**Professional Learning Community (PLC) in Secondary Schools Community in Malaysia**

**Zuraidah Abdullah (Ph.D)**

**Muhammad Faizal A.Ghani (Ph.D)**

**University of Malaya**

**mdfaizal@um.edu.my**

**Abstracts**

This paper outlines a research towards an initial assessment of the stage of the PLC in secondary schools in Malaysians secondary school with teachers as the main focus. A brief philosophy of the importance of learning organization and its development in various countries was reviewed and incorporated by the current situations, leading to the objectives and methodology for this study. The result showed the teachers can be active in their learning and improving their schools as to enhance the learning performance of the students in the first four characteristic dimensions refer to the practice of shared values, goals, mission and vision among teachers which play an important role in shaping the PLC in secondary school. Also, it reveals the importance of principals as key leaders play an important role in shaping the PLC in their respective schools as to provide support and guidance to teachers. In addition, collective learning and application dimension also has four characteristics showed teachers are more focused on their need to improve work performance and improve teaching methods. On the other hand, the secondary schools in Malaysia very much focus on the revision of the student workbook and hold a formal observation whereas, peer observations is poorly implemented. Thus, the characteristic of this dimension of practice is at a moderate level. Overall, this study has identified twenty-five properties which refer to the five (5) dimensions of practice that forms the PLC schools in Malaysia. The final stage proposes these schools have adopted the PLC which shows all the teachers work harder to ensure they continue to be implemented properly and constantly improving for a better future.

**Introduction**

Currently, school needsa dynamic and strong leadershipto create human capitals among teachers and students. The goal can be achieved by developing their capacities holistically in terms of towards knowledge, skills, intellect, and the progressive cultural attitude that has the highest ethical and moral value (Senge 1990; Cibulka, Coursey, Nakayama, Price Dan Stewart 2000). In order to achieve these objectives, the school leaders can’t reject the importance of learning in the teacher community. Teachers play an important role in determining future nations' success as to produce high quality, successful and highly skilled. According to Senge (1990), in order to manipulate the existing human resource in an organization effectively, leaders for an organization have to ensure that all the individuals in the organization are well-prepared to learn at every opportunity that comes. Thus, the school teachers can be lead and encouraged to continuously learn (DuFour Dan Eaker 1998; Hord et al., 1997) as to enhance the teacher education quality as human resource that its potential can be sharpened through learning.

In other words, the educators should start a learning revolution that can change the formation and development of the school community. The era of globalization characterizes a community that is not based on its size but its fundamental knowledge. Teachers in education organization will profits to the educational institutions through human and intellectual capital. By that, the best way to broaden the learning culture in higher level is by the development of Professional Learning Community (PLC) (Hord et al., 1997; DuFour Dan Eaker 1998). The PLC exists by the absorption of learning culture among every member within the school community. The learning culture gave the high impact of a community as it can make a difference in teaching and learning method, management and school leadership (Boyd Dan Hord 1994; Hord et al,. 1997 and 1999; Hipp et al., 2003). A prominent change can be seen by the learning and working teacher within a team. The PLC can enhance a good and effective relationship among the member of the community.

**Problem Statement**

Literature studies showed many materials on the importance of learning organization (Senge, 1990; Newmann & Wehlage, 1995; Hord, 1997; Meehan, Merrill L., Orletsky & Sandra 1999; Jasmin Muhammad, 1999; Zuraidah Abdullah, 2002; Huffman & Hipp, 2003; DuFour, DuFour, Eaker & Karhanek, 2004) which refers to the life-learning practice among the members of the school community. Results from a number of studies showed that a community which its culture depicted on-going learning culture able to dominate in the 21st century. In fact, an organization that does not have the learning organization is said to have no ability to i) predict and make an adaptation towards the surrounding, ii) underdeveloped, iii) difficult to learn effectively, iv) took a long time to change implementation, and v) don’t have the capacity to initiate development based on every aspect (Senge, 1990; Hord, 1997; Meehan, Merrill L., Orletsky Dan Sandra 1999; Huffman & Hipp, 2003).

The developing of the learning organization in this education world showed that all the school members that are currently learning, intend to learn and promoting themselves in their profession. This was with the agreement with Hord (1997) and Huffman & Hipp (2003) which stated that an individual who stopped learning will cause his living to stop. In fact, Mandy (1995, 55) demonstrated that the current chosen organization is the learning organization which had been stated by Senge (1990, 4), a successful company in the future is the organization that emphasize the importance of learning. Thus, many studies done by the western scholars emphasizing on the importance of an individual to learn continuously. Knowledge and skills are considered very crucial and important in determining a living organization and what is more important is the improved knowledge and skills of the members of the school community can constantly make a change for the effectiveness of an organization parallel with the current situation as to maintain its effectiveness.

However, the learning organization concept which narrated by Senge (1990), in the book of *The fifth discipline: The art and practice of file learning organization*  which portrayed the corporate world is giving more attention to the objective achievements towards competition and profits. Senge’s idea had been discussed with Schultz during 1999 in the development of learning organization practices in the education sector especially in the schools that portrayed the communities which implement the work and responsibility voluntarily and working collectively (Bitterman, 2000; St. Clair, 1998). This polemic result proved that an individual and a team of teachers in the school to compete

The results of this polemic have shown that individuals and teams of teachers in schools that compete not for gain in terms of money alone but rather refers to the human capital development of successful collaborative teachers and teachers produce student excel in their respective schools. Identity is more NATURE KPP (Hord; 1997), a more precise application in education (1990). Master of Education (Hughes and Kritsonis, 2006; Marsicks, Bitterman and van der Veen, 2000; Hord, 1997) say that organizational learning (Senge, 1999) tries to put forward is more focused on the corporate sector.

Therefore, Hord (1997) took the initiative and submitting the new model, which can convey a message and a clear signal to the leaders and practitioners in education about the appearance of the culture of lifelong learning in school. This model was modified by Hipp and Huffman (2003), which combines the features of the Hord model (1997) and Fullan (1990). Fullan (1990) demonstrated the progression in school change is a process that occurs in phases, (based on a phase-by-phase) of the initial phase, the implementation and adoption. Each phase of the development process and shows the school's development towards excellence. Each phase will demonstrate grading changes to the teacher community through implementing changes based on the five dimensions of i) shared and supportive leadership, ii) shared values​​, norms, mission and vision, iii) collective learning and application, iv) shared personal practices and v) supportive condition.

However, the PLC models for schools in Malaysia are still new and foreign. In fact, this model has not been reviewed and the local reviewers, even in western countries (such as United States, Britain and Australia) where it has been used as a school principle in such form as the PLC. This PLC refers to the local community that is continually learning to improve the professionalism of teachers in schools. Studies have found that schools that implement PLC have shown teachers are more willing to make changes through the implementation schools' improvement programs with the aim to increase the student learning achievement. These programs provide space and opportunities for teachers to learn and make changes in teaching and learning in the classrooms. Precisely, this article aims to present an initial assessment of the stage of the PLC in secondary schools in Malaysia.

**Assessment framework**

The framework of this study consists of a conceptual framework known as the PLC. This model is a conceptual framework that focuses on school improvement and student learning by Hord (1997 ) and Hipp & Huffman (2003 ) through the practice of lifelong learning of teachers in secondary schools. These learning processes demonstrate their learning according to teachers development phases. Therefore, this study incorporated the theory of change development phase (Fullan, 1985) to produce PLC profile in secondary school, as measured by the three phases on the onset, progress and culture. The framework of this research is for the secondary school teachers in Malaysia to implement a shift of teachers working culture independently on collaborating with the work culture ( Eaker , Dufour & Dufour , 2002).

The creation of this model is the idea of Senge (1990 ) on the formation of a learning organization that has a positive impact on the corporate world and the educational community. According to him, learning organization formed at the school has been able to facilitate the learning of each individual and change on an ongoing basis . Thus, the members of the organization have a high capacity to learn. They can adapt to the changes that occur either inside or outside the organization to continue to learn while working. Moreover, according to Argyris (1977) organizational learning is a process of detecting and correcting errors and improving. What is meant by mistake is knowledge that can undermine the learning process. This learning process has improved the performance of the organization to have an impact on the organization's ability to learn and adapt in a changing environment.

Learning organization proposed by Senge (1990 ) has been modified with the concept of community-based learning that have the same interests at work by sharing skills, expertise and knowledge to achieve the same purpose (Cavanagh , 2001) . Thus, the PLC model consists of five main dimensions. Each reviewed and analyzed dimension refers to the characteristics of each phase of referring the beginning of school development, implementation and practice (Fullan , 1985.1990 ). There are five dimensions identified by Hord (1997 ) and Hipp & Huffman (2003 ), which has the main characteristics of each dimension in the PLC model in the secondary school , i) shared leadership and support , ii) the shared values ​​of , goals, mission and vision, iii) collective learning and application , iv ) practice personal sharing and v) state support.

This model will also look at the support provided for outsider communication and assistance provided by other agencies. These agencies include the District Office of Parent Teacher Association and the local community. Researchers found that schools work in phases of practice has a strong support system to get help and support from external agencies. Researchers believe that each agency is very important for a school to learn and continue the school improvement. Therefore, this study will demonstrate that the school community accepts and prioritize practices both in terms of sharing ideas, norms, goals and values ​​of the school (Sergiovanni, 1994). This means that the community is the massing of the school community values ​​and sentiments that bind and integrate all the teachers, students and external agencies with similar goals.

This PLC model demonstrating the uniqueness of each process which is done by the schools studied as to improve the school reputation. Study team believes that every school has their uniqueness and specialty of its own. Each school will show a variety of ways and means to improve their respective school. According to Stoll & Fink (1996, 43), there is no single blueprint for a standard form can be followed by all schools. In essence, the school improvement occurs due to pressure from the school organization’s itself (Barth , 1990 ) rather than instructions from the outside . Therefore, this study will look at the changes that occur in schools that is aimed at enhancing the development and achievement of students in their learning through the development of the various changes in three phases identified by Fullan (1990).

