resources		
Almost every year there must be someone leaving; we should recruit new teachers. (ST7)	Teacher turnover		
If a teacher should leave for KKG meeting, I will ask the curriculum department to reschedule his/her teaching session. (P1)	Schedule		
We teach for a day at school and continue the job at dormitory; we often feel so tired. (NT3)	Workload		
Teacher must learn. Once (s)he stops learning, (s)he can't do teaching well. (Y1)	Perception of teacher learning	Leadership	
If a teacher asks my help, then I will look for the book or the solutions. (P3)	Principal's help		
We motivate the teacher that they have special potential and talent in teaching. (Y1) We appreciate the teachers by giving them motivations continuously. (P1)	Motivation		
I am the one who decides and assigns teachers to participate in MGMP meeting. (P2)	Decision		
…we met on July 2011, there are five topics delivered and discussed with the teachers. (P2)	Teacher meeting	Community	
I went to my colleague's house and discuss my teaching problem. (ST5)	Discussion		
We often share our experiences each other during our "piket" shift. (ST7)	Sharing		
I love our togetherness; we can learn and help from one another. (ST4)	Community		
IN KKG/MGMP we can meet teachers from other schools. We may hear many experiences that can be helpful. (ST7)	Learning experience in KKG/MGMP		

Example(s) of statements	Code(s)	Categories	Themes
Our primary students are changing since they moved to live with the older students. We don't like the new dorm arrangement. (P1)	dorm management	Other	
YPP is only the facilitator. All decisions are principals' responsibility. (Y1)	school-YPP relationship		
Education program of YPP is unclear. We don't know where the path that we should follow. (ST2)	YPP professionalism		
The professionalism is biased by the close relationship. We can't criticize others; we "have to be kindhearted". (ST3)	spiritual basis		
I asked my friend in Jakarta to send me books of games activity in English. (ST10)	Books	Teaching equipment	Classroom practices
I used in-focus for my science lesson yesterday. It is always available in principal's room. (ST5)	Multimedia		
I have to prepare the tools at home. Not every tools I need are provided in class. (NT2)	Limited tools		
Mostly, our students have a low ability to achieve the materials. (ST7)	Students' ability	Student characteristics	
They can't afford text books. (P3) They are not cooperative… (NT4)	Students' socio economic background		
They need support because they have very low motivation to study. (ST10)	Student's motivation		
The parents have no opportunity to be educated and show little support. Thus, the students don't think this schooling issue is also important for them. (ST10)	Parents support		
When I want to do new things, I quite often ask for principal's approval. (NT5)	Asking for approval	Coaching and supervision	
At my first year, I got my first example of RPP from our principal. (ST9)	Gaining help		
I'm rarely supervised. When a government officer comes, they only come to check my RPP. (ST9)	Supervision		
The feedback is given to teachers after the teaching session in principal room. (P2)	Feedback	Feedback	
I am glad if my senior colleague provides me some suggestion about my teaching. (NT4)	Suggestion		
When I have difficulty in my teaching, I try to get as many advices as possible. (ST5)	Advice		
I saw a class with cooking activities in English session. They did conversation in English during that fun activity. (P2)	Creative teaching	Teaching approaches	

Example(s) of statements	Code(s)	Categories	Themes
There is a lot of learning methods, but I have to do trial and error to find the most suitable one with students here. (P3)	Trial and error		
In classroom I practice class action research to get better understanding on students' learning preference, ability, and attitude. (ST8)	Class action research		
I like interactions in our schools. We are not only the teachers, but also we have the parenting role as well. There is personal bond built in here. (P2)	Parental teaching		
RPP resulted from MGMP meeting is modified based on school context.(ST11)	Contextual lesson		
It is our initiative to help students. We always the slow learners to come to school every Saturday. (NT1)	Extra lesson	Other	
If teacher initiatively ask for any stuff, the school must do its best to provide it. (ST10)	Limited budget for teaching equipment		
I don't have any courage to ask for any additional books I need. I feel sorry for schools' limited fund. (ST7)	Reticent behavior		
I really want to know specific methods for Papuan children. They tend to be uncooperative and rebellious. (NT4)	Teacher wants to know…	Learning needs	Teacher personal domain
The focus in the (MGMP) meeting was only about to make questions for exams. I do want to learn new things, but… (NT3)	Knowledge gap		
We need more training for teachers… (ST1)	Teachers want to have…		
I don't have teaching experience before. (NT5)	No sufficient experience		
To be beneficial, the tutor of KKG/MGMP should be competent in the topic (s)he talks about. Otherwise, they will get all participants confused and come back to school with nothing. (ST4)	Tutor competence		
Books are rarely available in Nabire. I always look for new books and other information when I went to Java in holiday season. (ST5)	Learning from media	Learning practices	
I gained knowledge and skills through trial and error. Experience has taught me many things, including teaching methods and suitable approaches to handle children with complex problem here in Papua. (ST10)	Learning from own experience		

