

**Improving Individual, Team and Organizational Learning Through  
Organization Development Interventions (ODI) :  
A Case Study of a Private K12 School, Thailand**

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**Abstract**

This research aims to improve teachers and staff as individuals, team, and organizational learning through the organization development interventions (ODI) for a private school with 3,087 students, from kindergarten to higher secondary, with 213 Thai teachers, and 32 foreigner teachers. The researcher facilitated an action research with mixed of both quantitative and qualitative approaches to examine current understanding, practice, and factors enable individuals, team and organization learning. The research designed and implemented Organization Development Intervention (ODI), sets of designed planned actions, organizing workshops, and on spot trainings in an atmosphere of schooling activities to improve organizational learning. The progress analysis was determined from the Mean scores of the different gap scores of the variables between the Pre ODI and Post ODI. The pair simple t-test was applied as statistical analysis to test the hypothesis. Ho1 is rejected as there is a significant difference between Pre ODI and Post ODI on individual learning, team learning and organizational learning. The qualitative data indicates that after engaged to ODI teachers and staff at the school demonstrated improvement of their interest and support for the school organizational learning at all levels. This study success to raise the impacts to personal attitudes and changes practices. The school teachers and staff as individuals, team, and organizational learning have been improved organizational learning through OD Intervention that enable them to practice it and make use to break through the turbulent situation, ensure sustainability and retains its competitive advantage in very competitive and changing circumstances.

**Keywords:** school organizational learning, learning organization

**Introduction**

Globalization and its effects (e.g., social, cultural, economic, and technology), has significantly changed across all regions. Modern information technology as a driver for social communication, trade, services, currency, news information, and culture is made available to people (Nelly, 2003). Globalization has impacts to the development of the Asian countries and become major issue in education reform. Rapid global economic integration leads to transformation and migration of industrial and occupational structure.

Globalization has impacts to the development of the Asian countries and become major issue in education reform. Rapid global economic integration leads to transformation and migration of industrial and occupational structure. The increase of workers migration brings about the new composition of multination of teachers and students and diversity of cultures to classroom (Hyunjoon and Yuko, 2010).

Being influenced and affected by the current trends of globalization like other developed countries, Thailand needs to stimulate and speeds up its development in all aspects to be able to surf global waves of changes relevantly and timely. Education is an important driver for development of the country; thus prompting school administrators and teachers to prepare their people and systems for the benefits of global communities regardless of race and nationalities. The 15-year National Education Plan demands building a society of learning, knowledge and integrity. The emphasis is placed on fostering a learning society with knowledge management, good behavior and integrity of the people. There are campaigns for research, increasing the knowledge and changing learning style of Thai people and Thai society (Singsuriya, Aungsumalin, & Worapong, 2014). The most important element that enhances schooling systems for greater performance is human resources development and management. (Wijakkanalan, S., Wijakkanalan, W., Suwannoi, P., & Boonrawd, S., 2013).

A significant aspect toward organizational successfulness means adaptation to changes and sustainable organizational learning with the purpose of engagement and empowerment (Asadi, Ghorbani, & Naderan, 2009; Marsick, 2009; Dirani, 2009; Ortenblad, 2004b). Through improving human resources, learning new knowledge and skills are important issues in providing professional consultations, conducting academic researches, participating in decision making process and preserving high level of organizational standards (Chughtai & Zafar, 2006; Awang, Ahmad, & Zin, 2010). Therefore the concept of the fully developing learning organization in educational institutions has attracted much attention (Alam, 2009). Thus the concern is whether educational institutions have the characteristics to revitalize organizational learning to retain their staffs to improve their attitudes, skills and knowledge to become learning organizations (White and Weathersby, 2005).

Learning organization became an interesting option of organization intervention to break through these challenging situations. Organizations that learn assume challenges and improve unproductive patterns of behaviors. Personnel of a learning organization has culture to reflect upon working process and think systematically in order to forecast change and initiate new processes toward the benefit of organizational stakeholders such as administrators, students, faculty and staff, parents (Senge, 2006; Freed, 2001; Moloi, 2010; Ayupp & Perumal, 2008).

Many organizations are gradually increasing productivity because they did recognize and give priority to continuous improvement and continuous learning (Liao, Chang, and Wu and Axson, 2010). The only constant is organizational learning, and therefore the power of acquiring and learning new knowledge becomes a very essential source for maintaining a valuable heritage and generating core competences in the individual, team and the organization. Continuous learning is essential for competitive advantages and sustainability for an organization due to fast changing environment that demands organizations fast responses and constantly adaptation to survive and become prosperous (Axson, 2010).

This action research highlights at the importance of the organizational learning at individual, team, and organization level through implementation of the organization development intervention. Improving Organizational Learning at all level to enable the sustainability development of the school through the turbulent situation and to help school members to become dynamic in learning new knowledge and innovation (Garvin, 2000). During the research process, teachers and staff continually reflect on what they have learned, their approaches, how they have a dialogue and make decisions, their findings and their reaction. In short, in this action research and approaches, the researcher as an OD practitioner involves in the cycle of planning, acting, dialogue, reflecting and learning (Buijs, 2012).

### Organization Background

This research was implemented in a private school which has 3,087 students, from kindergarten to higher secondary, with 213 Thai teachers, and 32 foreign teachers. The school has 90 classrooms from kindergarten to secondary six with two teachers specially assigned as class-teacher to take care of the students and perform the guidance roles along with teaching their subjects. Teacher work hours cover an average of 20-25 hours teaching - per week and special assigned duties according to job description.

Diagnosing with both qualitative and quantitative methods allowed researcher to learn the context and situation of the school. In order to examine the current situation of individuals, team and organization learning in the school, researcher diagnosed the extent of learning capacity by implementing a qualitative methodology with variety of means to gain preliminary data and situation of the school organizational learning, to locate areas of strength and weakness, and take steps to further develop it.

In this study, the researcher applied the SWOT and Stavros's SOAR analysis to understand the context of the school as an organization. These tools of strategic planning are represented by the acronym; SWOT stands for Strengths, Weaknesses, Opportunities, and Threats and SOAR stands for Strengths, Opportunities, Aspirations, and Results. SWOT can be used at any level of an organization; it is traditionally employed at the senior management level to look for problems and focus on weaknesses and threats then search for possibilities. Researcher apply SOAR to enhance the result of SWOT to avoid draining of energy and lossing of spirit that lead to negative impact momentum and achieving results (Daly, Alan, Millhollen, Basha, and DiGuilio, Laila, 2007). In SOAR, weaknesses and threats are not ignored. They are reframed and given the appropriate motivations' within the Opportunities and Results conversation. Ultimately, it becomes a question of balance. High performing teams talk to each other differently than low performing teams. High performing teams are more positive, ask more questions, and are more focused outside of themselves. SOAR is a way to help people learn how to have positive and other-focused inquiry (Fredrickson, B., 2009).