According to Gross *et al.,* (1971), the changes do not occur spontaneously rather each planned change implemented and reviewed in advance in school. This is because every change requires i) all members of the school community to clearly understand the process of change , ii) all members of the community meet the demands of the material and resources, iii) determination of correspondence between the initial planning to the implementation of change, and iv) withstand risk (Fullan, 1991). Therefore, a success certainly needs teachers who are always learning and willing to make changes as to ensure successful changes. Based on the model of the PLC by Hord (1997) and Hipp & Huffman (2003 , this study will incorporate the changes in the phase of theoretical development (Fullan, 1991), which resulted in 'an organizer ' or framework of a model increased the student achievement and school improvement refers to three levels of initiation, implementation and acculturation. Figure 1 below shows the conceptual framework that is to be made by the researcher.

**Figure 1: Study Conceptual Framework**

**The involvement of outside agencies supportng the PLC** 



**PHASES**



Shared and supportive leadership



Shared value, objectives, mission and vision









Implementation



****



Suppotive conditions



* Skills, Rescources and Communication Systems Komunikasi

**Objectives of the Study**

This study was carried out based on the following objectives :

1. The PLC level in secondary school in Malaysia and,

2. The characteristics of PLC in five secondary schools in Malaysia in terms of five dimensions.

**Highlights of Previous Research**

**The concept of Professional Learning Communities.**

A professional learning community is described as a community to shape a culture that shows all school staff to learn and be a student. In other words, each individual in the school community plays their role and responsibility towards each other to learn as well as to ensure the well-being of the school community (Myers and Simpson; 1998). At the school of principals, the second line of leadership and teachers belong to the members of a professional learning community. They are regarded as a professional staff crucially focused on the teacher and considered to be individuals who always practice learning. They will seek to share learning and increase the effectiveness of the school and the learning of their students. The creation of a learning culture is a practice showing the PLC lifelong learning among the school population.

Schools that make up the PLC is the school that promote and create learning values ​​through a collaborative process that emphasizes dynamic discussion among teachers, students, principals, parents and the school community to improve the quality of life and continuous learning among school staff and the school community (Speck , 1999.8). The implications of the school community are responsible for implementing the PLC is always interconnected with each other to build their communities. Thus, according to Roberts and Pruitt (2003), the construction of a learning culture within the school community will create a collective atmosphere of principals, teachers, students, parents and members of the school community. Thus, the school is able to create a cohesion atmosphere among the school population.

The existence of this culture will also develop an internal capacity of an effort to encourage teachers to be experts in their respective subjects. PLC has five key dimensions namely: **i**) shared and supportive leadership, **ii**) shared values​​, norms, mission and vision, **iii**) collective learning and application , **iv**) shared personal practice, and **v**) supportive conditions – supporting conditions in terms of relationships and structures. At the initial stage, the Professional Learning Community model was introduced by Hord (1996a) through joint research with Southwest Educational Development Laboratory (SEDL). He also has identified six characteristics of a PLC in a school. After conducting a more detailed study of this learning community by establishing a common set of attributes, it has shown that there are five main dimensions of 17 descriptors. These five dimensions are mutually influencing each other in determining learning among teachers occurs continuously and can improve the performance of pupils in the school. Each dimension contained in the PLC has critical attributes that will describe each phase of the beginning of the school’s development, implementation and practice (Fullan, 1990). Here are five dimensions identified by Hord (1997) and Hipp & Huffman (2003) as an attribute of successful schools make their school a PLC ;

1. **Shared and supportive leadership**: This dimension refers to the leadership in the community who share the school. Shared leadership will reflect a community that will develop leadership capacity support. It is formed because of the atmosphere and climate that promotes community empowerment practices to all PLC members to realize the school's mutual vision and mission happen. This dimension could also provide an opportunity for all community members do an effective decision-making to create positive implications for student learning and achievement.
2. **Shared values, goals, mission and vision**: This dimension refers to the learning community to show their shared values, goals, mission and vision among its members. This can be seen through daily practices, norms and values ​​that exist and are embedded in a PLC. Mission and vision are formed is transparent to all. Vision and mission established together in school and community that focuses on improvement in student achievement and student learning.
3. **Collective learning and application**: This dimension describes collaborative relationships in the school community focused on improving the effectiveness of information delivery and decision-making based on science. These practices will result in the behavior of a positive community. It emphasizes the cognitive processes that show the results of the effectiveness of the PLC and the importance of practicing work collectively as to produce a curriculum and instructional practices that are effective.
4. **Shared Personal Practice**: This dimension is more concerned about the process that encourages teachers to interact, provide feedback and share the results of student learning experiences. This happens in the school and classrooms that involve research-based models such as action research, coaching, creating a mentor-mentee system and do joint decision making.
5. **Supportive Conditions - in terms of relationships and structure:** This dimension is a critical dimension in shaping the PLC. It reflects a commitment to the PLC that show support in maintaining the school improvement process is continuous. This dimension also has identified the conditions of its formation through logistical support in terms of i) the scheduling, II ) the resources , II ) cognitive support and I ) social opportunities in leadership and effective communication system .

Many researchers such as Meehan *et al.,* (1997) and Huffman & Hipp (2000) have used this feature to the PLC in 2003, which Huffman & Hipp has refined this concept by listing five PLC-dimensional and each dimension has its own attributes which can be illustrated in Diagram 1.1 which shows the involvement of external agencies, parents, teachers, students and administrative line in school improvements and increase the learning of students in the school.

**Method of Study**

Study design

This study was undertaken to survey the PLC schools in Malaysia. Thus, the survey methods used to collect data among secondary school teachers in Malaysia.

**The study sample**

The sample consists of 676 teachers who account for principals, school second line of leadership and regular teachers from 50 secondary schools in Malaysia. The selections of school were made ​​by multi-level cluster sampling by 'Multistage cluster sampling (Babbie, 2001). This study involved a total of 177 secondary schools located in 11 school locations in the Malaysian state of Selangor, Federal Territory of Kuala Lumpur, Negeri Sembilan, Melaka, Johor, Perak, Penang, Kedah, Perlis, Kelantan and Sarawak by zone. However, the researchers only received a total of 50 schools got on Table 2. This table shows the distribution of schools by state that have to cooperate with the study.

*Table 2: Distribution of Secondary Schools by State, Zone and Type of School*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | **States** | **Zone** | | **National Day Schools** | **Boarding Schools** | **Technical Schools** | **Cluster Schools** | **Religious Secondary Schools** | **Total** |
| 1. | Selangor | Central | | 1 | 1 | 2 | 1 | 2 | 7 |
| 2. | Kuala Lumpur | - | 2 | 3 | 3 | - | 8 |
| 3. | Perak | 1 | - | 1 | - | - | 2 |
| 4. | Negeri Sembilan | Southern | | 1 | 2 | - | 1 | 1 | 5 |
| 5. | Melaka | 3 | - | - | - | - | 3 |
| 6. | Johor | 3 | 1 | 1 | 1 | - | 6 |
| 7. | Pulau Pinang | Northern | | 1 | - | - | 1 | 1 | 3 |
| 8. | Kedah | 4 | - | - | 1 | 1 | 6 |
| 9. | Perlis | - | - | 1 | - | 1 | 2 |
| 10. | Kelantan | Eastern | | 3 | - | - | 1 | 1 | 5 |
| 11 | Sarawak | West Malaysia | | 3 | **-** | **-** | **-** | **-** | 3 |
| **Total** | | | **5** | **20** | **6** | **8** | **9** | **7** | **50** |

Teachers who are selected through cluster sampling were based on the post. Thus, the total sample size for this study population was about 1,085 teachers under the tutorship clusters have been identified but only 676 of which have been working together to study. Average respondents are shown in Table 3.

*Table 3: Demographics of Respondents Based on Gender, Age, Teaching Experience and Position*

|  |  |  |  |
| --- | --- | --- | --- |
| **Gender** | **Total** | **Percentage** | |
| Men | 223 | 33.0 | |
| Women | 453 | 67.0 | |
| **Age** |  |  | |
| 23-33 | 91 | 13.4 | |
| 34-43 | 252 | 37.3 | |
| 44 and older | 333 | 49.3 | |
| **Teaching experience** |  |  |
| Less than 10 years | 290 | 42.9 |
| 11- 20 years | 156 | 23.1 |
| More than 20 years | 230 | 34.0 |
| **Position** |  |  |
| Principal | 34 | 5.0 |
| School secondary leadership members | 396 | 58.6 |
| Teacher | 246 | 36.4 |
| **Jumlah** | 676 | 100 |
|  | | |

Table 3 shows the female teachers were more as respondents were 453 people (67%) involved compared with male teachers, 223 (33%). In terms of age , it was found that 91 (13.4 %) aged between 23 and 33 years, a total of 252 (37.3%) aged 34 to 43 years and beyond of teachers aged 44 years and above were 333 persons (49.3%) . In terms of teaching experience, it was found that 290 (42.9 %) teachers having experience less than 10 years. Next, a total of 156 teachers (23.1 %) have the experience between 10-20 years and 230 teachers (34 %) more than 20 years. They consist of three groups of teachers according to the principal office of 34 people (5 %), the second line of school leadership ranks 396 people (58.6 % ) and 246 regular teachers (36.4 %). Overall, the background of the respondents from five types of secondary schools covering aspects of experience in the field of teacher education and teacher positions are considered variables that have the closest connection with this study. These variables influenced the culture and the appearance of the PLC at secondary schools in Malaysia.