Example(s) of statements	Code(s)	Categories	Themes
I observed my senior colleague to learn how to deliver the material. (NT4)	Learning from senior ' s teaching		
Every night I prepare myself at home. (ST6)	Teaching preparation at home		
…in Malang, the school organized a field study to one of schools there. We enjoyed it and learned much from teachers there. (ST5)	School visit		
I like to participate in KKG as long as the topic is beneficial for my learning and can be used for my teaching practices. (NT2)	Participation in KKG/MGMP		
For the first time, I got information about class action research from a meeting in education office. Then, I looked for the book to learn more, although it's not mandatory to be implemented in our school. From that book, I learn the function of the class action research and relate it to my students' attitude and ability. (ST8)	Initiative	Professional attitude	
Though I have many years in teaching experience, I still feel that I need to be improved. (ST1)	Want to be improved		
Usually, I solve my problem by myself. If I can't, then I will find another ways. (ST4)	Problem solving		
If I get confused, I ask for help form my colleague. (ST6)	Asking for help		
I never feel hesitate to ask questions to principal, colleagues, even to outsider who knows the solution for my teaching problem. (ST1)	Asking questions		
Henry taught me about PowerPoint. I have used it for my science class. (ST5)	Enthusiasm		
For me, my teaching experiences is a part of my learning. (NT5)	Teaching as learning		
Yes, a well-being influences teachers' motivation; their motivation affects their (personal) learning and, eventually, their teaching in the classroom. (P3)	Salary	Other	
As time goes by, the living needs and cost of family is increasing; a teacher must do something (for that). (ST2)	Dilemma		
Even though our salary is not sufficient, we can always share everything. There is a joy in this situation. Yes, we are living in the same boat. (P1)	Commitment		

Appendix G: List of respondents

Codes	Name	Status	Subject	Academic background	Teaching experience at school (year)
ST1	Melkias Aunalal	Teacher (PNS)	Social science	SPG (Teacher Education)	16
ST2	Johan Ernes Mahadur	Teacher	Mathematics	D3 (Theology)	9
ST3	Henry Tarumaselly	Teacher	Computer	D2 (Theology)	9
ST4	Luciana Loupatty	Teacher	Mathematics	S1 (Christian Teaching)	7
ST5	Hemus Kase	Teacher	Gr.2	S1 (Theology)	6
ST6	Susy Ernawaty	Teacher	Gr.2	D2 (Theology)	6
NT1	Herlina Panjaitan	Teacher	Gr.1	S1 (Theology)	4
NT2	Agustina	Teacher	Gr.1	D3 (Computer)	2
ST7	Gugu Nangaro	Teacher (PNS)	Language	S1 (Counseling)	16
ST8	Yulin Nangaro	Teacher (PNS)	History	S1 (History)	9
ST9	Engelberth Wiay	Teacher	Sport	--High School--	6
ST10	Stephanie	Teacher	English	S1 (English Literacy)	6
ST11	Ramijo	Teacher	Sport	S1 (Theology)	5
NT3	Yakobus Prasetyo	Teacher	Geography	S1 (Social Education)	2
NT4	Wahyuni	Teacher	Mathematics	S1 (Mathematic Education)	1
NT5	Ayu Nuridah	Teacher	Computer	S1 (Informatics)	1
P1	Yohanes Edy	SD Principal	-	S1 (Theology)	12
P2	Budi Santoso	SMP Principal	Social science	S1 (Administration)	7
P3	Hanna Widjaja	SMA Principal (PNS)	Biology	S1 (Biology)	16
Y1	Eliezer Edo	YPP Leader			
Y2	Revlin	Education coordinator (YPP staff)			

Appendix H: Observation guide 1

OBSERVATION GUIDE 1

How do YPP (primary) teachers experience personal learning through KKG meeting?