Documentary studies, structure interviews with administrators, teachers and staffs allowed researcher to examined the current situation of individual learning, team learning and organization learning in schools and searched for factors enable individuals, team and organization learning and completed the SWOT Analysis.

Meeting and interviewing with school director and middle administrators, department by department, allowed researcher to draw up the SOAR. Researcher engaged members of the organization to identify and analyze the strengths and opportunities of the school in order to create shared aspirations, goals, strategies, and commitment (Stavros, 2009).

Table 1:

Summary of the SWOT/SOAR analysis of the school as an organization

<p style="text-align: center;"><b>STRENGTH</b></p> <ol style="list-style-type: none"> <li>1. ACN maintains high standards with a good reputation.</li> <li>2. ACN has good facilities, environment, advance technology equipment for educational technology to support classroom activities and student care system.</li> <li>3. Administrators have provided quality time to work collaboratively to improve standard.</li> <li>4. ACN teachers and staff have experienced in undergone many improvement programs.</li> </ol>	<p style="text-align: center;"><b>WEAKNESS</b></p> <ol style="list-style-type: none"> <li>1. Limitation of adaptation to changes</li> <li>2. ACN teachers and staff are used to with conservative and bureaucratic way of administration</li> <li>3. The top management does not aware of the importance of developing the school towards a learning organization.</li> <li>4. Teachers and staff do not have the courage to take initiative but rely on the commands and directions</li> <li>5. The school has administrative structure and management style that is not support the knowledge management and learning culture.</li> <li>6. Meetings become the floor to inform with less discussion or dialogue.</li> <li>7. Teachers and staff have limited know-how about knowledge management to promote a learning culture.</li> <li>8. There is moderate awareness among administrators, teachers and staff of global educational trends, and how they could effect or create impact to the school.</li> <li>9. There is very little space for organizational learning, initiative and innovation.</li> </ol>
<p style="text-align: center;"><b>OPPORTUNITIES</b></p> <ol style="list-style-type: none"> <li>1. Education is an important driver for development of the country, the political agenda has utilized education sector as the key solutions to develop country.</li> <li>2. ACN situate in business area which is recognized as the gate to North East region of the country.</li> <li>3. Stakeholders such as parents, students and local communities are highly satisfied with the school facilities and curriculum.</li> </ol>	<p style="text-align: center;"><b>THREATS</b></p> <ol style="list-style-type: none"> <li>1. Stakeholders and local communities are moderately satisfied with the school administration and service</li> <li>2. Schools are facing with pressure from economic factors, globalization, government policies.</li> <li>3. Stakeholders' expectations.</li> </ol>
<p style="text-align: center;"><b>ASPIRATION</b></p> <ol style="list-style-type: none"> <li>1. Development beyond the compliance with the educational standardization and regulations.</li> <li>2. Strategies for changing and upgrading people's attitude through education.</li> <li>3. Aim to create learning persons, learning organization and learning society.</li> <li>4. Enable the chance of consciously and continuously pursuing quality improvement.</li> <li>5. Develop sustainability of being an active learning organization.</li> </ol>	<p style="text-align: center;"><b>RESULT</b></p> <ol style="list-style-type: none"> <li>1. Improving ACN teachers and staff as individuals, team, and organizational learning through the organization development interventions</li> <li>2. Practicing Organizational Learning and knowledge management</li> <li>3. Preparation students ready for life in a fast-changing world</li> <li>4. Ongoing or relevant professional development that come with the policy of the top leader.</li> <li>5. Promote continuous learning and dialogue and Inquiry at the individual level.</li> <li>6. Encourage collaboration and team learning</li> <li>7. Provide Strategic leadership for learning</li> <li>8. Create systems to capture and share learning</li> <li>9. Empower teachers and staff toward a collective vision and Systems Connection.</li> </ol>

## Problem Statement

This research was inspired toward a healthy change and improvement of the school's organizational learning in a balance way in order to maintain a competitive advantage. The main concern of this research is to improve school teachers and staff as individual, team, and organizational learning through the organization development interventions (ODI). As Organizational Learning is moderately practiced and made use to breakthrough the turbulent situation, practice learning in all levels towards learning organization is an important factor for the school as an organization to progress and achieve to improve organizational performance. Though there are some practices as individuals, team and organization level, teachers and staffs have learning skills using their personal experience and moderately share their new findings and build the community of learning. They depend much on serving the traditional observances and transactional leadership style for compliance purpose and survival of position. Deficiency of learning culture makes school teachers; both team and individual simply ignore change, repeat old practices, and apply old solution in all ventures. Continuous learning is essential for competitive advantages and sustainability for an organization due to fast changing environment that demands organizations fast responses and constantly adaptation to survive and become prosperous.

## Research questions

This research attempts to answer to the following research questions:

1. What is the current level of understanding and practice of individuals, team and organizational learning in the school?
2. What factors enable individuals, team and organizational learning?
3. What Organization Development Intervention (ODI) could be designed and implemented to improve organizational learning?
4. What is the perception difference on learning organization of individuals, team and organization learning before and after ODI?
5. What is the impact of Organization Development Intervention (ODI) on individuals learning, team learning and organizational learning?

## Research objectives

1. To examine perception on the current understanding and practice of organizational learning of individuals, team and organization learning in the school.
2. To design and implement Organization Development Interventions to improve organizational learning.
3. To compare the perception difference on organizational learning of individuals, team and organization learning before and after ODI.
4. To propose Organizational Learning improvement program and ODI learning package for further study.

## Hypothesis of the study

Ho1 There is no difference between PRE ODI and POST ODI on perception about individual learning, team learning and organizational learning

Ha1 There is difference between PRE ODI and POST ODI on perception about individual learning, team learning and organizational learning

## Review of Literature

### School as an open system

Organization can be viewed as an open system as it depends on interactions among people and information taken from environment. An organization as a system is composed with three related parts: inputs, changes, and outputs. An organization brings in inputs (raw materials, customer requirements, capital, information or people), operate through change process and give product into environment as outputs (Rothwell, 2010).

A school is categorized as an open system because its operation is much like a living organism. School imports inputs from environment, transforms the inputs with some managements and then produce the outputs as the educational services to the society (Duffy, 2008). To be precise, school constituted by individuals perform various functions necessary toward the successfulness of goals and vision of the school. Teachers and staff are sustainable vision and goals oriented as they achieve their goals through interaction and coordinated effort with themselves inside and environment outside (Robbins, SP & Barnwell, 2002).

