Instructional Status of Teachers at Community of Practice in Thai Education Reform Period: Perspectives and Recommendations from Case study

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ABSTRACT

Community of Practice can be defined as a group of persons working together with an aim to exchange of information, to generate knowledge, to develop the expertise and to solve the problems on works. These characteristics conform to the Thai education reform policy that empowering teachers get a lesson learned at their school as community of practice. Also, driving they change and shift their practice to a total quality of school's learning. This article emphasizes the results of launching the community of practice approach in a school as case study. There are revealed that school has been established their community comprising a rule and activity based on sharing the 7E teaching technique for learning plan arrangement. As for teachers as practitioner, nevertheless, they get a good knowledge and skill of curriculum and instruction but they are lack of research skill. The educational agencies are their favorite. These agencies should act as the 'mentor' providing supports for those teachers in producing academic publication along with the instruction. The teachers believe that, by doing so, teachers' proficiency and experiences can then be developed and transferred into the knowledge for disseminating to others.

Keywords: community of practice, education reform, exchanging the information, generating the knowledge, developing the expertise, solving the problems on works.

1. INTRODUCTION

Networked Learning Group (NLG) is a tool for laying the foundation, supporting and researching Networked Learning Communities (NLCs). Further, patterns and dynamics of learning community tend to be unknown to most people [3] [7]; while, this particular matter is often reflected in the documents pertinent to learning community of private or business sector as the organizational structure or leadership [8]. This is different from the educational perspective in which patterns and dynamics of learning community are viewed as management practice or process or so-called "School-based Learning Community". However, there are several broad definitions of "learning community"; for example, learning community is a group of people who learn together. It can be a learning place, the culture of working collaboratively or knowledge management. Meanwhile, the adoption of the concept of learning community based on definition still has no thinking logic and interconnection. Also, there is unclear direction for the implementation of "Networked Learning Communities" [4] [5] [7] [8]. The works of NLCs is basis on the learning that relates to contextual and social process of practitioners. This results in the emergence of NLCs along with the development of teacher professional into teachers' learning based on the real practice in school. This leads eventually to teachers' learning community. In other words, school may be comparable to Community of Practice (CoP) for those instructors in which they are able to create and disseminate practice-based knowledge within school or among schools [1] [3] [5] [7].

The educational context in Thailand, there emphasize an action according to the education reform policy for developing an educational quality or students quality through training teachers, lecturers and staffs of educational institutions. Its aims to drive and shift the educational quality to better level, as well as to encourage the students become a smart learner [10]. These reflect that the teachers need to take an action in light of acquiring, creating and transferring their knowledge according to the community of practice approach. However, to gain that aims, schools need to advocate teachers to get a competence for developing a learning process of students. Thus, teachers must have time to work and learn together. There shift the traditional teacher development using training and disseminating an academic document to learning in their tasks.

Research Question: What is the instructional status of teachers at community of practice in Thai education reform period? and What should be the appropriate means to enhance the effectiveness of teachers' instruction?

Research's Objectives: (1) to investigate the instructional status of teachers at community of practice, chosen as case study and (2) to propose recommendations on the instructional status of teachers at Community of Practice

Theory and Instruction based on Community of Practice
Community of Practice theory plays an important role in the development of learning based on the society and culture. This theory has been developed by taking into account teachers' working conditions and their informal learning situations. It has been applied as a conceptual framework for investigating and seeking the understanding of teachers' instruction in different contexts [9]. This may include, for example, development of teacher professional and teachers' informal learning networks, etc. In addition, this particular theory has also been used as a direction and tool to support teachers' learning in school and Community of Practice. This may then encourage teachers to change their practice for the promotion of learning quality in school as a whole [1] [3] [4] [5] [7]. Consequently, Community of Practice theory has often been applied in the research related to the instruction in school for relevant analysis. Some researchers may use such theory to investigate and to seek the

understanding of teachers' instruction in one give classroom Practice for teachers. On the other hand, certain researchers may implement this theory in the exploration and understanding of teachers' instruction in several classrooms across the entire school. Those classrooms are also viewed as one Community of Practice for teachers. Despite the difference of scope between these two groups of researchers, their common objective is to seek the empirical data based on the performance in each classroom [1] [3] [4] [5] [6].