(Observation in a KKG meeting)

- topic(s)

- delivery methods

- the tutor(s):

- the participants:

- the process:

- the environment

Appendix I: Observation guide 2

OBSERVATION GUIDE 2

How are newly knowledge/skills (PowerPoint) enacted in science class?

(Observation in a science class (4th grade of primary school))

- Subject: Science

- Learning objectives:

- Teacher's practices

  -interaction with students:

  -teacher's assistance provision:

  -teaching approach used:

- Students' engagement:

Appendix J: Observation guide 3

OBSERVATION GUIDE 3

How are school and YPP environment supporting and/or hindering the implementation of TPD program?

(Observation at schools and dormitories neighborhood)

- Interaction

    -teacher-teacher:

    -teacher-student:

    -teacher – principal:

    -teacher -YPP leader:

- Daily activities:
    - In dormitories:

    - At school(s):

Appendix K: Data of school inventory

List of schools' inventory

Primary school (SD)			
Items	**Good**	**Broken**	**Total**
Student chairs	252	13	265
Student tables	164	30	194
Blackboards	3	10	13
Book shelf	9	3	12
PC/computers	9	5	14
Typing machine	1	1	2
Secondary schools (SMP/SMA)			
Items	**Good**	**Broken**	**Total**
Student chairs	338	-	338
Student tables	338	-	338
Whiteboards	14	-	14
PC/computers	46	3	49
Photocopy machine	1	-	1

Appendix L: Teacher status in Indonesia

<u>TEACHER STATUS</u>

In general in Indonesia

There are two types of teacher status in Indonesia, namely PNS (Pegawai Negeri Sipil) and non-PNS. The PNS teachers are civil servants and usually working at a public school, while the non-PNS teachers are in private schools. The PNS teachers receive their salary from the government, while the non-PNS teachers receive only from the school.

It is commonly believed that the combination of salary and additional benefits that come with being a PNS have led many people to prefer being a PNS and teach at a public school, rather than teaching at a private school. Being a PNS also provides access to extra benefits, such as health care insurance (*Asuransi Kesehatan* or *Askes*), pension (*Pensiun*), and several more benefits both for the PNS teacher and his/her family. PNS teachers in rural schools are considered to be more prosperous, even compared with PNS teacher in more advanced areas, because of the huge additional allowance from government for working in a remote area.

At YPP schools

The majority of YPP teachers are from outside Papua. Their first coming to Nabire is mostly because they want to have temporarily work as volunteers. Later, they decided to stay longer and become a permanent teacher in YPP schools. However, most of them are not from teacher education. Some have higher education background, as follows:
D1 is equal to a completion of one year in higher education
D2 is equal to a completion of two years in higher education
D3 is equal to a completion of three years in higher education
S1 is equal to bachelor degree (four years in university)
S2 is for graduated students from Master program

The non-PNS teacher has monthly salary about Rp150,000.00 equal to 13 Euro (kurs 1Euro=Rp12,000.00)

To support their lives, most of YPP teachers have a job side. The job sides can be one of the following job-sides:

- Private teachers (after school hours)
- Part time teacher at another private schools (during school hours)
- Business of home-made food
- Clowns and MC for children birthday party
- Farmer
- Fishery
- "Warung", a small shop taking space at a house

Appendix M: Statistics data of the number of students

Appendix The number of students and class size in past 5 years

Schools	2007/2008			2008/2009			2009/2010			2010/2011			2011/2012		
	NoS	NoC	AvS	NoS	NoC	AvS	NoS	NoC	AvS	NoS	NoC	AvS	NoS	NoC	AvS
(SD) Primary	**310**	**11**	**29**	**339**	**11**	**31**	**342**	**14**	**25**	**357**	**14**	**26**	**362**	**14**	**26**
SMP	*136*	*6*	*23*	*154*	*6*	*26*	*156*	*6*	*26*	*184*	*7*	*27*	*196*	*8*	*25*
SMA	*79*	*5*	*16*	*90*	*5*	*18*	*101*	*6*	*17*	*108*	*6*	*18*	*142*	*6*	*24*
Secondary	**215**	**11**	**20**	**244**	**11**	**23**	**257**	**12**	**22**	**292**	**13**	**23**	**338**	**14**	**25**

NoS = the number of students

NoC = the number of learning groups

AvS = the average number of student in a classroom (class size)