The school is considered the place to establish learning skill for students. In consideration of the present nature of the school, which refers to the place that promote learning atmosphere, the concepts of learning organization is suite to connect with the nature of the school system. The concept of the organizational learning is increasingly relevant to twenty-first century educational management because of the increasing complexity, uncertainty and rapidity of change of the school context. It is therefore important to understand what a organizational learning is, what its characteristics are and how it relates to the concept of a learning organization.

### Learning organization

Learning Organization was introduced and explored as the arts of management and business best practice by Peter Senge in the early 1990's. A learning organization empowers its people to continually learn to form a common vision by seeing the big picture. It gradually learns from new thing every situation and increasingly generates unique knowledge thus develops its learning culture. The concept became famous when Senge published his book name "The Fifth Discipline". The book explained about characteristics of the learning organization, the five disciplines. A learning organization characterized with systems thinking, mental models, personal mastery, building of shared

vision, and team learning. In this research Learning Organizational refers the state of the school as an organization that have practiced organizational learning and characteristics to collectively improve learning processes of the organization. Members of school as an organization performed dynamic learning role within their functions at diverse levels (individual, team, and organization) and how research facilitated the learning to develop the learning culture within school as an organizational practices in order to struggle toward constant improvement in sharing best practices among individual and across team and spreading all over the organization.

### Organizational learning

The concept about organizational learning has been mostly discussed as a strategic movement of human resource development (HRD) policies. Organizational learning composes of adaptive processes to form a self-reflective organization. The process collectively increases generative learning through the organization. It is important to understand the dynamics of learning and knowledge management processes around new principles and techniques. The learning seeks to achieve results and how to achieve results. It actively reflects from its successes and failures. Learning organizations regularly challenge their basic assumptions about how things are done. They discuss their weaknesses openly, answer difficult questions and encourage inventive break through. The learning is aimed at renewing and generating knowledge for the organization. Its appropriate quality goals and strategies can be adapted to opportunities and the changing needs (Ghosh, 2004).

In this research, organizational learning refers to the collective competency of organization learning behaviors at different levels (individual, team or group, and organization) composing of: Systems connection, Empower toward shared vision, Inquiry and dialogue, System to share learning, Embedded KM, Collaborative team learning, Create Continuous learning, Organization learning at individual level, Organization learning at team level, and Organization learning at Organization level. Organizational learning is a dynamic process for organizations to sustain continuous growth and improving core competences (Garvin, 2008; Keating, 1995). Organizational learning refers to an active process of creating, retaining and sharing knowledge in the development of capabilities in acquisition, generating, and integration of knowledge targeted at more productive and effectiveness organizational practices (Gilley & Maycunich, 2000; López et al., 2006; Argyris & Schön, 1978). Learning in individuals, team and organization encompasses innovative thinking around designs. It begins with the experience of discovery of undesired errors or gaps between what happened and desired conditions. Learning processes lead to developing solutions to eliminate this gap. It embraces diagnosing and understanding problems and designing suitable solutions. Intervention processes involve implementing solutions, reflection about the effects of the solutions and draw conclusions to generate knowledge extending to other relevant situations (Smith, 2001).

## Organizational learning vs learning organization

The term “learning organization” and “organizational learning” are interrelated utilized, changed over and used in a confusing variety of meaning which indicates the missing concept and understanding of both terms. Greater understanding of the relationship between “organizational learning” and the “learning organization” will provide better theoretical comprehension and lead to understanding of the meanings related the area of this study (Tseng and McLean, 2007).

This study focuses on the meanings of both terms. “Organizational learning” gives the meanings concerning on the action of learning and focus at the processes of learning itself. Organizational learning refers to the collective competency of organization learning behaviors at different levels (individual, team or group, and organization) composing of: Systems connection, Empower toward shared vision, Inquiry and dialogue, System to share learning, Embedded knowledge management, Collaborative team learning, Create Continuous learning, Organization learning at individual level, Organization learning at team level, and Organization learning at Organization level.

On the other hand “Learning organizations” is the ideal and vision of practicing organizational learning, which has another characteristic to collectively improve learning processes of the organization (Easterby-Smith and Araujo 1999; Tsang, 1997). Learning organization refers to the state of an organization that has healthy organizational learning, which focuses on “*activity*” and “*process*” (Finger and Brand 1999: 136). Learning Organization of the school refers to the state of the school as an organization that have practiced organizational learning and characteristics to collectively improve learning processes of the people in organization, at the individual, team and organization levels.

## Fostering organizational learning in schools: Creating impact through learning process

Learning Organization concept inspires a strong movement from inside out and focus upon continuous improvement (Drucker, 1998). Integration and application of the concept of an organizational learning both from the field of business and management science and education administration can enhance the capability to handle with change more successfully and effectively (Philips, 2006; Jamali et al., 2006). The concept also involves school as an organization. School as an organization needs to be flexible and break through an uncompromising and unending changing environment. The school system has to learn how they can deal with old and new problems, be ready for any situation, and prepare themselves toward sustainability (Chapman, 2002).

Fostering school’s organizational learning demands a systemic approach with the support of the processes of organization change and development. The organizational learning involves multiple sources and learning opportunities. Teachers perform better in alignment to schools visions and goals. Growing mindsets of self-directed professional teachers are accountable for the quality of organizational learning that takes place in the

schools as learning space. School’s organizational learning involves much more individual learning, team learning and interdependent support than one finds with traditional practice (Brown, 2003). Organizational Learning promotes passion to learn and inspiration in motivates everyone for continuous learning. This is not only a matter of the individual or certain team but also the school as a whole and an organization is able to revitalize and keep balance of change and stability (Bryson et al. , 2006).

Becoming a learning organization brings a school to invest in human capital and redesign administrative structures to empower teachers and staff to lifelong learning in their assigned job and that of others (Senge, 2000). Both academic and social learning enable teachers and staff in developing the competency and passion to living the deeper cognitive learning community, creativity, compassion and inclusivity. A balance between transactional and transformational forms of administrators’ leadership contribute significantly to organizational processes directly as well as to school conditions fostering organizational learning processes. Passion to learn, availability and sufficient resources encourage individual learning toward professional development and promote school innovation in administration. School administrators together with teachers and staff will be able to foster cultures of professional learning and to strengthen personal interrelationship (Arbuckle, 2000, p. 326).