Community of Practice can be defined as a group of persons working together with an aim to exchange of information, to generate knowledge, to develop the expertise and to solve the problems on works. Group members are also willing to participate in activities and to have interaction among them throughout the whole development process of one given matter. In this regard, there are 4 categories of Community of Practice [2] : 1) Problem Solving Communities: it is found that most Community of Practice tends to face some sort of problems in performing works. The relevant solution is thus initiated through the gathering of experts and specialists from different fields. Members and heads of departments at Community of Practice may then enjoy diverse and efficient alternatives for problem solving; 2) Knowledge Sharing: principal works or activities at Community of Practice are to develop new knowledge for the improvement of its performance. The search, examination and gathering of knowledge are pursued; while the important ones to the performance have been disseminated to members in the Community of Practice. This results in the development of information exchange process with the emphasis on filling the gap of significant knowledge for members' performance at Community of Practice; 3) Better Practice Communities: the performance in this particular community is to develop, examine and disseminate the working process in one specific matter. Its works are on the basis of exchanging, sharing and learning about good practices among members in the community; and 4) Innovation Communities - it is possible that specialists in technical and professional fields may be the members of Community of Practice. Hence, seeking and creating new knowledge based on works performance are the specific aim of this particular community. An operating base may be established to facilitate rapid dissemination of concepts and works by each member.

For Community of Practice, learning is regarded as the process of change in light of the participation at Community of Practice ranging from trainee students, teachers and new personnel, those teachers in general, head of subject groups, administrators and specialists. In fact, there are some practitioners at Community of Practice; hence, the participation of new practitioners has to be permitted by the existing counterparts. The important characteristics of Community of Practice consist of 3 main elements: (1) to create members' mutual commitment, (2) to mutually pursue projects and activities by members, and (3) to exchange and share the responsible works among members. Specifically, the foundation of Community of Practice is that the members have collaboratively made the agreement. Also, frequent interactions among the members from any background are also central. The participation at Community of Practice is regarded not only as the learning for further action but also as a part of the performance for the accomplishment of expected goal. Those important characteristics of Community of Practice are detailed as follows [1] [3] [4] [5] [6] [7]:

To create members' mutual commitment: theoretically, this is the regulations for all members at Community of Practice to pay respect and to adhere while doing works. Such regulations are to ensure the security and safety for members or teachers in participating activities specified at because the classroom can be regarded as Community of Community of Practice. This means that, in doing works together, members should pay respect to each other and mutually confide, especially in light of the exchange of ideas during the course of work. In addition, all members should have personal responsibility and co-responsibility toward the whole picture of students' learning in the school too.

To mutually pursue projects and activities by members: theoretically, members of Community of Practice express their common views on what should be done, what should pay attention to, and what should not much attention to. Mutually-initiated projects/activities should respond to the satisfaction and induce the members or teachers to have regular participation. It is necessary that those things to be done need to be required by teachers or interesting to them. This is to allow teachers to learn about such things well and to have higher motivation to improve their own way of working. Additionally, the thing to be done should lead to the enhancement of teachers' instruction and students' accomplishment of desired learning outcomes with an emphasis on the development of continual learning of students.

To exchange and share the responsible works among members: in theory, it concerns the communications and dissemination of knowledge and experiences in practice among members at Community of Practice. In this process, the members or teachers should be able to search and connect the performance or good instruction with the promotion of students' learning process. Communication process or feedback from responsible works of each member or instructing teacher may contribute to the availability of metacognitive-learning activities at Community of Practice along with closer collaboration in works.