**Analytical study**

Analysis of survey data using the *Statistical Package for the Social Sciences* (SPSS) version 16.0 involves descriptive statistics mean, standard deviation, percentage and frequency. This method is used to answer objective 1 and 2. The effectiveness level of the learning organization as measured against the scores used by Eccles, Grimshaw, Campbell and Ramsay (2003). It made ​​interpretation percent score for question 1. If the scores percent of survey participants expressed their level of agreement on a scale of 5 (Very Often) and 4 (always) is high, in the range of percentages ranging from 50 to 100, the level of effectiveness of the learning organization is high and satisfying in practice. Meanwhile, if the score percent of study participants who expressed their level of agreement on a scale of 3 (Rarely) was high, ranging from 50 percent to 100 percent, the level of effectiveness of the learning organization is simple and satisfying medium practice. If the score is the percentage of study participants who expressed their level of agreement on a scale of 2 (sometimes) and 1 (No Direct) is higher that percentage ranges from 50 to 100, then the effectiveness of the learning organization is unsatisfactory. Furthermore, question 2 using mean and standard deviation to determine the dimensions of organizational practiced in school studies .

***Table 4: Mean Value Level PAC Interpretation***

|  |  |  |
| --- | --- | --- |
| **Mean value** | **Interpretation** | **Data value** |
| 1.00 to 2.33 | Low | 1 |
| 2.34 to 3.66 | Medium | 2 |
| 3.67 to 5.00 | High | 3 |

For the purpose of describing the level of the PLC schools in Malaysia, this study has changed the mean value scale that can be referred to Table 4, which shows the results of these calculations were made and the mean value of the range of a particular set to low, medium and high. Interpretations of the mean values ​​in this table have been able to determine the PLC level of secondary schools in Malaysia.

**FINDINGS**

**The findings of this study are discussed as follows.**

1. **PLC level of Secondary School in Malaysia**

This section is to identify the relevant dimension of the PLC as follows.

The findings of the PLC in secondary schools were obtained and showed the highest mean value indicating the most prominent dimension in PLC secondary schools and the second highest mean value of the second PLC showed high and according to the mean value obtained by analysis that has been done. PLC level secondary school in Malaysia as a whole can be seen in Table 4.

***Table 5: PLC Secondary School in Malaysia***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Dimensions of Professional Learning Community** | **Mean Value** | **Standard Deviation (SD)** | | **L** | **R** |
| Shared and supportive leadership | 3.90 | .071 | | **3** | **3** |
| Shared values, objectives, mission and vision | 4.04 | .065 | | **3** | **1** |
| Collective learning and application | 3.89 | .058 | | **3** | **4** |
| Shared personal practice | 3.63 | .064 | | **2** | **5** |
| Supportive conditions – Human relationship | 3.95 | .057 | 3.91  Mean  .053  SD | **3** | **2** |
| Supportive conditions – Structure | 3.87 | .049 |
| **Total** | **3.87** | **.062** |  | **3** |  |

*\*N= 676, L=level and R=* ***Ranking***

Table 5 showed the overall PLC in secondary schools in Malaysia where it is at a high level, with an overall mean value of 3.87. All practices are at a high level, with the exception of personal practice sharing which is moderate. In detail, the available practice shared values, goals, mission and vision at the highest levels, with a mean of 4:04 (SD = .065). This was followed by supportive climate- human relationship, with a mean value 3.91. In this dimension, the analysis was also made between two aspects in terms of human relationships and structures. It was found that aspect of the relationship got more of a mean value of 3.95 (SD = .057) while the higher structural aspects of getting a mean value of 3.87 (SD = .049). Practice is the third highest shared and supportive leadership with a mean 3.90 (SD = .071). Then it was followed by the practice of collective learning and application with a mean of 3.89 (SD = .058). Shared personal practice, is the only one who is moderate with a mean of 3.63 (SD = .064). The overall level of the PLC levels in schools in Malaysia is at a high level showed by the mean; 3.87 (SD = .062).

In addition, the analysis is also made to identify the PLC for each of the five types of secondary schools in Malaysia. The findings showed the PLC in all secondary schools was high but that high school (HS) is moderate. This is reflected in the Schedule 4:14 to 4:18 that shows the distribution of the mean level of the PLC on the five ( 5 ) Secondary School. Overall, it was found the PLC level in schools in Malaysia are at a high level, but a moderate level of HS. This means that all secondary schools in Malaysia have features that closely resembled the real PLC model, except for the HS. In this case, it was found that the mean of the highest in HS compared with four other school types. In terms of the dimensions of the PLC, only personal learning sharing practice dimension is moderate while the four (4) other dimensions is high. This study was able to show different levels based on the mean value. The difference in mean values ​​of each dimension has shown patterns of practice in teacher PLC secondary schools studied which is due to the difference in terms of i) the situation , I ) the needs of students and iii) the needs of teachers.

**Key Features of the PLC in Secondary Schools in Malaysia**

This section will describe in detail the specific characteristics of the PLC based on questionnaire items, according to the dimensions identified by Hord (1998 ) and Hipp and Huffman (2003 ). To answer research questions on the main characteristics of the PLC in five (5) types of secondary schools in Malaysia, analyzed method was according to frequency response given by the respondents with the highest percentages and mean. Each item is assigned a position and level (high, medium and low) based on the interpretation of the table 5 mean level of PLC.

Overall, the results showed that the dimensions of the shared values, goals, mission and vision are a key dimension of the PLC levels in schools in Malaysia. Secondary school teachers have responded very high on this dimension refers to the four important features namely i) supports the values ​​and norms , ii) focus on student learning , iii) have high hopes and expectations , and iv) shared vision for teaching and learning. The importance of this dimension is clearly illustrated by the feedback given by the teachers of the statement items for the dimensions of practice sharing values, goals , mission and vision in the table 5.

***Table 6: Item for Shared Values ​​, Goals, Mission and Vision Dimension***

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | **Item Shared values, objectives, mission, and vision dimensions** | **% value** | | | | | **K** | **T** | **Mean** | **Standard deviation** |
| **1** | **2** | **3** | **4** | **5** |
| 13 | A collaborative process exists during building the shared values among the teachers | 0.3 | 2.1 | 28.7 | 55.8 | 13.2 | **12** | **3** | 3.79 | 0.69 |
| 14 | Sharing practice among the school members which has been supporting norms and teachers attitude in decision making relating to teaching and learning | 0.1 | 1.8 | 17.6 | 64.6 | 15.8 | **9** | **3** | 3.94 | 0.64 |
| 15 | Teachers share the visions in developing school which focussed on students learning | - | 3.1 | 10.8 | 60.4 | 26.8 | **6** | **3** | 4.11 | 0.66 |
| 16 | The decision was made parallel to values, mission and school’s vision | - | 1.9 | 11.2 | 56.5 | 30.3 | **3** | **3** | 4.15 | 0.68 |
| 17 | Collaboration process existed in developing a mutual vision among the teachers | 0.4 | 2.2 | 18.2 | 56.2 | 22.9 | **8** | **3** | 3.98 | 0.73 |
| 18 | School’s objectives are focusing more on students learning rather than their results | 0.4 | 3.6 | 24.4 | 52.1 | 19.5 | **11** | **3** | 3.86 | 0.77 |
| 19 | The participation of the teachers in developing school’s mission visit | 0.9 | 3.6 | 15.5 | 53.3 | 26.8 | **7** | **3** | 4.01 | 0.80 |
| 20 | Long-term school objective was taken in planning and implementing of the teacher's job | 0.3 | 2.5 | 11.4 | 56.2 | 29.6 | **5** | **3** | 4.12 | 0.72 |
| 21 | Long-term strategy by the school being taken into account in planning and implementing of the teacher's job | - | 1.6 | 11.2 | 59.2 | 27.5 | **4** | **3** | 4.13 | 0.66 |
| 22 | The school policy is parallel with its mission | - | 1.5 | 7.8 | 54.1 | 36.5 | **1** | **3** | 4.25 | 0.66 |
| 23 | All the school programs are in line with its vision | 0.1 | 2.1 | 10.1 | 52.7 | 35.1 | **2** | **3** | 4.20 | 0.71 |
| 24 | Teachers-Parents Association (TPA) involve actively in determining high hopes on students' achievements | 0.9 | 4.7 | 19.5 | 49.7 | 35.1 | **10** | **3** | 3.93 | 0.84 |
| **Total mean: 4.04** | | | | | | | | | | |

*K = Position & Scale: 1 = None at all, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Very often*

The results showed 22 items ( mean = 4:25 ) , item 23 ( mean = 4:20 ) , item 16 ( mean = 4.15) , item 21 ( mean = 4.13) and item 20 ( mean = 4.12) to . These five items showed that teachers and parents support the values ​​and norms of the school which is more focused on the learning of students and have high expectations about the ability of the school community. In addition, these items reflect the mutual vision practice among the school community where it has been a major guideline for the teaching and learning of teachers in secondary schools in Malaysia. For example item 22 , "school policy is in line with the vision of the school" , item 23 "All school programs are in line with the vision of the school" , item 16 "The decisions made ​​in line with the values, mission and vision of the school" , item 21 "long-term strategy school organization is taken into account in the planning and implementation of the teacher" , and item 20 "long-term goal of school organization are taken into account in the planning and implementation of the teacher". The five items on this test are the mean value of the items that showed high mean and teachers agreed to say that the shared vision, mission, goals and values ​​that exist in their school contributes to students' learning and school improvement.

Table 6 also showed 86.8 % of the teachers responded to the practice of teachers who always support the indigo - values ​​and norms, and 85.8% indicated that teachers have high expectations for their school. In addition, 83.8% of secondary school teachers responded to the practices and programs in the school is focused on student learning and 82.4 % of teachers ensure a shared vision of the school as well as a guideline for teaching and learning. All four of these characteristics are at a high level and dimension characterized by shared values, goals, mission and vision have been able to determine the ranks of administrators and teachers from a PLC in their school.