### Theoretical framework of the study

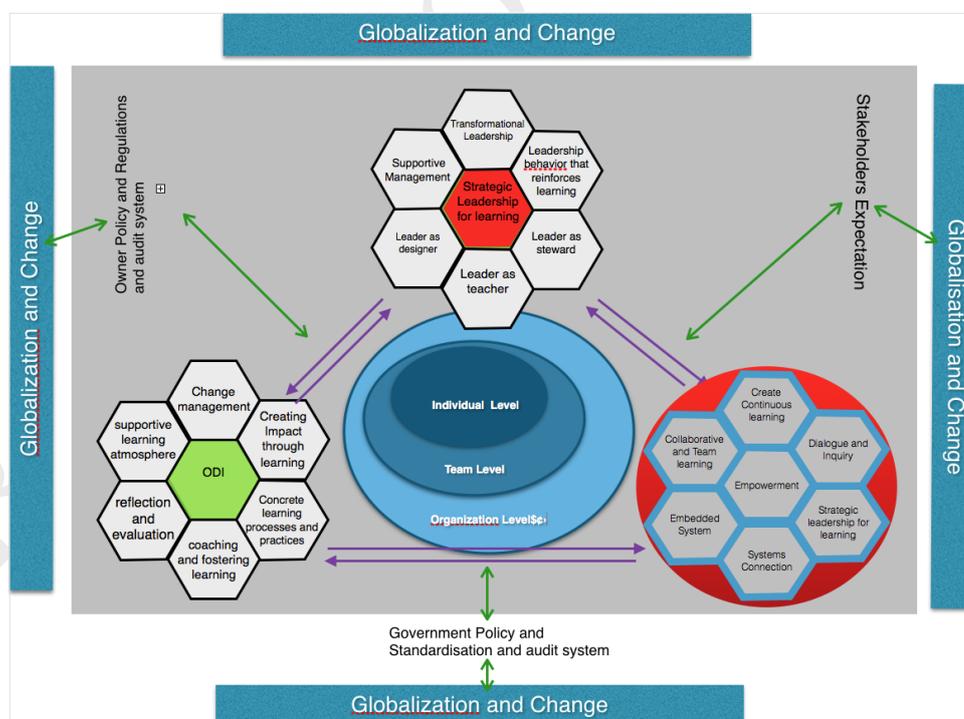


Figure 1. Theoretical framework

As presented in the Figure 1. The theoretical foundations of this research are on three major assumptions in terms of the process to engage in are: namely a] that human

systems are open dynamic learning systems, interacting within itself as well as with its environment in various ways and at various levels; b] that human systems at individual, team and organization levels, engaged in a process of learning, a process so generic in its functioning and growth; c] in the course of the learning process, various variables, elements and activities are at play.

This study applies the concept of school as organization and learning system, organizational learning models, learning organization and its related factors to foster continuous learning as a basis to design an organizational development intervention (ODI) to improve the school organizational learning. Enabling and improving the practice of organizational learning are the core process values to coach school personnel from individual level to team level and organization level to comply with external factors, policy and external audit system. With the supportive leadership roles and OD change management, transformative learning processes will be gradually nurtured and continually developed for the learning growth of individual, team, and the school as an organization. The school organizational learning will grow beyond practicing for survival and more importantly but toward live long learning organization. There are three cluster of issues considered in this theoretical framework namely a) the strategic leadership for learning with six specific elements, b) the ODI processes as a set of six interactive and engagement for development of organizational learning, and c) the seven dimensions of organizational learning. These three clusters are argued to influence and create impact at every level of the system, the individual, the team and the organization. All the levels would feel and consider the consciousness of the external conditions generated by globalization and change.

**Conceptual framework**

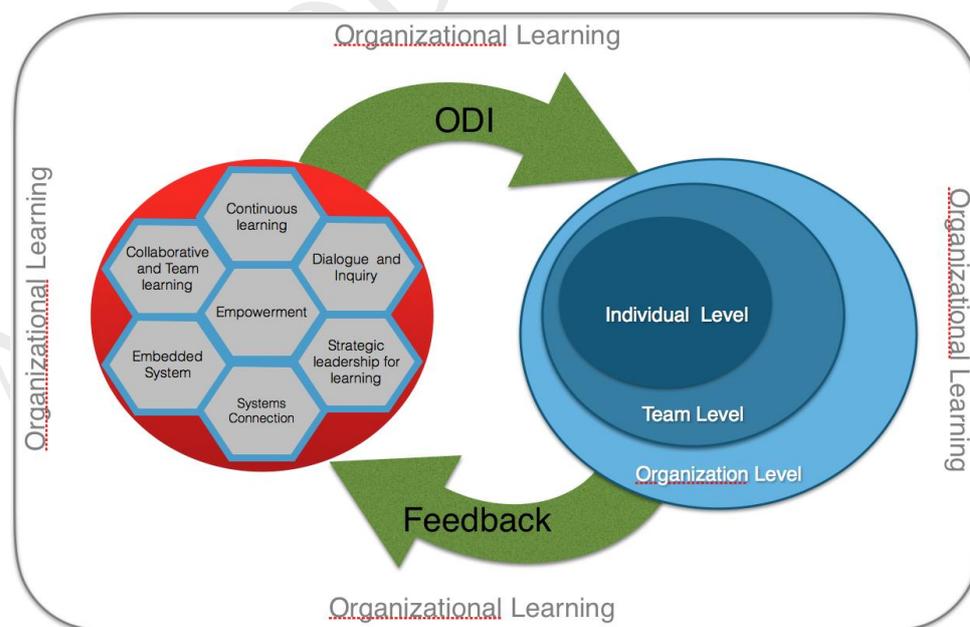


Figure 2. Conceptual Framework

As presented in the Figure 2, the OD Intervention at three levels is applied as independent factors that affect the dependent factors in the organizational learning area. The dependent factors consist of continuous learning, dialogue and inquiry, collaborative and team learning, empowerment, embedded system, system connection, and strategic leadership. They serve as essential dimensions embedded in the interaction between organization members and the organized structure of the school organizational learning culture. This conceptual framework reflects the researcher's system thinking of dealing with real situation of the school to improve individuals, team and organizational learning.