2. RESEARCH METHODS

This study is the combination of qualitative and quantitative research. The sample group includes one primary school (Semester 2, Academic Year 2010). The informants are administrators of educational institutions, head of academic affairs section and teachers (total of 10). The criteria for the selection of case study are the basis of (1) being primary school (2) being administrators or teachers who are willing to provide information and to participate in this research and (3) being the school with external assessment results at 'Good' level or higher. The data collection has been made in order to respond to the 2 objectives of this study. With respect to the first objective concerning the investigation of instructional status of teachers at Community of Practice, the following process has been pursued by the researcher: (1) to observe the instructions of teachers in school using observation forms (2) to have a focus group with teachers after the observation of each instruction using the minutes, and (3) to have a meeting with administrators, head of academic affairs section, teachers, and other teachers using minutes. For the second objective in proposing recommendations on the instructional status of teachers at Community of Practice, the researcher has had a focus group with teachers and a group of educational institution administrators using minutes. The data analysis is divided into 2 parts: (1) qualitative analysis of data by means of content analysis and (2) quantitative analysis of data using descriptive statistics: frequency, percentage, means, and standard deviation. Nonetheless, during the course of this research, a special meeting between the researcher (as the facilitator for the development of Community of Practice in school) and administrators and head of academic affairs section has been held. This is to clarify, gain the understanding and specify the

scope of Community of Practice in school. It is then agreed that mathematics teachers' Community of Practice for Grade 1, 3 and 6 (a total of 3 classes) has been developed in order to reflect the success of the development of Community of Practice with the focus on the enhancement of students' learning process in the initial, intermediate and final phases of their learning in school.

3. RESEARCH RESULTS

1. Instructional Status of Teachers at Community of Practice

The teachers of each class have attended the meeting with the researcher, administrators, head of academic affairs section and other teachers in order to clarify, to gain the understanding and formulate plans in performing works together within one semester. In this meeting, details of the performance according to the concept of Community of Practice have been formulated with an aim (1) to create members' mutual commitment; (2) to mutually pursue projects and activities by members; and (3) to exchange and share the responsible works among members. The details in figure 1 are as follows:
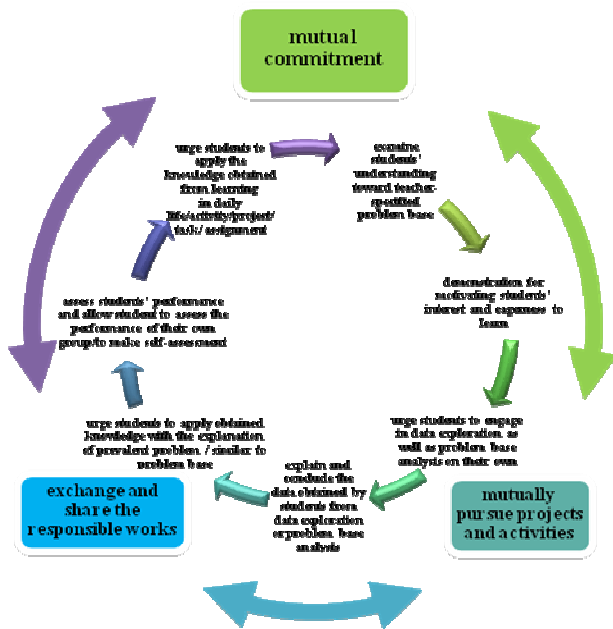

Figure 1 Teachers' framework in school as the community of practice

1. To create members' mutual commitment: it has been agreed in the meeting that general meeting between administrators and teachers would be held at the end of each month for 3 months (equivalent to 1 semester). Meanwhile, the focus group will also be arranged every 2 weeks (total of 6) between teachers and/or other teachers. In addition, there may be weekly focus group among teachers themselves (on necessity basis). Also, the teachers may be invited to attend, observe and assist their counterparts' instruction at least once or twice (on suitability basis) during the semester. The researcher, as the motivator for the development of Community of Practice in

school, has provided the supervision to the teachers at least 4 times (on suitability basis).