Furthermore, the dimension of State support is with the second highest score often practiced by teachers in shaping the PLC in secondary schools in Malaysia (Table 5). Tables 7 and 8 show the overall secondary school teachers which have responded very high on this dimension it divided into two factors that have been supporting the learning of secondary school teachers to continue to learn in terms of relationships and structures. Through this study reflected the culture of schools and teachers 'work culture is very important in helping students' learning and provide space for teachers to improve their teaching methods. Table 6 shows the items that refer to the five dimensions of its state support in terms of relationships.

***Table 7: Item Statement Analysis for Supportive Condition Dimension: On Relationships***

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Bill** | **Item for Supportive Condition Dimensions: On Relationships** |  | **% value** | | | | **K** | **T** | **Mean** | **Standard deviation** |
| **1** | **2** | **3** | **4** | **5** |  |
| 47 | Loving culture that is built on trust and respect basis exist among the teachers and students | 1.9 | 9.2 | 60.5 | 28.4 | - | **3** | **3** | 4.15 | 0.65 |
| 48 | The ‘keep-trusting’ culture while taking risks | 0.1 | 2.4 | 22.3 | 58.4 | 16.7 | **7** | **3** | 3.89 | 0.69 |  |
| 49 | Excellent achievements always be recognized and celebrated in school | 0.4 | 2.7 | 12.1 | 49.9 | 34.9 | **2** | **3** | 4.16 | 0.76 |
| 50 | Teachers are not being penalized or fined for unpurpose mistakes | 3.3 | 5.6 | 14.3 | 53.0 | 23.8 | **8** | **3** | 3.88 | 0.94 |
| 51 | Teachers and administrators see the mistakes of individual teachers as supportive teaching experience | 0.6 | 4.4 | 18.2 | 55.9 | 20.9 | **6** | **3** | 3.92 | 0.78 |
| 52 | The principals and school administrators support the teachers to be brave in trying and make changes in the teaching and learning field | 0.3 | 2.8 | 13.2 | 52.1 | 31.7 | **4** | **3** | 4.11 | 0.75 |
| 53 | The principals get rewarded due to support given towards his teachers and students great achievements | 2.4 | 10.9 | 23.7 | 46.4 | 16.6 | **10** | **2** | 3.63 | 0.96 |
| 54 | All the school members and stakeholders keep thinking of the school culture that loves changes | 0.4 | 3.0 | 20.6 | 53.0 | 23.1 | **5** | **3** | 3.95 | 0.77 |
| 55 | The success that the schools gained can be fit together by all | 0.3 | 2.7 | 11.5 | 48.4 | 37.1 | **1** | **3** | 4.19 | 0.76 |
| 56 | The school gives rewards consistently to every problem-resolved activities involving teacher's assignment | 1.9 | 7.4 | 30.0 | 45.7 | 15.2 | **9** | **2** | 3.65 | 0.88 |
| **Total mean:** **3.95** | |  | | | | | | | | |

*K = Position & Scale: 1 = None at all, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Very often*

Table 7 shows the mean value for each dimension of the test items for state support in terms of the relationship which has formed a positive school culture, especially in terms of relationships between the student-teacher, teacher-teacher and principals-teachers. This relationship shows that administrative support is always encouraging teachers dared to try and make a difference in teaching and learning where it has motivated teachers. Items appearing in this dimension refer to the five characteristics that refer to human relations factors, i) beliefs, ii) celebrates and honors, iii) take risks, iv) culture of caring and v) collaboration in implementing change.

This can be described by the mean value of six teachers practice test items, namely Item dimensions 55 "received by the school's success can be felt along" ( mean = 4.25 ) , Item 49 "outstanding achievement always be recognized and celebrated in schools" ( mean = 4.20) , Item 47 "caring culture that is built on trust and mutual respect exists among teachers and students" ( mean = 4:19 ) and Item 52 "Principals and school administrators encourage line teachers are bold enough to try and make a difference in the field of teaching and learning" (mean = 4.11). Similarly, item 54 "All parties (school staff and stakeholders) strives to instill a love of change school culture" (mean = 3.95) and item 51 "Teachers and administrators see mistakes made by individual teachers as a learning experience that builds" (mean = 3.92). This shows that all teachers in secondary schools are giving attention to human relations in shaping the PLC.

This study has also shown that teachers are more comfortable with a trusted colleagues to make room for more teachers to be more open during the discussion sessions and teachers adhere to the principle errors committed by them is a learning encourages them to continue making improvements in teaching and enhance the skills of teachers through item 48 "The culture of mutual trust exists when taking the risk" ( mean = 3.89 ) and item 50 " teachers are not penalized or fined for oversight mistakes " ( mean = 3.88 ). This analysis also shows that the teachers do not make the reward as a major factor for them to work harder. Reviewed on these 56 items "The school consistently reward for every problem solving activities related to teacher assignment" ( mean = 3.65 ) . And item 53 “principals rewarded for giving support to the development of teachers and students (mean = 3.63). These two items are at moderate level.

Primarily, this study exhibited that 85.1% of teachers have responded to the practice of celebrating and appreciating each assignment undertaken by them. Appreciation and entertainment practice has been able to nurture a culture of caring and trust among teachers in schools. A total of 82% of the teachers responded to the cultural practices of caring and trust in shaping the PLC and 79.9% of teachers showed the courage in taking a risk by making a difference in their teaching lessons and always work in carrying out their duties. In addition, this study also shows that there is trust among the teachers at the high school because of its principles or practices of teachers, 76.8 % of teachers consider mistakes as a learning process. Analysis of this study also found that 61.9% of teachers responded to its recognition and reward is also a feature that is quite important in encouraging and motivating teachers to continue learning. The findings also show that there are four features in this dimension was high but its recognition and rewards are modest at that stage. Feedback by teachers also depicts human relationships are the key factors that need to be addressed by the school to determine the success of a school.

The robustness of this dimension has also been influenced by a few important factors such as the resources, facilities and communication systems available in the schools studied. These three factors are closely related to the preparation of the school in terms of the structure that supports the creation and maintenance of PLC exists in secondary schools. The study found that there are seven (7) items was high and two (2) items are more moderate. However, the findings of this study have demonstrated the level of the teachers on this dimension is high and has been able to identify the characteristics of the structure factor in the creation of every high school in the PLC study. This is shown by the dimensions of the test items in terms of the structure of the State supported in the table 4:21. The results showed 61 items "The situation around the school is clean, attractive and fun to students/stakeholders, and creating warm welcome in a sense of their presence" ( mean = 4:20 ), item 60 " Teachers can access ICT to obtain materials for their teaching process" ( mean = 4.17), and, item 63 " Communication among the teachers at this school are efficient" ( mean = 4:09 ), item 62 " gap in terms of staffing positions ( DG ) are not significant between teachers has established collaboration between co-workers " ( mean = 3.96 ) and item 65" the management of schools, District Education Office , the State Education Department and the Ministry of Education has always given support in terms of infrastructure support in learning of teachers in schools is continuous " ( 3.81 ). With resources, complete and effective communication system in the schools surveyed are increasing students' learning and teachers easily implement the school improvement, particularly in terms of teaching methods of teachers.

***Table 8: Statement Analysis for Test Item Supportive Conditions Dimensions: Structure***

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | **Item Supportive Conditions Dimension: Structure** | **% Value** | | | | | | **R** | | **T** | **Mean** | **Standard deviation** |
| **1** | **2** | **3** | **4** | **5** | | |  |
| 57 | Discussion time allocated to teachers as to facilitate collaborative works. | 1.2 | 6.1 | 28.1 | 51.5 | 13.2 | **6** | | | **3** | 3.69 | 0.81 |
| 58 | School’s schedule design promote collective learning and can decrease the alienation of teachers. | 0.9 | 6.5 | 27.8 | 52.2 | 12.6 | **7** | | | **3** | 3.69 | 0.80 |  |
| 59 | Financial resources for teachers’ expertise development is constantly available. | 3.4 | 8.0 | 25.0 | 50.0 | 13.6 | **8** | | | **2** | 3.62 | 0.93 |
| 60 | Teachers can access to ICT technology as to get their teaching materials. | 0.9 | 2.2 | 11.2 | 50.1 | 35.5 | **2** | | | **3** | 4.17 | 0.7795 |
| 61 | The school’s environment is clean, interesting and delight the students/stakeholders, as well as their presence are well-welcomed. | 0.6 | 1.8 | 10.8 | 50.3 | 36.5 | **1** | | | **3** | 4.20 | 0.74 |
| 62 | The non-significant gap in staffing positions among the teachers has created a collaboration between colleagues. | 2.7 | 3.3 | 15.2 | 53.1 | 25.7 | **4** | | | **3** | 3.96 | 0.88 |
| 63 | Communications between the teachers in this school is effective. | - | 1.8 | 14.9 | 55.8 | 27.5 | **3** | | | **3** | 4.09 | 0.69 |
| 64 | The management of schools, District Education Office, the State Education Department and the Ministry of Education provides the expertise to the teachers as to enhance their learning and teaching performance. | 2.8 | 8.1 | 30.8 | 44.8 | 13.5 | **9** | | | **2** | 3.57 | 0.91 |
| 65 | The management of schools, District Education Office , the State Education Department and the Ministry of Education always giving the support in terms of infrastructure that helps the teachers in continuous learning | 0.9 | 4.6 | 23.4 | 54.0 | 17.2 | **5** | | | **3** | 3.81 | 0.79 |
| **Total mean: 3.870** | | | | | | |  | | | | | |

*K = Position & Scale: 1 = None at all, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Very often*

Whereas item 57 " The time allocated to the teacher talk to facilitate collaborative work " ( mean = 3.69 ) and item 58 "The design school schedule promotes collective learning and can reduce the alienation of teachers in this school " ( mean = 3.69 ) showed at secondary schools in Malaysia still has a schedule provided to teachers to discuss and debate about education issues although its mean value is close to the average level. The following items are in moderate level, item 59 " Financial resources for teachers’s expertise development is constantly available" ( mean = 3.62 ) and item 64 " The management of schools, District Education Office, the State Education Department and the Ministry of Education provides the expertise to the teachers as to enhance their learning and teaching performance." ( mean = 3:57), which shows the financial resources for the development of the teachers are hard to come by the school management, District Education Office (PPD), the State Education Department (JPN) and the Ministry of Education (MOE) where it is quite difficult to provide expert resources to schools.