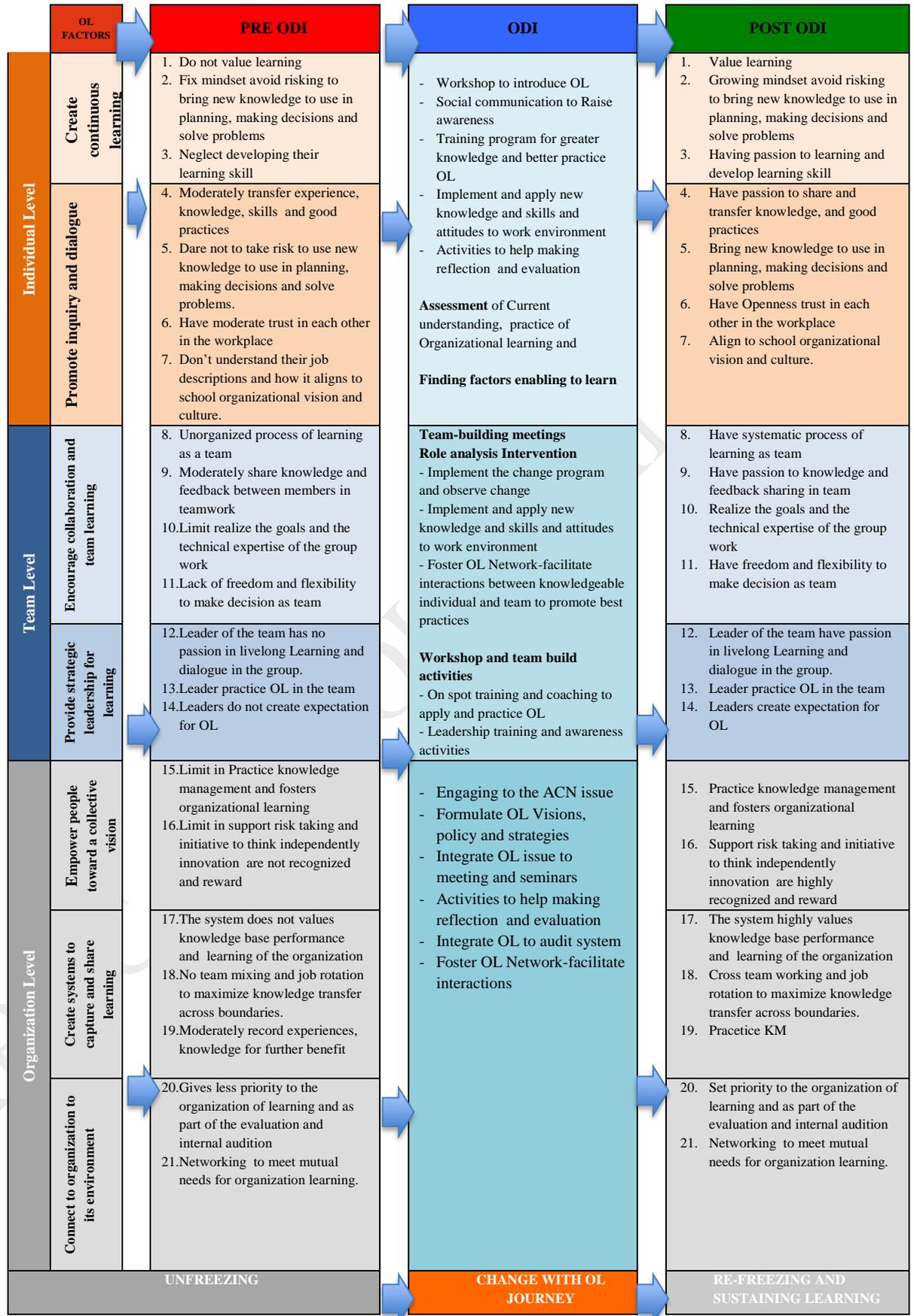


Figure 3. Action Research Framework

Figure 3 illustrates the summary of the action Research framework. This research is an action research in its nature. Researcher considers the school as a learning system and open system where member of the organization are practitioners that together collectively learn from their existing practices, interventions and reflections. The action research activities links organizational and individual learning with interventions and the improvement of practices. The ODI supports acquisition and transmission of knowledge among individuals, team and the organization. It enables space for reflection, learning and growing.

Researcher designs a framework to enable organizational development process in diagnosing, developing, and sustaining the outcome. Assessing and benchmarking the learning competency of an organization is an effective approach to initiate and facilitate a change process in building a greater learning competency (Nadler, 1998; Jick, 1994). The internal diagnosis of an organization to create aspiration and sense of urgent can serve to unfreeze the organization and to motivate change (Beer, 1980). Planning and successfully implementing the changes in the school and improvement of organizational learning of teachers and staff are therefore important parts of the process of becoming an active learning organization. In building this learning capability, creating awareness that everyone is engaging in this change process. The ODIs of this study are integrated in an open system and are grounded or crystallized from the OD diagnosis/assessment.

Researcher implements the ODI to allow the school as an organization to develop from its current state of learning organization to a more desired future state by facilitating change with the use of ODI to unfreeze the organization and to motivate change then maintain the journey of ODI to foster and restrain organizational learning.

### **Methodology**

In order to accomplish the research objectives, the researcher utilized both qualitative and quantitative study. The qualitative study integrates with many methods such as documentary research, structure social and digital interviews with administrators, teachers and staff.

The quantitative technique consisted of online survey, communication via email and school E-Office system to determine the perceptions and preferences of teachers and staff towards organizational learning. On completion of finalizing instrument design, researcher administered the data collection using online survey via school E-Office system. The researcher formulated an online survey with multiple choices about organizational learning competency electronically sent by e-mail. The questionnaires contained an instruction page and a consent page stating “by completing and submitting the survey you are granting permission to the researcher to use this data, and that samples will be coded so that the identity of the respondents will be protected”. The respondents returned the completed electronically to the researcher by online survey.

The response of the participant was gathered and readied for analyzing. The process is as follows:

The researcher prepared bilingual, Thai and English, questionnaires and contacted the Office of Director Department of the school to collect participants' email. Then questionnaires will be sent via online survey and inform the launch of questionnaires via E-Office system.

The respondents are requested to respond the questionnaires within one month as available function to be set in the online survey.

Follow-up of the questionnaires, together with social communication to distribute reminder note, will be sent to those respondents from time to time. After their retrieval, the online survey application checks all questionnaires and automatically and real time to analyze and report instant descriptive statistic.

Qualitative techniques were another method of collecting the data that focused on respondents' perceptions of organizational learning in the schools. A social communication and face to face interaction was used to facilitate interview. Social communications and face to face interactions were used to facilitate interview and collect qualitative data to respond to the research objectives no.4; To make assessment of the effect of intervention and determine the amount of improvement, and the research questions no.4 and 5; What is the perception difference on learning organization of individuals, team and organization learning before and after ODI? What is the impact of Organization Development Intervention (ODI) on individuals learning, team learning and organizational learning? The feedbacks are as followings.