2. To mutually pursue projects and activities by members: The teachers' needs and the preparedness of school's strategies facilitating teachers to work efficiently at Community of Practice have been analyzed in the meeting. It is found that teachers need the development of students' learning process to promote their academic achievement. With respect to the preparedness of school's strategies supporting teachers, they include internal supervision strategies using clinic supervision. Then, there is also brainstorming session in the meeting to seek the directions of the instruction that support students' learning process. It is agreed in the meeting that the instruction based on 7E teaching technique should be the most suitable one for the development of students' learning process. Each instructing teacher has agreed in principle and will incorporate 7E teaching technique into learning plan arrangement.

3. To exchange and share the responsible works among members: initially, each instructing teacher is mutually responsible for learning plan arrangement based on 7E teaching technique, learning materials, and other specific details. He/she may also take some additional duties on the basis of appropriateness. Further, teachers may be invited to attend, observe and assist their counterparts' instruction at least once or twice according to their mutual agreements. Nonetheless, during the course of focus group and general meeting, the teachers have exchanged their ideas and engaged in the discussion in light of the development of students' continual learning process according to mutual agreement. They may discuss in such regard while having personal contact in their daily life as well.At Community of Practice in school, teachers need to develop students' learning process. In this regard, each teacher has agreed in principle and will incorporate 7E teaching technique into learning plan arrangement, especially those who teach mathematics for Grade 1, 3 and 6. The performance of each teacher's instruction can be summarized into the following strengths and weaknesses:

Mathematics teachers have 3 strengths, namely, (1) Teachers examine students' understanding toward teacher-specified problem base, (2) Teachers urge students to apply obtained knowledge with the explanation of prevalent problem that is similar to problem base, (3) Teachers assess students' performance and allow student to assess the performance of their own group/to make self-assessment. While the weaknesses are: Teachers urge students to apply the knowledge obtained from learning in daily life/activity/project/task/ assignment, respectively.

According to the results of focus group, meeting and document study. This research found that all teachers are knowledgeable and skillful in learner- centered instruction as well as capable to devise their own learning plans, to seek the information and to prepare learning sheets or material on their own. However, the teachers need to spend most of the time in a session to solve students' personal problems and lack of learning preparedness so it becomes difficult for teachers to conduct their instruction within the timeframe specified in learning plan. Meanwhile, they are also unskillful to do classroom action research for their academic publications. As more than half of students have poor readiness for learning, the teachers need to prepare certain supplementary classes for students with poor performance and the intensive tutorial sessions for those with good performance. School-level integrated activities are also introduced to develop assertiveness and public mind in caring for and helping out their classmates.
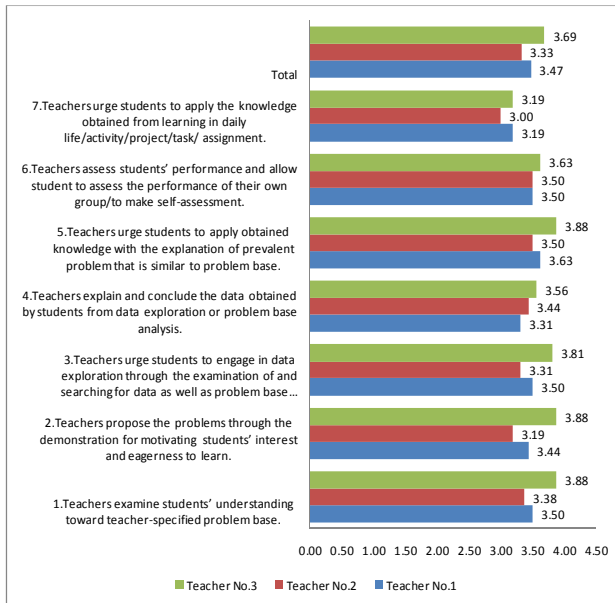
Figure 2 The performance of each teacher's instruction in school as the community of practice