Therefore, this study showed 82.5 % of teachers have responded to the importance of the communication development system provided in schools and no teachers' staffing position disparities that prevent communication among teachers. This analysis also demonstrated that 79% of teachers responded to the concerns of the school on school climate that is conducive and MOE in ensuring complete infrastructure facilities provided to all schools. In addition, 64.2% secondary school teachers responded that the school provides a time and a place for teachers to learn and discuss whereas only 60.9% of teachers had informed that the schools provide financial resources and expertise in the development of teacher professionalism. This study shows that there are three features in this dimension that is at a high level, but its financial resources are at a moderate level. The study also found that supporting conditions dimensions are very important in order to determine the secondary school teachers can actively participate in their learning and improving the schools for the sake of the students’ performance.

Meanwhile, the Leadership dimension is the dimension of sharing and support that can influence the formation of the PLC in schools. This dimension ranks the third highest (see Table 5) and is considered one of the very important dimension in defining the PLC as shown by the table 9.

***Table 9: Item Statement Analysis for Shared and Supportive Leadership Dimensions***

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Bil** | **Item Shared and Supportive Leadership Dimensions** | **Value %** | | | | | **R** | **T** | **Min** | **Standard deviation** |
| **1** | **2** | **3** | **4** | **5** |
| 1 | The consistent participation of teachers in discussion in making decision on most of the issues that arise in schools. | 0.7 | 7.5 | 28.3 | 51.2 | 12.3 | **11** | 2 | 3.66 | .81 |
| 2 | The principals was taking into account all the teachers' opinions in decision making. | 0.9 | 8.1 | 27.8 | 47.5 | 15.7 | **10** | 3 | 3.68 | .86 |
| 3 | Teachers can get important information easily. | 0.3 | 3.4 | 21.7 | 57.2 | 17.3 | **7** | 3 | 3.87 | .73 |
| 4 | The principals always give the support when needed. | 1.0 | 2.5 | 11.1 | 47.8 | 37.6 | **1** | 3 | 4.18 | .80 |
| 5 | Teachers always been given the chance to make changes. | 0.6 | 2.8 | 17.8 | 51.2 | 27.7 | **4** | 3 | 4.02 | .78 |
| 6 | The principals take responsibility towards making the innovations. | 0.9 | 2.5 | 15.2 | 52.5 | 28.8 | **3** | 3 | 4.05 | .78 |
| 7 | The principals give rewards towards successful innovations. | 1.9 | 6.8 | 26.6 | 43.0 | 21.6 | **9** | 3 | 3.75 | .93 |
| 8 | The principals act democratically with the teachers in power and authority sharing. | 1.6 | 4.6 | 22.8 | 49.6 | 21.4 | **8** | 3 | 3.84 | .86 |
| 9 | Leaderships is highly encouraged among teachers. | 0.3 | 2.5 | 8.7 | 57.7 | 30.8 | **2** | 3 | 4.16 | .70 |
| 10 | Teachers were guided to be effective leaders. | 0.3 | 4 | 18.2 | 54.0 | 23.5 | **5** | 3 | 3.96 | .77 |
| 11 | Every decision must go through the form and field meeting in certain subjects. | 0.4 | 3.7 | 19.7 | 55.5 | 20.7 | **6** | 3 | 3.92 | .76 |
| 12 | Stakeholders took accountability together with students learning without showing power or authorities. | 0.6 | 6.4 | 31.1 | 51.0 | 10.9 | **12** | 2 | 3.65 | .78 |
| **Total mean: 3.900** | | | | | | | | | | |

*K = Position & Scale: 1 = None at all, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Very often*

This dimension also has certain characteristics which refer to the school leaders who always i) be responsible for the decisions made, ii) guides the teachers to be leaders, iii) the sharing of power and authority , iv ) provide support to teachers and students , and v ) provide an area decision making to members of the school community. This study has shown the importance of this leadership dimension by looking at the feedback given by the teachers of the test items. It has found that almost all of the items are at a high level and the other two items at a moderate level. The strength of this dimension is clearly illustrated by items 4 ( mean = 4.18) "Principals always give support when needed", item 9 (mean = 4.16)" Leaderships were encouraged among teachers", item 6 (mean = 4.05) in "The principal is also responsible for innovation done ", item 5 ( mean = 4:02 ) " Teachers always been given chance to make changes" , item 10 ( mean = 3.96 ) " Teachers were guided to be effective leaders " and Item 11 " Every decision must go through the form and field meeting in certain subjects "( mean = 3.92 ).

The statements of the items statement clearly shows that the principal plays a key role in realizing the PLC existed in their schools to provide support and guidance to teachers. In addition, the principal has shown the sharing of responsibility for innovation and changes made by the teachers. In fact, decision-making is not done by the administration but should be done together in committee meetings, form, management or teacher. Whereas , item 3 " Teachers can easily get important information " ( mean = 3.8787 ) , item 8 " Principal act democratically with the teachers through the sharing of power and authority " ( mean = 3.84 ) , item 7 " Principal rewards the successful implementation of innovation " ( mean = 3.75 ) and item 2 " The principal take into account all the opinions of teachers in decision making " ( mean = 3.68 ). The four items were shown in schools, teachers need a facility to access information and find a democratic leadership principals, teachers recognize success and a good listener has encouraged teachers in secondary schools to learn and improve their teaching as to ensure that the increased in performance of student learning.

Item 1 "Teachers consistently involved in discussions to make decisions on most of the issues that arise in school" (mean = 3.66) and item "stakeholders take collective accountability for student learning without show of power and authority" (mean = 3.65). Both of these items are at a moderate level. This shows that secondary school teachers in Malaysia are not widely given the opportunity to discuss and decide together towards administrator issues arising in their school. In addition, it has depicted that the stakeholders shown a relatively passive role of students' learning. Therefore, a percentage of the feedbacks given by teachers clearly show secondary schools towards shared leadership and support dimensions exist. The study found that the characteristics of leadership exists among teachers say i) 82.4% of all teachers are responsible for the decisions made, ii) 79.4% of school teachers are guided to be a leader, iii) 66.4% the Administrator and teacher share power and authority, iv) 75.8% line school leadership support to teachers and students, and v) 63.3% of teachers say the school to give an area of ​​decision-making to members of the school community. Leadership traits has provided opportunities for teachers to demonstrate their capacity as leaders who are responsible for decisions and the school leadership is always supportive of teachers to continue to improve the performance of teachers.

Next on the table 10, the dimension of collective learning and application was at the level of the fourth dimension in creating the PLC in high school. This can be shown by table 4.24, the test items that refer to the dimensions of collective learning and application.

***Schedule 10: Dimensions Statement Analysis of Collective Learning And Applications Items***

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | **Item Statement Analysis of Collective Learning And Applications** | **% value** | | | | | | **K** | | **T** | **Mean** | **Standard deviation** |
| **1** | **2** | **3** | | **4** | **5** |
| 25 | Teachers find and try different teaching techniques in the classroom collaboratively | - | 1.8 | 23.2 | | 58.0 | 17.0 | **6** | 3 | | 3.90 | 0.68 |
| 26 | The teachers work together to implement teaching strategies to be applied in their work ( P & P ) | - | 1.2 | 19.8 | | 59.5 | 19.5 | **4** | 3 | | 3.97 | 0.66 |  |
| 27 | Cohesiveness among teachers that reflect their commitment to the school improvements are obvious | 0.1 | 3.3 | 23.8 | | 53.3 | 19.5 | **7** | 3 | | 3.88 | 0.75 |
| 28 | Co-teachers plan to solve the problem of student needs | 0.1 | 1.3 | 14.8 | | 62.1 | 21.6 | **2** | 3 | | 4.03 | 0.65 |
| 29 | Collective learning is always done through open discussion”. | - | 1.8 | 23.7 | | 56.1 | 18.5 | **5** | 3 | | 3.91 | 0.69 |
| 30 | Involvement in discussions among themselves trigger a variety of ideas that encourage further exploration | - | 1.3 | 19.2 | | 58.9 | 20.6 | **3** | 3 | | 3.98 | 0.67 |
| 31 | Staff development is focused on enhancing the skills of teachers in teaching and learning in the classroom | 0.3 | 3.1 | 24.1 | | 53.7 | 18.8 | **8** | 3 | | 3.87 | 0.75 |
| 32 | Teachers have the information in the decision-making process applied in school | 0.3 | 3.7 | 20.7 | | 62.1 | 13.2 | **10** | 3 | | 3.84 | 0.69 |
| 33 | Teachers are committed to the program that nourish their learning | 0.1 | 2.5 | 11.8 | | 61.7 | 23.8 | **1** | 3 | | 4.06 | 0.68 |
| 34 | Discussion was meant to understand the terms of reference of other teachers in the school according to the various stages of form and function of the teacher | 0.6 | 4.1 | 20.0 | | 60.2 | 15.1 | **9** | 3 | | 3.85 | 0.74 |
| 35 | Teachers and (Parents-Teachers Association) collaboratively learn and apply new knowledgegain to solve problem. | 1.2 | 8.9 | 39.6 | | 38.8 | 11.5 | **11** | 2 | | 3.50 | 0.85 |
| **Total mean:** **3.894** | | | | |  | | | | | | | |

*K = Position & Scale: 1 = None at all, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Very often*

This dimension has four features that show teachers' practice i) shares information and dialogue , ii) collaborative problem solving, iii) applying science and iv) use the skills and strategies in the teaching and learning of teachers. The study found that teachers are more focused on the things they need to improve their performance and teaching methods through several dominant items ( Please refer item 33) " Teachers are committed to the program that nourish their learning " ( mean = 4.06 ) , item 28, " co- teachers plan to solve the problem of student needs " (4.03) , item 30 " involvement in discussions among themselves trigger a variety of ideas that encourage further exploration " (mean = 3.98 ) , item 26, " the teachers work together to implement teaching strategies to be applied in their work ( T&L) " ( mean = 3.97) , and item 29 (mean = 3.91) "collective learning is always done through open discussion."