As with many qualitative studies, the participants in the school were well known to researcher and to one another, so anonymity was neither a possibility nor a goal. However, survey responses were anonymous. Researcher reminded participants of this on several occasions, believing they might be more forthcoming in their responses with such assurances. To assure the confidentiality of the survey data, from the point it was first being collected through the data analysis process. Participants' names and identities were carefully, not to be described or mentioned. Hardcopies of memo notes, and survey responses were kept in a locked cabinet in researcher office. The computer files are kept in password-protected files on personal computer.

#### Research Instrument

This study used mixed of both quantitative technique and qualitative approaches based on the theoretical-framework to collect data and find out the situation and opportunity to improve organizational learning in schools. DLOQ questionnaire was used to be a guideline to generate a questionnaire for the school as several studies have shown strong reliability and validity levels for the DLOQ (Asadi, et al., 2009; Basim, Sesen, & Korkmazurek, 2007; Hernandez & Watkins, 2003; Watkins & Marsick, 1997; Yang, et al., 2004). The short version DLOQ consists of three adequate measures items for each of the seven dimensions of the DLOQ and has better psychometric properties in terms of the

formation of an adequate measurement model. The short version of DLOQ has been measured for reliability and validity and utilized in a variety of studies and across a variety of cultural contexts (Elinger, 2002; Hernandez, 2000; Lien, 2006; Song, Joo, & Zhang et al., 2008; Yang, 2003; Yang et al., 2004). The results of these studies have verified the applicability of the DLOQ in different cultures, providing internal consistency of each item's reliability (coefficient alpha range from .71 to .91) and reliable factor structure of the dimensions of learning organization (Lien et al., 2006).

The questionnaire was adapted from the Dimensions of Learning Organization Questionnaire (DLOQ), developed by Watkins and Marsick (1996, 2003) to meet the understanding the school context. The DLOQ statements are adapted and integrated with the questionnaire "Assessing the Organizational Learning Capacity of Schools" by David c. Dibbon (1999), and the questionnaire "Development of knowledge management strategies for schools under the St.Gabriel's Foundation of Thailand", Dissertation by Chamnan Laorukphol (2010) to make it comprehensive to investigate the perceptions and describe the nature of the school organizational learning.

Both close-ended and open-ended basic forms were used to generate questionnaire. Close-ended questions consisted of series of alternative five points of Linkert Scale ranking to be chosen by respondents. Open-ended question allow respondents to compose their own words freely in writing to respond to the questions. This instrument measures respondents' perceptions on learning organization dimensions. The dimensions describe organizational learning actions or practices by individuals, teams, leaders, and the organization as a whole.

There are seven dimensions to be measured by this instrument include (1) create continuous learning opportunities, (2) promote inquiry and dialogue, (3) encourage collaboration and team learning, (4) create systems to capture and share learning, (5) empower people toward a collective vision, (6) connect to organization to its environment, and (7) provide strategic leadership for learning. Close-ended questions with alternative five points of Linkert scale ranking is utilized to address research questions 1 (What is the current understanding and practice of individuals, team and organization learning in the school?) and 4 (What is the impact of Organization Development Intervention (ODI) on individuals, team and organizational level before and after ODI?). Open-ended questions, which allow respondents to answer freely in writing, are utilized to address research question 2 (What factors enable individuals, team and organization learning?). Researcher used Pre-ODI data to address research question 3 (What Organization Development Intervention (ODI) could be designed and implemented to improve organizational learning?).

### **Data analysis**

Applying mixed methods together with integrated procedures is an exceptional practice to conduct high quality research (Creswell and Tashakkori 2007; Johnson and

Christensen 2012). This study utilizes both qualitative and quantitative study to achieve the objectives of the study. “Qualitative research refers to document study of the meanings, concepts, definitions, characteristics of the related factors and situation. By digital and social interview, it seeks answers to questions by examining the perception of the learning of teachers and staff in various levels. In contrast, quantitative research in this research refers to counts and measures of the perception organizational learning with an integrate DLOQ, (Berg, 2004). Both qualitative data and quantitative data were analyzed. Qualitative data were collected from three sources: literature reviews, observations, interviews, and survey open-ended questions. Quantitative data were collected from survey with closed-ended questions.

As the triangulation is a powerful solution to the problem of relying too much on any single data source or method, qualitative data was triangulated with quantitative data to strengthen evaluation and make findings more useful by providing different information and perspectives about the improvement of the school organizational learning (Patton, 1990). Therefore, this research made use of a variety of methods to ensure the correctness and trustworthiness of the research findings and lessen the risk to unreliability.

- *Triangulation of methods* (Both qualitative and quantitative data collection and data analysis methods were employed);

- *Triangulation of data sources* (Observations, interviews, and surveys were utilized);

- *Triangulation of qualitative data analysis* (Three teachers and researcher regularly participated in decoding meeting)

- *Triangulation of analysts* (Multiple analysts were used to review survey, interview, and observation findings).

#### Qualitative data analysis

Three types of qualitative data were analyzed with the coding technique, in the following order: responses to survey open-ended questions; responses to interview questions; and notes from observations of teachers and staff meetings and activities.

#### The coding team

Researcher assigned three teachers who were qualified with Ph.D and Master Degree and extensive experience in conducting research study and surveys of the school to assist in coding the qualitative data. Collaborating with co-coders was done with meetings throughout the coding process. These meeting were dynamic with comparing notes on coding, discussing and defending individual coding decisions, negotiating compromises, and refining codes and code definitions. While different coders will always have opinion on any given data, it is essential to have a positive and integrity mindset to contribution to a data analysis process. Frequent communication among coder increases coding skills, ensure better final product, and create conviction in the study’s findings. (Berg, 2007; Padgett, 2008).

### The coding process

Coders were assigned to group the given data according to the variable, to extract themes to identify how respondents perceive or think about ODIs as well as their expectations and to make a memo of synthesis of the data. While coding, all three coders used hard copies, rather than computer copies to list codes and a short and precise write memos. Coding meetings occurred frequently in the beginning of the coding process of both Pre-ODI and Post-ODI periods. Discussion in coding meetings allowed comparison and review about ideas that struck him or her while coding, trends emerging from the data, and adjustments that might be made to synthesize the data. Coding deadlines were agreed upon for the completion of specific coding tasks. Discussions during coding meetings were animated by researcher.

### Quantitative data analysis

A single type of quantitative data was analyzed: responses to survey with closed-ended questions. Simple statistical technique for Social Sciences was used to analyze data to provide descriptive statistics; Mean, and Standard Deviation. The results indicated the information on the current organizational learning competency that occurred in the school as PRE ODI and the state of teachers and staff on the organizational learning competency in the school as Post ODI.