2. Recommendations on the instructional status of teachers at Community of Practice

The focus group with teachers after the observation of each instruction and general meeting with the administrators, head of academic affairs section and other teachers during school monthly meeting, it is found that the data and instructional status of teachers can be divided into 3 important issues: curriculum and instructional plan, assessment and evaluation, as well as classroom action research and education professional development, respectively. The details of each issue can be summarized as follows:

With respect to curriculum and instructional plan, it is found that all teachers in the school have a participation in curriculum development as designated by administrators, especially those teachers responsible for that particular subject or supervising students in that given level. Therefore, the teachers have quite good understanding of Basic Education Curriculum B.E. 2551 (A.D. 2008) and curriculum of the educational institution. This leads to the good adoption into the formulation of learning plan for the instruction. Also, each instructing teacher searches and explores documents and Internet-based resources resulting in his/her ability to design activities, learning materials, knowledge sheets/supplementary documents to said learning plan relatively well. In this regard, the school has been awarded, last year, the provincial-level prize (Bangkok Metropolis Award) for its mathematics learning plan. Consequently, this may partly reflect the success attributable to the collaboration and mutual support among teachers, especially those teaching mathematics. However, limited budget is one problem in producing learning materials, and knowledge sheets/supplementary documents to the learning plan; hence, most teachers need to contribute their own expense to do so.

With regard to the assessment and evaluation, teachers have made a survey on students' preparedness for learning and found that 30-40 % of students in each class face some difficulties in light of their families and living status. The students need to work to support their individual families so some students may not have sufficient time to do their homework or to enjoy uninterrupted learning opportunity. The students may likely be illegible. Such problems also have an impact on mathematics instruction because students may learn mathematics in slower path than it should be. On the other hand, 60-70% of students have relatively good family readiness with parents' close attention on the learning of their children. As a result, all teachers take co-responsibility to conduct certain supplementary classes for students with poor performance and intensive tutorial sessions for those with good performance. Additionally, school-level activities have also been introduced in order to develop the assertiveness and public mind in caring for and helping out their classmates. This can be a way to reduce social inequity and gap for students. Despite the fact that teachers are knowledgeable and skillful in learner-based instruction and able to formulate learning plan and to seek data for their knowledge sheets and learning materials, teachers have to spend most of the time in a session to solve students' personal problems or lack of learning preparedness. Therefore, it may become difficult for teachers to pursue their instruction within specified timeframe and to conduct full assessment and evaluation as required by the learning plan. As a result, the provision of feedbacks on some subjects to students may delay, especially at the beginning of the semester.

With reference to classroom action research and education professional development, it is found that most teachers cannot conduct classroom action research for their academic publications due to the lack of research skills. All teachers agree that responsible agencies should act as the 'mentor' providing supports for those teachers in producing academic publication together with the instruction. The teachers believe that, by doing so, teachers' proficiency and experiences can then be developed and translated into the knowledge for disseminating to others; while, students' learning process and achievement can be enhanced efficiently.

According to such data and instructional status of those teachers, the recommendations on the instruction of teachers at Community of Practice have been agreed during the focus group between teachers and administrators of educational institutions. These can be summarized as follows:

Firstly, with respect to the curriculum and learning plan, teachers still face the difficulties to pursue their instruction in the real setting despite their knowledge and skill pertinent to the curriculum and instruction. In particular, the problem on the production of learning materials is attributable to the limited budget. The school should thus seek the collaboration from all social sectors in light of the budget for supporting the instruction. The internal and external learning sites should be created and developed in order to facilitate the instruction too. Meanwhile, shared use of certain learning materials should be promoted because it can be a way to alleviate budgetary limits and to systematically enhance the development of learning materials in the school as a whole.