For item 25 " Teachers work find and try different teaching techniques in the classroom " (mean = 3.90) , item 27 " cohesiveness among teachers that reflect their commitment to the school improvements are obvious " ( mean = 3.88 ) , item 31, " Staff development is focused on enhancing the skills of teachers in teaching and learning in the classroom " ( mean = 3.87 ) , item 34 " discussion was meant to understand the terms of reference of other teachers in the school according to the various stages of form and function of the teacher " ( mean = 3.85 ) and item 32 " Teachers have the information in the decision-making process applied in school " ( mean = 3.84 ), five of these items are at a high level and shows secondary school teachers always make improvements in teaching and learning in the classroom. In addition, teachers always share the information with other colleagues as to enhance their skills and knowledge. The feedback provided by these respondents also indicated dimensions have been encouraging teachers to discuss with the other teachers to deal with students and apply their learning in decision-making.

This study also shows the relationship between teachers and parents associations (PTA) relating to cooperation in the process of learning and applying new knowledge to solve problems in high school are at a moderate level. This refers to item 35 " Teachers and PTA together learn and apply new knowledge gained to solve problems " (mean = 3:50). Average level is related to the limited space and the opportunity to create activities and programs with teachers and parents in the school and outside of school. It can be seen that both sides have their own commitments.

This study has found that this dimension has four main features of 79.1% of teachers said that the sharing of information and dialogue activities always occur among them, 77.8% said they would be collaborative in problem solving and 62. % of teachers says they apply their knowledge in the exercise off their routine duties. In fact, 75.6% have insisted they use the skills and specific strategies in teaching teachers to improve the learning of their students. This characteristic describes the attitude and actions of teachers on teacher collective learning in order to improve and enhance the teaching and learning of students.

Last but not least is the practice personal sharing dimension that is at the lowest mean value (see Table 11) where it can be seen that the overall dimensions are moderate. Dimensions practice personal sharing has eleven (11) items that refer to four main characteristics in terms of i) the observation and encouragement , ii) sharing new practices iii) provide feedback and iv) analyzing the assignment or student workbooks and analyze practices related to student learning. Table 10 shows the teacher provides support to other teachers to share ideas and opinions as to improve their performance in terms of teaching methods.

***Table 11: Item Analysis for Shared Personal Practice Dimension***

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Bil** | **Item *for Shared Personal Practice Dimension*** | **Nilai %** | | | | | **K** | **T** | | **Min** | **Standard deviation** |
| **1** | **2** | **3** | **4** | **5** |
| 36 | Mutual observing among teachers | 2.8 | 16.4 | 45.1 | 29.7 | 5.9 | **10** | 2 | | 3.19 | 0.87 |
| 37 | The teachers always give feedback to their colleagues in connection with teaching practices | - | 2.8 | 20.7 | 57.0 | 19.5 | **2** | 3 | | 3.93 | 0.71 |  |
| 38 | The teachers always respond to relevant colleagues' teaching practices. | 0.1 | 2.7 | 25.6 | 55.6 | 16.0 | **4** | 3 | | 3.84 | 0.71 |
| 39 | Teachers share ideas and opinions in order to improve student learning in an informal | 0.4 | 1.6 | 13.0 | 59.5 | 25.4 | **1** | 3 | | 4.07 | 0.69 |
| 40 | Teachers jointly analyze student work to share and improve the practice of teaching | 1.0 | 4.4 | 25.9 | 53.1 | 15.5 | **5** | 3 | | 3.77 | 0.79 |
| 41 | There is a usual rotation schedule presiding teacher in the subject panel and form | 19.4 | 20.7 | 29.4 | 22.9 | 7.5 | **11** | 2 | | 2.78 | 1.21 |
| 42 | Teachers have the opportunity to identify the focus of the activities of their staff development | 1.5 | 8.4 | 35.2 | 47.2 | 7.7 | **9** | 2 | 3.51 | | 0.81 |
| 43 | Teachers will try the ideas they have to share in the classroom | 0.4 | 2.8 | 28.1 | 56.5 | 12.1 | **6** | 3 | 3.77 | | 0.70 |
| 44 | Teachers always get feedback on their performance to improve its practices continually | 2.2 | 8.6 | 34.3 | 42.9 | 12.0 | **8** | 2 | 3.53 | | 0.89 |
| 45 | The opportunity to be mentors and trainers for teachers at this school are always there | 1.8 | 7.8 | 27.4 | 50.0 | 13.0 | **7** | 2 | 3.64 | | 0.86 |
| 46 | Teachers are encouraged to review the shortcomings and mistakes themselves to be performing better | 0.3 | 3.3 | 21.6 | 56.2 | 18.6 | **3** | 3 | 3.89 | | 0.74 |
| **Total mean: 3.63** | | |  | | | | | |  | | |

*K = Position & Scale: 1 = None at all, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Very often*

The study found that six (6) items that are at a high level and four (5) items at a moderate level. These findings indicate that colleagues play an important role in motivating each other to continue to learn and always give feedback to other colleagues who may be teaching them and always do reflection to identify their own weaknesses. This can be shown by item 39 " Teachers share ideas and opinions in order to improve student learning in an informal " (mean = 4:07), item 37 " The teachers always give feedback to their colleagues in connection with teaching practices " (mean = 3.93), item 46 " teachers are encouraged to review the shortcomings and mistakes themselves to be performing better " (mean = 3.89) and item 38 " the teachers always respond to relevant colleagues teaching practices "( mean = 3.84 ). Four (4) of this item shows that individual teacher is always sharing new practices, their own reflection and feedback on teaching practices. Teachers in secondary schools are constantly assessing mistakes, vulnerabilities and their subsequent offense where eventually they would think of activities and teaching improvement programs, either formal or informal. In addition, this study also shows teachers giving each other encouragement and feedback on their teaching practices. Similarly, it was found that items 40" Teachers jointly analyze student work to share and improve the practice of teaching " (mean = 3.77) and item 43 " Teachers will try the ideas they have to share in the classroom " (mean = 3.77) are at a high level. Both of these items show teachers practice their routine work in analyzing student work and to try new ideas in collaborative classrooms. This proves that teachers in secondary schools do not work in isolation or solitary.

However, five items that are at a moderate level were of item 45 "The opportunity to be mentors and trainers to teachers at this school are always there " ( mean = 3.64 ) , item 44 " Teachers always get feedback on their performance to improve its practices continually " ( mean = 3:53 ) , item 42 " Teachers have the opportunity to identify the focus of the activities of their staff development " ( mean = 3.51), and item 36 " Teachers observe mutual colleague " ( mean = 3:19 ) and item 41 " There is a usual rotation schedule presiding teacher in the subject panel and form " ( mean = 2.78 ). The findings of this study indicate that teachers in public schools do not have the opportunity to become mentors or trainers to other colleagues. This is supported by the respondents stating that not many teachers observe other colleagues where observations usually determined by the administrator. Similarly, it was also supported that the opportunities for teachers to become chairman of the committee meeting or teachers at school is less. This role is given the responsibility by the principals to the leadership ranks of teachers and administrators are a range of school management. In fact, principals and school administrators were on the frontline to play their role in determining the title and school staff development activities rather than the teachers. The school did not investigate and assess the needs of teachers in improving their skills and knowledge.

For sharing personal practice dimensions, it has eleven ( 11 ) items , referring to the four key characteristics that showed 62.3% of teachers said that they have carried out surveillance and provide encouragement to other colleagues whereas, 61.7% of teachers are always sharing new practices and 63.2% of teachers provide feedback on each of the actions performed by the teachers. This dimension also showed 76.7 % of school teachers concerned about assignments or books practice analyzing student work and the practices associated with student learning. These four characteristics are more concerned about individual teachers' attitudes towards their learning which in turn form a group or small team work, medium or large. Thus, each individual teacher is considered essential in any PLC in secondary schools in Malaysia. It can be said that individual teacher is the key agent in building the PLC in high school.

**Preliminary Conclusion**

Few key features identified is the practice of teachers i) support the values ​​and norms, ii) focus on student learning , iii) have high hopes and expectations , and iv) share a vision for teaching and learning. Four characteristic dimensions refer to the practice of shared values, goals, mission and vision among teachers which play an important role in shaping the PLC in secondary school. In addition, there are five (5) properties referring to human related factors , i) having trust between each other , ii) to celebrate and honor, iii) risk-taking, iv ) have a culture of caring and v) collaboration in implementing changes. The five characteristic dimensions refer to the practice of state support in terms of relationships and practices followed by the dimensions of the structure of state support in terms of three (3) characteristics of the preparation of i) the source , ii) facilities and iii) communication systems available in the schools studied. The findings of this study support the State dimension of practice which is very important to determine the secondary school teachers can be active in their learning and improving schools to improve learning performance of the students.