After the ODI, the progress analysis was determined from the Mean scores of the different gap scores of the variables between the PRE ODI and Post ODI. The pair simple t-test was applied as statistic analysis to compare the mean score of PRE ODI and Post ODI to find out the impact of the ODI for the school organizational learning.

The test provided an appropriate significance test of the difference of paired sample's means. The researcher tested the Organizational Learning on the same variables collected twice. Therefore, the paired sample t-test, sometimes called the dependent sample t-test was used to determine the impacts of ODI on the school's organizational learning between the means of PRE ODI and POST OD Intervention. By applying this paired sample t-test, the determined same group of 204 teachers and staff was engaged to respond to the same survey instrument twice with an interval of five months between the two surveys, resulting in pairs of observations.

### Action Research Design

This study has the nature of an action research approach as to deal with real situation of the school. It is primarily focus to improve individuals, team and organizational learning. It is more appropriate to implement Action research than traditional research for improving organizational learning and practice. Researcher as a practitioner and facilitator of action research to improve individuals, team and the organization learning must focus on close collaboration and highly participatory of the

participants that involved at every stages of the research process (Bradbury-Huang, H., 2010). Action research addresses real life issues and techniques adopted in acquisition of knowledge. It integrates qualitative and collaborative processes aiming to benefit the immediate stakeholders in a democratic, collaboration through participation, and social change (Ferrance, 2000).

The researcher considers the school as a learning system and open system where member of the organization are practitioners that together collectively learn from their existing practices, interventions and reflections. The action research activities linked organizational and individual learning with interventions and the improvement of practices. The ODI supports acquisition and transmission of knowledge among individuals, team and the organization. It enabled space for reflection, learning and growing. Action research methods involve researchers and stakeholders to cooperate in the process of diagnosis of a problem, design of interventions and application, implementation and evaluation of interventions to make improvement. There are five main phases in Action Research methodology (Reason and McArdle, 2008).

Phase I: Diagnosing or problem identification of localized problems and their underlying causes and formulate a working hypothesis to be used in the action research cycle.

Phase II: Action planning, participants gather, organize and interpret data in order to formulate actions that can improve the existing situation.

Phase III: Action taking according to the systemically analyzed field data, participants implement planned solutions.

Phase IV: Results evaluation involves the assessment of the effect of intervention and determine the amount of improvement.

Phase V: Reflection or specifying learning, participants' document and sum up the learning outcomes, which include knowledge contributions to both theory and practice. It also addresses additional questions raised by the data and hence serves as the starting point for a new cycle of additional improvements.

Table 2.  
Data analysis and interpretation procedure

<b>PHASE 1 Diagnosing</b>		
<p><b>Response to Research Objectives:</b> 1. To examine perception on the current understanding and practice of organizational learning of individuals, team and organization learning in the school.</p> <p><b>Research Questions:</b> 1. What is the current understanding and practice of individuals, team and organizational learning in the school?</p>		
Source of data or Sample	Data Analysis Method	Outcome
1. Documents - FSG school Charter - SWOT analysis - Quality Assurance Reports - Stake Holders Satisfaction Survey 2 Observation, Interviews 3. Online Survey	Literature review  Coding process Descriptive statistic Determination of Means Score and Standard Deviation	Preliminary Data about current understanding and practice of individuals, team and organization learning in the school
Target purposive sample (n=208)		
<b>PHASE 2 Action Planning</b>		
<p><b>Response to Research Objectives:</b> 2. To design and implement Organization Development Interventions to improve organizational learning.</p> <p><b>Research Questions:</b> 2. What factors enable individuals, team and organizational learning?</p>		
Source of data or Sample	Data Analysis Method	Outcome
Qualitative study to identify trends, Action Research, OD Change Models and insights about learning organization with various resources and interviews with experienced educative administrators  Visiting and meeting with Director and the school management	Literature review To investigate and diagnose the school contextual situation  Literature review Synthesis of OD change models, action research practices in the focus area	- Seven factors enable individuals, team and organization learning - Action research framework - ODI framework - Research instrument
Target purposive sample (n=208)		

<b>PHASE 3 Action taking</b>		
<p><b>Response to Research Objectives:</b> 2. To design and implement Organization Development Interventions to improve organizational learning.</p> <p><b>Research Questions:</b> 3. What Organization Development Intervention (ODI) could be designed and implemented to improve organizational learning?</p>		
Source of data or Sample	Data Analysis Method	Outcome
Quantitative study to make first assessment with research questionnaire Meeting with Director and the school management to collect data	PRE ODI and POST ODI Descriptive statistic Determination of Means Score and Standard Deviation	Organization Development Interventions to improve organizational learning
Target purposive sample (n=208)		
<b>PHASE 4 Results Evaluation</b>		
<p><b>Response to Research Objectives:</b> 3. To compare the perception difference on organizational learning of individuals, team and organization learning before and after ODI.</p> <p><b>Research Questions:</b> 4. What is the perception difference on learning organization of individuals, team and organization learning before and after ODI? 5. What is the impact of Organization Development Intervention (ODI) on individuals learning, team learning and organizational learning?</p>		
Source of data or Sample	Data Analysis Method	Outcome
Field note of ODI  Second assessment of the output of the OD Intervention of the improvement of the organizational learning	Determination of responses to interview questions, Means Score and Standard Deviation of the different gap scores of the variables between the Pre ODI and Post ODI with the pair simple t-test	The impact of the OD Intervention for the school organizational learning
Target purposive simple (n=208)		
<b>PHASE 5 Reflection and conclusion</b>		
<p><b>Response to Research Objectives:</b> 4. To propose Organizational Learning improvement ODI for further study.</p>		

Source of data or Sample	Data Analysis Method	Outcome
Overall assessment of the output of the OD Intervention of the improvement of the organizational learning  Sum up of the learning outcomes, which include participants' document knowledge and contributions to both theory and practice.	Specifying learning by determination of actions and reflections of the Pre ODI and Post ODI  Additional questions raised by the data and hence serves as the starting point for a new cycle of additional improvements.	Organizational Learning improvement ODI for the school and the schools under the Foundation.
Target purposive simple (n=208)		

Table 2 indicates the summary of the data analysis and interpretation procedure. Researcher designed a framework of data analysis to respond each research question and objective systematically according to the five phases of research; PHASE I Diagnosing, PHASE II Action Planning, PHASE III Action taking, PHASE IV Results Evaluation and PHASE V Reflection and conclusion.

#### Participants and population

The participants of this study are the total population of a private school teachers, administrators and staff. There are 13 administrators, 213 Thai teachers and staff, 32 foreign teachers who participated the action research study. Researcher purposely engaged every teacher and staff in the study.