Secondly, with reference to the assessment and evaluation, the teachers are unable to conduct full assessment and evaluation as required by the learning plan because they cannot pursue their instruction with specified timeframe. As a result, the provision of feedbacks on some subjects to students may delay. Since the teachers need to spend most of the time in a session to solve students' personal problem and lack of learning preparedness, the school should initially develop the academic camp or preparatory programs to systematically and continually prepare students in each semester. This is to reduce the burden of teachers in supervising and conducting the instruction in each class.

Thirdly, with regard to classroom action research and education professional development, most of teachers lack research skill to do classroom action research for their academic publications. They also need certain supports from external agencies. Consequently, the school should seek the collaboration with original affiliation, Educational Service Area Offices and local higher education institutions. The school may, for example, urge for the supports of senior experts or trainers from those agencies to provide training programs or to be the 'mentor' in assisting the teachers to conduct classroom action research. This can be a process that helps the teachers to achieve the expected goal of teacher professional learning. This means that the teachers have the potentials and capability to develop their proficiency and experiences and translated them into the knowledge for disseminating to others; while, students' learning process and achievement can be enhanced efficiently.

The summary of those are follows: With respect to the curriculum and learning plan, the school should thus seek the collaboration from all social sectors in light of the budget for supporting the instruction. The internal and external learning sites should be created and developed in order to facilitate the instruction too. Meanwhile, shared use of certain learning materials should be promoted because it can be a way to alleviate budgetary limits and to systematically enhance the development of learning materials in the school as a whole.

In light of the assessment and evaluation, the school should initially develop the academic camp or preparatory programs to systematically and continually prepare students in each semester. This is to reduce the burden of teachers in supervising and conducting the instruction in each class allowing them to be able to pursue the instruction within the timeframe specified in learning plan. Also, the assessment and evaluation can be completely made according said learning plan so the provision of feedbacks to students may become in more timely manner.

With regard to classroom action research and education professional development, the school should seek the collaboration with original affiliation, Educational Service Area Offices and local higher education institutions. The school may for example, urge for the supports of senior experts or trainers from those agencies to provide training programs or to be the 'mentor' in assisting the teachers to conduct classroom action research. The teachers may then enjoy a chance to broaden their knowledge and research skills as well as to accomplish the expected results of teacher professional learning.

4. DISCUSSION

According to this study and research results, there are 3 interesting issues to be discussed as follows: Firstly, with respect to the development of teachers' Community of Practice in the school, this research, in fact, concerns the instruction of the school based on the theory Community of Practice. Consequently, the instruction of teachers in different classrooms has been investigated in order to gain relevant understanding, especially mathematics class of Grade 1, 2 and 3, which are the case study explored in this particular research. As a result, one can say that these classrooms are teachers' Community of Practice or, in the other words, mathematics teachers' Community of Practice.

Mathematics teachers, as the core member of such Community of Practice, have engaged in the process for mutual analysis of projects/activities to be held at Community of Practice in this school. It is found that the teachers desire to develop students' learning process in order to enhance their learning achievement. This may imply that the teachers intend to promote not only the instruction of teachers but also expected learning achievement of students focusing on their continual learning development. Further, the teachers also agree that the instruction based on 7E teaching technique is the most suitable one for the development of students' learning process. As a result, each instructing teacher has agreed in principle to apply 7E teaching technique in formulating the learning plan. This may reflect the fact that Community of Practice in this school has pursued projects/activities, which are regarded as necessary and according to teachers' interest. Therefore, teachers are capable to perform well and encouraged to make certain changes for the improvement of their performance. This can be evidenced by gradual progress of individual teachers. One can claim hence that Community of Practice in this school is so-called 'Better Practice Communities'. That is to say that the development, inspection, and dissemination of a process for one specific matter have been pursued on the basis of sharing and learning on good practices among members themselves.