Next dimension shared leadership and support have five (5) main feature which refers to the school leaders who are always i) be responsible for the decisions made, ii) to guide teachers to be leaders, iii) the share of power and authority, iv) provide support to teachers and pupils and v) provide an area of decision-making to members of the school community. This study shows the importance of leadership in shaping the PLC dimension in schools especially principals as key leaders play an important role in shaping the PLC in their respective schools to provide support and guidance to teachers. In addition, collective learning and application dimension also have four (4) characteristics showed that teachers practice i) shares information and dialogue, ii) collaborative problem solving, iii) the application of science and iv) use the skills and strategies in R & D teacher. The study found that teachers are more focused on their need to improve work performance and improve teaching methods.

Sharing personal practice dimensions has four (4 ) main characteristics in terms of i) the observation and encouragement , ii) sharing new practices, iii) provides feedback and iv) analyzing the assignment or student workbooks and analyze the practices associated with students' learning. The study found that secondary schools in Malaysia very much focus on the revision of the student workbook and hold a formal observation whereas, peer observations is poorly implemented. Thus, the characteristic of this dimension of practice is at a moderate level.

Overall, this study has identified twenty-five (25) properties which refer to the five (5) dimensions of practice that forms the PLC schools in Malaysia. These features promote teacher learning and impact on student learning and school improvement programs implemented based on the needs of students and teachers. Thus, there are many encouraging factors and obstacles in forming the PLC in Malaysian secondary school.

**Discussion**

The challenge for school teachers today is to ensure the development of human capital be holistic in terms of the development of knowledge , intellectual skills , fostering an attitude that is based on ethical values ​​and high morals . Thus, the school institution currently has a high level of educational achievement, particularly the leadership role of school principals. Principals as leaders at the school plays an important role in ensuring that each individual teacher in secondary schools in Malaysia has the capacity to develop in themselves through the learning process in service teachers. This learning process occurs through the involvement of teachers to collectively implement programs and carry out school improvement activities, especially those that focus on change and improvement in teaching and learning in the classroom.

Accordingly, it is the responsibility of school principals to mobilize the leadership ranks of both schools and teachers in order to develop the school as a PLC. This is because today's school improvement model is to start from a learning community and the community just had a desire to learn where eventually being able to maintain its influence. Therefore, this study was carried out over three years eventually be able to demonstrate the success of some secondary schools in Malaysia which overcome this problem by making their school organization as a PLC. The studied schools have shown that the unique culture and specials among parents, the community and the students. The study also found that the differences and uniqueness of this culture are dependent on the how the teachers work and the background of the school community itself consisted of their teachers, students and parents.

Principals of the surveyed school had played an important role in determining the culture of learning occurred despite the PLC itself was initially quite difficult to set up. The study found that successful schools which make their school as PLC model is a school leader who dared to make a difference and have its own personality in leading their school community. This study is in line with the statement by Schein (1985), which shows that school leaders create and manage the school’s culture has a unique ability to lead and shape a positive work culture. The successful leaders are a unique leader creating a positive work culture with teachers enhance the learning process by creating a space of time for teachers to learn, taking a holistic approach in addressing the problems, believing that they can change and alter the environment, encouraging open communication, trusting in the team work, be an approachable leader and has given more importance to the stakeholders to focus on the important man of the system.

Malaysian school principals have also shown their first practice focuses on creating shared values, goals, mission and vision of the school. Studies have shown that the most frequent practices adopted by the fictitious high school senior in Malaysia is to ensure the practice of shared values​​, goals, mission and vision of the place and have been able to determine the culture of continuous learning to occur. These high frequencies have a direct reflection that the PLC policy development in secondary schools is on the vision and mission of the school where it is able to invite the teachers work together to achieve goals. Practice of shared values, goals, mission and vision of the school can produce a positive impact on the future. Values ​​that exist in the school community to be guided one towards the better. The findings of this study have shown that the more clear detail and visual images, as described by Blanchard and Johnson (1982:25), the vision that being built was more convincing. The shared values, objectives, mission and vision are important in which makes every member of the school community collaborate to make changes altogether in order to achieve success and excellence of the school.

Therefore, this study has identified that the positive practice by the principals in secondary schools is the most important element in order to develop the PLC in secondary schools where should begin with the formation of Malaysia with the vision and mission of the school which is in line with the three key principles of school policies, programs and practices to be implemented each member of the school community work together to make the school outstanding. The three key principles are an essential foundation for creating a collaborative teacher teams to achieve the school objectives which focused on its student achievement. Principals, teachers, students and all other school staff who work together have shown full commitment in implementing continuous improvement in these studies. In other words, all of the school staff was involved in this learning process.

The study also found that successful principals are those who dare to challenge themselves in producing leaders who are teachers at all levels through the guidance and support of the principal. Principals serve as mentors and then followed by supportive element. According to Maimunah (2005), the principals who have a leadership style in guiding and supporting the highly favored by teachers. Principals have the initiative to teach as well as trying to establish a good relationship with the teachers. Coaching and mentoring sessions are considered as a learning process among teachers in secondary schools. In addition, teachers are taught on an ongoing basis in line with the goals by implementing assignments in their specialized area in the mission and vision of the school.

Practicing principals share leadership and support are also demonstrated in determining the uniqueness and specialty of the senior teachers and experienced help in leading the teachers were principals make these teachers as consultants. They are thought to have extensive knowledge about their duties at school. Thus, the principal always makes these teachers as facilitators in solving problems of students and teachers. Not only that, principals will also discuss with senior and experienced teachers to make a decision or plan several school improvement programs. In this way directly principals in Malaysia today has been able to develop the potential of school teachers to become teacher leaders are effective.

This is supported by the findings of the study indicated that principals and teachers meet regularly to plan programs teaching and learning in schools. The discussion occurs in one way rather than in the open instead. They talk about students' learning problems and decisions which are made by consensus. In addition, the principals also ensure that teachers are responsible for coordinating the programs involved. This work describes the practice school leadership has placed emphasis on power sharing. Transformational leadership that is always guiding and supporting this amalgam of 'learning repertoire' of the school community who can understand i) the duties and responsibilities , ii) a collective decision, iii) do what you want because of the requirement of the students and school , iv ) not to do something that is not allowed, v) relates the knowledge to practice. These findings are in line with the findings by Cheng (1996), which refers to the school as an educational organization to give more attention to the process of teaching and learning by supporting teachers do various improvement programs.

In addition, the uniqueness of shared leadership practices and support principals and teachers saw the school's leadership ranks increased where it has been able to list the guidelines for all members of their communities, especially on the method and manner of service of the decision made ​​in their school. This shared leadership practice once again has shown that the principal is not the only leader in the school that determines the outcome, however it happens only on a collective basis. Studies have clearly demonstrated leadership practices always i) to provide support and guidance for teachers to become leaders , ii) shared power and authority, iii) provides an area in decision making , and iv ) be responsible for the decisions made.

Once again, this study has found towards teachers' understanding of the concept of teacher leadership. Most teachers have expressed that there were shared leadership existed among them. This finding is in line with studies by Hord & Sommers (2008 ), Harris (2003 ) , Harris & Muijs (2002 ) and Crowther *et al.,* (2002 ), which sets out the duties and responsibilities of teachers as leaders who share that as i ) the leader of the students and other colleagues who act as facilitators, trainers, mentors, curriculum specialists, apprentice to new approaches and lead to learning groups , ii) leaders on operational duty in ensuring that schools operated continuously to achieve the goal (teacher role as head of the department, researchers and members of the working group) and iii) the leader in decision-making at and outside school.

The uniqueness of Principal leadership efforts in creating professional learning communities in schools that are controlled by a centralized system is indeed quite difficult to implement. Principals work hard and dare to change school policy development. Malaysian school principals should be more careful and creative in order to reduce the stress of teachers in the discharge of their duties and at the same time the teachers learn to be professional and self- improvement. Successful principals who have demonstrated their wisdom by ensuring the MOE 's objectives are achieved and also ensure the real needs of the schools assigned to all schools members. The study found that the learning cycle occurs among teachers and involve all parties in support of the PLC in their respective schools. Wisdom principals are able to bridge the relationship between school and NRD, PPD, parents and students to have an impact on teaching and learning (T&L) of the teachers and increase student achievements. Principals have to get the involvement of the various parties are considered as factors that encourage community support for the school to be a successful PLC. All parties have demonstrated a strong commitment to the goals to be achieved by the school. The members of this community will always support and challenge each other as to enhance the growth and development of communities.

This finding could prove the position to influence the development of school leadership of PLC practice in a secondary school are in line with the findings of Cheng (1991), about leadership education in Hong Kong is more focused on the position and hierarchy based only. However, the study found that there are still many lines consisting of school leadership principals, senior assistants and front line senior subject teachers are still lacking the knowledge and skills related to leadership, management and administration of schools, especially in managing and leading the teacher towards a lifelong learning culture. Teachers who served as principal of the high school should be provided with training and school management and leadership courses at regular intervals. This is because exposure to science in educational leadership and management is very important as many studies found that many principals are still quite timid and hesitant to share power and authority to adopt an area of ​​decision-making for the teachers, especially the second line of school leadership (Maimunah, 2005). The study found two features of this practice is at a moderate level. This phenomenon exists because the principal was “scared” the teachers will do “wrong“which causes the principal to be taken on the action or surcharges. In addition to that, they also feel "fear" as the principals are having less trusting to teachers who are considered little or no knowledge and experience of leading, managing and governing the school.