Appendix N: Teachers lists in primary schools

	Names	Status	Academic background		Grade/Subject(s)
1	Almin Arundaa		D3	Christian Education	Grade 3
2	Yohana Ririhatuella	PNS	High school	Sport	Sport
3	Dewi Irene Noviawaty	PNS	s1	Fishery	Science (grade 5-6)
4	Rachel Winarsih	PNS	s1	Archieves	Bahasa Indonesia (language)
5	Endang Wahyuningsih		s1	Theology	Grade 4
6	Penina Tanamal		D3	Christian Education	Grade 3
7	Olfi Punusingon		s1	Fishery	Grade 5
8	Johan Ernes Mahadur		High school		Mathematics (grade 5-6)
9	Henry Tarumaselly		D2	Theology	Computer
10	Stefanus Rendra		High school		Mathematics (grade 5-6)
11	Susi Ernawaty		D2	Theology	Grade 2
12	Luciana Luopatty		s1	Christian Education	Grade 4
13	Maria Sattu		s1	Theology	Civics
14	Hemus Kase		s1	Theology	Grade 2
15	Ruth Veronika Anny Ekawaty		D3	Secretary	
16	Elisabet Panjaitan	PNS	s1	Theology	Religion
17	Herlina Panjaitan		s1	Theology	Grade 1
18	Isye Lenora Wawoh		s1	English Literacy	English
19	Melkias Aunalal	PNS	High school	Teacher Education	Social science (grade 5-6)
20	Wengsi Pongkurung		s1	Sea science	Science (grade 5-6)
21	Dormince Waa	PNS	D2	Christian Education	Religion
22	Agustina		D3	Computer science	Grade 1

Note:

| the highlighted names indicate the native/local teachers
D1, D2, D3, S1, S2   (see Appendix L)

Appendix O: Teachers lists in secondary schools

	Names	Status	Academic background		Subject(s)
1	Budi Santoso		s1	State Administration	Social science
2	Gugu Rongko Jutje Nangaro	PNS	s1	Counselling	Bahasa Indonesia (language)
3	Yulin nangaro	PNS	s1	Teacher education-History	Civics
4	Rachel Winarsih	PNS	s1	Teacher education-Archives	Social science
5	Dewi Irene Noviawaty	PNS	s1	Veterinery	Science
6	Hersen Strauning	PNS	s1	Biology	Science
7	Umsanah	PNS	s1	Teacher education - Language	Bahasa Indonesia (language)
8	Engelbert Wiay		D3	Theology	Sport
9	Eni Kumalawati		s1	Teacher education - English Language	English
10	Billy Ardi Nugroho		s1	Informatics	ICT
11	Stephanie		s1	Teacher education - English Language	English
12	Ester Winarti		s1	Science	Mathematics
13	Ramijo, S.Th		s1	Theology	Religion & Sport
14	Denny Kristiono, S.Th		s1	Theology	Religion
15	Smirna Alfonsina Yenusi, S.IP		s1	Politics Science	Culture and Social science
16	Ernes Yohan Mahadur		High school		Mathematics
17	Wahyuni		High school		Mathematics
18	Citra P. Kusuma		s1	Teacher education - English Language	English
19	Yuliana Wulandari		s1	Teacher education - Physics	Science
20	Henny Sus Setyo Wardany		s1	Teacher education - Physics	Mathematics
21	Ephasari Pandiangan		s1	Teacher education - Language	Bahasa Indonesia (language)
22	Suharto		s1	Teacher education - Mathematics	Mathematics
23	Ester Winarti		s1	Science	Biology
24	Kristia Yuliawan		s2	Informatics	ICT
25	Julius Denny Ploii		s2	Accounting	Economy

26	Selma Mugu		s1	Social	Sociology
27	Y. Basuki Retno Riyanto		s1	Teacher education - English Language	Art
28	Hana S, Widjaja	PNS	s2	Science	Biology
29	Sebastian Degei	PNS	s1	Civics	Civics
30	Faren S. Wartanoy		s1	Sosiology	Sociology
31	Suryati Mangallo	PNS	s1	Teacher education - Chemistry	Chemistry
32	Yusuf	PNS	s2	Accounting	Economy
33	Ayu Nuridah		s1	Informatics	ICT
34	Jasmari		s2	Teacher education - Language	Bahasa Indonesia (language)
35	Secandzies Worabay	PNS	s2	Teacher education - Civics	Geography
36	Eko Setyo				(other) Foreign language

Note:

the highlighted names indicate the native/local teachers

D1, D2, D3, S1, S2   (see Appendix L)