Secondly, with regard to the instructional status of teachers at Community of Practice in the school, 3 prominent points of mathematics teachers are found. The first one is that the teachers has presents the problem base through the demonstration in order that students can observe and attempt to explain the reasons or principles of the prevalent problem base. The next one is that teachers provide helps, advices and answers for the answers raised by students during data exploration or problem base analysis. The last one is that the teachers have assessed students' performance during the course of the class in order to track their progress. In this regard, it can be argued that these 3 action items of teachers may be an indicator identifying the success of the improvement of the instruction of teachers and of students' expected learning achievement based on students' continual learning development. However, the teachers may also have certain points in which the improvement is needed. This means that the teachers should allow students some time to explain about the results from activities/project/task/assignment conducted by them and to make relevant conclusions. This may indicate that the time allotted for the instruction of teachers may likely insufficient to permit students to do so. This is due to the fact that the teachers need to spend most of the time in a session to solve students' personal problems and lack of learning preparedness so it becomes difficult for teachers to conduct their instruction within the timeframe specified in learning plan. Besides, they are unable to conduct the assessment and evaluation as required by the learning plan. As a result, the provision of feedbacks on some subjects to students may delay, especially at the beginning of the semester.

Thirdly, with reference to the perspective and recommendations on the instruction of teachers at Community of Practice in the school, this research has revealed in light of the curriculum and learning plan. This means that the school should seek the collaboration from all social sectors in light of the budget for supporting the instruction. The internal and external learning sites should be created and developed in order to facilitate the instruction too. Meanwhile, shared use of certain learning materials should be promoted because it can be a way to alleviate budgetary limits and to systematically enhance the development of learning materials in the school as a whole. This finding may reflect the fact that the budget is an important influential factor to the development and steering of Community of Practice in efficient manner. For the research findings regarding the assessment and evaluation, the school should initially develop the academic camp or preparatory programs to systematically and continually prepare students in each semester. This is to reduce the burden of teachers in supervising and conducting the instruction in each class allowing them to be able to pursue the instruction within the timeframe specified in

learning plan. Also, the assessment and evaluation can be completely made according said learning plan so the provision of feedbacks to students may become in more timely manner. All these may reflect the fact that the potentials and preparedness of students are the important influential factor to the efficiency of the teachers' instruction at Community of Practice. Moreover, in light of the research findings on classroom action research and education professional development, the school should seek the collaboration with original affiliation, Educational Service Area Offices and local higher education institutions. The school may, for example, urge for the supports of senior experts or trainers from those agencies to provide training programs or to be the 'mentor' in assisting the teachers to conduct classroom action research. This can be a process that helps the teachers to achieve the expected goal of teacher professional learning. One can argue thus that the external supports in different formats, especially in terms of knowledge and technique are the important factor facilitating the teachers to be successful in the profession as expected.

5. RECOMMENDATIONS

1. Seven action items (consists of twenty-six action sub-actions) applied in the observation and assessment of the instructional status of teachers at Community of Practice in this study are develop in conformance to the instructional process for the promotion of students' learning process. Consequently, those agencies responsible for the instruction, schools and Educational Service Area Offices may apply these findings as the tool for the promotion of teachers' self-assessment and self-analysis for enhancing the efficiency of the instruction and students' learning process.

2. With reference to the perspective and recommendations on the curriculum and learning plan, assessment and evaluation as well as classroom action research and education professional development at Community of Practice in this research, it is found that the school still needs different supports from external sources. Therefore, the school should be a core agency in seeking collaboration from all social sectors in supporting, participating and involving in the steering of instruction of the school toward the efficiency for maximizing educational gains, especially in light of quality students and availability of professional teachers in the school.

3. For future researches, the investigation of teachers' Community of Practice in the school addressing other subjects may reflect the results and possible methods to build the good practices of teachers in each subject. This may then be translated into a milestone for holistic development of good Community of Practice in the school and into the motivation for the exchange of knowledge among the teachers. This is also regarded as the socialization allowing the teachers, the core member of Community of Practice, to improve the quality and efficiency of their instruction.

6. ACKNOWLEDGEMENTS

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