**CONCLUSION**

The global wave of change in education today is highly demanding and challenging especially towards the principals and school leadership which ranks them, the teachers build capacity through a variety of methods and approaches. Diversity approach by the principals are intend preserve the culture of learning among teachers in secondary schools because of the high level of activities and programs is more focused on the needs of teachers and students in the school. Success has lead principals indicated that teachers and students are more committed to each learning activity experienced by them. This phenomenon had a positive impact on the careers of teachers and students learning. Cultural preservation also depends on the ability of a school community to develop a culture of learning practices and procedures that become a habit or routine work of all the teachers. This study also proved that every school has its own unique character and do not have a perfect recipe in achieving excellence in students and schools. School leaders do not just rely on an approach that is considered perfect which can be adopted by all schools to ensure that it is able to maintain the excellence and effectiveness of the school. In total, the principal who creates the PLC schools in Malaysia has been able to i) build a learning culture for teacher , ii) promote and create positive practices among teachers , iii) provide teachers and appropriate work space as a place to think , iv) teacher community members expressed willingness to take risks to achieve rewards , v) the entire community as resource teacher community, vi) ensuring transformed into action learning strength , vii) linking intricate system of thought and execution and viii) ensure the strength and stability of vision and mission is based on a partnership with the school. This study has demonstrated the successes of every liberal principal expressed a collective aspiration and always learn together in a professional to create a positive relationship between the teacher work force and teachers working in secondary schools to promote competition to improve the quality. These schools have adopted the PLC which shows all the teachers work harder to not only do things right but, ensure they continue to be implemented properly and ensure that what is done is getting better, better and constantly improving for a better future.

**Reference**

Aitkin, M. & Longford, N. (1986). Statistical modelling issues in school effectiveness studies. *Journal of the Royal Statistical Society*, Seris A, 149, 1-43.

Babbie, E. (2001). The practice of social research (6th Ed.). Belmont, CA: Wadsworth Publishing Co.

Blanchard dan Johnson (1982), *The One Minute Manager.* New York: Berkley Books.

Brookover, W.B., & Lezotte, L.W. (1979). *Changes in school characteristics coincident with changes in student achievement* (Occasional Paper No 17). East Lansing: Michigan State University, EastLansing Institute for Research in Teaching.

Chapman, N. (1995). Developing a sense of mission at Whitefields School: the tension between action research and school management, *Educational Management and Administration,* 23 (3), 206-211.

Cheng, Y. (1991): ‘Organisational Environment in School: Commitment, Control, Disengagement, and Headless’, *Educational Administration Quarterly*,Vol. 27, No.4. (pp.481-505).

Creswell, John W. (1998). Qualitative inquiry and research design: Choosing among five traditions. Thousand Oaks: Sage.

Crowther F, Kaagan S, Ferguson M & Hann L 2002, *Developing Teacher Leaders: How teacher leadership enhances school success*, Corwin Press, Thousand Oaks, California.

DuFour, (2004) *Professional Learning Communities: A Bandwagon, an Idea Worth Considering, or Our Best Hope for High Levels of Learning?* DuFour, R (2007). Middle School Journal. September 2007. Volume 39.Number 1 (4-8). Retrieved from www.nmsa.org on 9/27/2007.

DuFour, R., DuFour, R, Eaker, R., & Many, T.(2006). *Learning by doing: A handbook for professional learning communities at work*. Bloomington, IN: Solution Tree.

DuFour, R. & Eaker, R. (1998). *Professional learning communities at work: Best practices for enhancing student achievement*. Alexandria, VA: Association for Supervision and Curriculum Development.

DuFour, R., DuFour, R., Eaker, R., & Karhanek, G. (2004).*Whatever it takes: How a professional learning community responds when kids don’t learn.* Bloomington, IN: National Education Service.

Eaker, R., & Gonzalez, D. (2006). *Leading in professional learning communities*. *National Forum of Educational Administration and Supervision Journal, 24*(1), 6-13.

Eaker, R., DuFour, R., & DuFour, R. (2002). *Getting Started: Reculturing Schools to Become Professional Learning Communities*. Bloominton, IN: National Educational Service

Gay, L. R., & Airasian, P. (2000). Educational research: Competencies for analysis and application. Upper Saddle River, NJ: Prentice-Hall, Inc.

Hord, S (2004). Professional Learning Communities: An Overview, in S. Hord (ed) *Learning Together, Leading Together: Changing Schools Through Professional Learning Communities.* New York: Teachers College Press and Alexandria, VA: ASCD.

Hord, S. (1997). *Professional Learning Communities: Communities of Continuous Inquiry and Improvement.* Austin, Texas, Southwest Educational Development Laboratory.

Hord, S., & Sommers, W. (2008). *Leading professional learning communities: Voices from research and practice.* Thousand Oaks, CA: Corwin Press.

Huffman, J. B. and Hipp, UK. (2003) Professional Learning Community Organizer, in J. B. Huffman and K.K. Hipp (eds) *Professional Learning Communities: Initiation to Implementation.* Lanham, MD: Scarecrow Press.

[Handy](javascript:doAuthorSearch('%26%2334%3BCharles%20B.%20Handy%26%2334%3B');) C. (1995). *The Age of Unreason*. Random House Business Books.

Harris, A., & Muijs, D. (2002). *Teacher leadership: A review of research*. Retrieved January 25, 2007, from: http://www.ncsl.org.uk /media/1D5/9E/teacher-leadership.pdf

Harris, A. (2003) Teacher leadership as distributed leadership, *School Leadership and Management*, 23 (3): 313-324. Quote page 322.

Hipp, K. A. and Huffinan, J. B. (2003) *Professional Learning Communities: Assessment-Development-Effects.* Paper presented at the Annual Conference of the International Congress for School Effectiveness and Improvement. Sydney, Australia, January.

Hord, S. (1997). *Professional Learning Communities: Communities of Continuous Inquiry and Improvement.* Austin, Texas, Southwest Educational Development Laboratory.

Kementerian Pelajaran Malaysia (2005). *Perangakaan Pendidikan Malaysia 2005*. EPRD. Putrajaya Malaysia.

Kementerian Pendidikan Malaysia (2001). *Pembangunan Pendidikan 2001-2010. Perancangan Bersepadu Penjana Kecemerlangan Pendidikan*. Pusat Bandar Damansara, Kuala Lumpur.

Kogan, M. (1978). *The politics of educational change.* Manchester University Press (Manchester).

Leo & Cowan. (2000). Launching Professional Learning Communities: Beginning Actions: Issues About Change. Southwest Educational Development Laboratory, Volume 8, Number 1

Lieberman, A., & Miller, L. (2004). *Teacher leadership*. San Francisco: Jossey-Bass.

[Maimunah Muda](http://gemilang.ukm.my:80/cgi-bin/chameleon?sessionid=2010010110563204227&skin=default&lng=ms&inst=consortium&host=202.185.40.3%2b1888%2bDEFAULT&patronhost=202.185.40.3%201888%20DEFAULT&search=SCAN&function=INITREQ&sourcescreen=COPVOLSCR&pos=1&rootsearch=3&elementcount=1&u1=1003&t1=Maimunah%20Muda&beginsrch=1) (2005). [Kepimpinan situasi di kalangan pengetua sekolah di Malaysia.](http://gemilang.ukm.my:80/cgi-bin/chameleon?sessionid=2010010110563204227&skin=default&lng=ms&inst=consortium&host=202.185.40.3%2b1888%2bDEFAULT&patronhost=202.185.40.3%201888%20DEFAULT&search=SCAN&function=INITREQ&sourcescreen=COPVOLSCR&pos=1&rootsearch=3&elementcount=1&u1=4&t1=Kepimpinan%20situasi%20di%20kalangan%20pengetua%20sekolah%20di%20Malaysia%20%2f%20Maimunah%20binti%20Muda&beginsrch=1) [Bangi : Fakulti Pendidikan, Universiti Kebangsaan Malaysia.](http://gemilang.ukm.my:80/cgi-bin/chameleon?sessionid=2010010110563204227&skin=default&lng=ms&inst=consortium&host=202.185.40.3%2b1888%2bDEFAULT&patronhost=202.185.40.3%201888%20DEFAULT&search=SCAN&function=INITREQ&sourcescreen=COPVOLSCR&pos=1&rootsearch=3&elementcount=1&u1=2009&t1=Fakulti%20Pendidikan,%20Universiti%20Kebangsaan%20Malaysia,&beginsrch=1)

Merriam, S.B. (2001). *Qualitative research and case study applications in education: revised and expended from case study research in education* San Francisco: Jossey-Bass Publishers.

Meehan, M.L., Orletsky, S.R. & Sattes B. (1997, July). *Field test of an Instrument Measuring the Concept of Professional Learning Communities in Schools*. Appalachia Educational Lab., Charleston, WV. 74p.

Morrissey, M. S. (2000) *Professional Learning Communities: An Ongoing Exploration.* Austin, Texas: Southwest Educational Development Laboratory.

Purkey, S., & Smith, M. (1983). Effective schools: A review. Elementary *School journal, 83(4), 427‑452.* Reynolds, R., and Ablett, A. "Transforming the Rhetoric of Organisational Learning to the Reality of the Learning Organisation." *The Learning Organization* 5, no. 1 (1998): 24-35.

Schein, E. H. (1985). *Organizational culture and leadership*. San Francisco: Jossey-Bass.

Senge, P. (1990). The leader's new world: Building learning retention. *Educational Leadership*, 47, 84‑88.

Sergiovanni, T. J (2001a). *The Principalship; A reflective practice perspective.* Needham Hight: Allyn & Bacon.

Speck, M. (1999). *The Principalship: Building a Learning Community*. Upper Saddle River: Prentice-Hall.

Taylor, F.W. (1911). *The Principles of Scientific Management*. New York: Norton.

Zuraidah Abdullah (2002). *Transformational Leaderhip: Learning Organisation in Secondary School in Selangor.* MasterThesis. Institut of Principalship Studies, Universiti Malaya.