#### Research Instruments

This study used mixed of both quantitative technique and qualitative approaches based on the theoretical-framework to collect data and find out the situation and opportunity to improve organizational learning in schools.

The questionnaire was adapted from the Dimensions of Learning Organization Questionnaire (DLOQ), developed by Watkins and Marsick (1996, 2003) to meet the understanding the school context. The DLOQ statements are adapted and integrated with the questionnaire "Assessing the Organizational Learning Capacity of Schools" by David c. Dibbon (1999), and the questionnaire "Development of knowledge management strategies for schools under the St.Gabriel's Foundation of Thailand", Dissertation by

Chamnan Laorukphol (2010) to make it comprehensive to investigate the perceptions and describe the nature of the school organizational learning.

Both close-ended and open-ended basic forms were used to generate questionnaire. Close-ended questions consist of series of alternative five points of Linkert Scale ranking to be chosen by respondents. Open-ended questions allow respondents to compose their own words freely in writing to respond to the questions. This instrument measures respondents' perceptions on learning organization dimensions. The dimensions describe organizational learning actions or practices by individuals, teams, leaders, and the organization as a whole.

There are seven dimensions to be measured by this instrument include (1) create continuous learning opportunities, (2) promote inquiry and dialogue, (3) encourage collaboration and team learning, (4) create systems to capture and share learning, (5) empower people toward a collective vision, (6) connect to organization to its environment, and (7) provide strategic leadership for learning.

Phase I : DIAGNOSING the school contextual situation

#### PRE ODI Findings

Pre-ODI was concerning about diagnosing the school contextual situation with both qualitative and quantitative methods. Researcher learned the context and situation of the school by meeting and interview with school director and middle administrators, department by department. Researcher performed qualitative method by studying with various resources such as literature review, documentary research, and interviews with experienced educative administrators. Documentary research, structure social and interviews with administrators, teachers and staff allow research to examined the current situation of individual learning, team learning and organization learning in schools and searched for factors enable individuals, team and organization learning. Research diagnose the extent of learning capacity by implementing a qualitative methodology with variety of means to gain preliminary data and situation of the school organizational learning, to locate areas of strength and weakness, and take steps to further develop it.

In order to gain better perception of Pre-ODI stage, an online survey with a questionnaire applied from DLOQ questionnaire was launched after its passing the validity test. Determination of the perceptions, preferences and the current issue of the school organizational learning and to identify trends gave insights about learning organization in the area of education to assess organization learning at all level, individuals team and institution level. The result of this quantitative survey study corresponded and confirmed with information from qualitative study and provided a quality preliminary data for researcher to in-depth understand the context of the school.

Table 3 :  
PRE ODI : Descriptive Mean and Standard Deviation (SD)

Level and Dimension	MEAN	SD	RATING
Continuous learning	2.47	.90	Rarely true or occur
Promote dialogue and Inquiry	2.58	.63	Rarely true or occur
<hr/>			
<b>INDIVIDUAL LEVEL</b>	<b>2.53</b>	<b>.71</b>	<b>Rarely true or occur</b>
Encourage collaboration and team learning	2.54	.67	Rarely true or occur
Provide Strategic leadership for learning	2.78	.60	Neutral
<hr/>			
<b>TEAM LEVEL</b>	<b>2.64</b>	<b>.62</b>	<b>Neutral</b>
Empower people toward a collective vision	2.67	.92	Neutral
Create systems to capture and share learning	2.41	.86	Rarely true or occur
Systems Connection Connect to organization to its environment	2.60	.87	Neutral
<hr/>			
<b>ORGANIZATIONAL LEVEL</b>	<b>2.54</b>	<b>.73</b>	<b>Rarely true or occur</b>

Table 3 indicates teachers and staff perceived that before ODI organizational learning occurs neutrally at team level while rarely occur at individual level and organizational level.

Teachers and staff perceived that continuous learning and Promote dialogue and Inquiry at the individual level were rarely occurring. They have fix mindset and avoid risking bringing new knowledge to use in planning, making decisions and solve problems. Self-initiative in learning skill was low as they moderately transferred experience, knowledge and good practices, and somewhat trust in each other in the workplace.

At the team or group level, teachers and staff perceived that encourage collaboration and team learning rarely occurred while they perceived that provide Strategic leadership for learning occurs more. Team leaders had limit passion in personal livelong learning and learning as a team. Moderately share knowledge and feedback between members in teamwork made the team lack of freedom and flexibility to make decision.

At the organization level, teachers and staff perceived that create systems to capture and share learning is rarely occur while empower people toward a collective vision and Systems Connection are neutral. Limitation in Practice knowledge management and fostering organizational learning cause management team avoid

supporting risk taking or initiative to think independently and deny innovation. They gave less priority to the organization of learning and did not value knowledge base performance as part of the evaluation and internal audit.

The results from qualitative study of documents such as school SAR, stakeholder satisfaction reports, interview and observation reflected more challenge and area to improve than the result from quantitative study. Researcher could conclude the findings for the Pre-ODI about understanding and practicing of individuals, team and organization learning in the school that teachers and staff do not have the courage to take initiative but rely on the commands and directions of the Director. The single opinion leadership style did not enable leader of the organization to facilitate the change process and the transformation in the quality of teaching and learning. Teachers and staff hide themselves from taking any initiative and dare not to liberate themselves. Any innovation must be informed to the top management before implemented. The school has administrative structure and management style that is not support the knowledge management and learning culture. Teachers and staff work have fix mindset to respond to the hierarchical controls and that of external standardization. They primarily stick to the conformity to rules, regulations and the directions from the authority.

## Phase II : ACTION PLANNING

### Planning for ODI to improve organizational learning

As the Pre ODI was concerning about diagnosing the school contextual situation with both qualitative and quantitative methods, the result of this quantitative survey study corresponded and confirmed with information from qualitative study and provided a quality preliminary data for researcher to in-depth understand the context of the school.

Therefore, the researcher designed the ODI by integrating an open system, action research design framework and organizational development process together to diagnose, develop, and sustain the outcome in nature. In building this learning capability, creating awareness that everyone was engaging in this change process. Assessing and benchmarking the learning competency of an organization was an effective approach to motivate aspiration and sense of urgent change to unfreeze the organization. The school as an organization developed from its current state of learning organization to a more desired future state by facilitating change with the use of ODI to unfreeze the organization and to motivate change then maintain the journey of ODI to foster and restrain organizational learning.

At the individual level teachers and staff perceived that continuous learning and Promote dialogue and Inquiry at the individual level were rarely occurring. They have fix mindset and avoid risking bringing new knowledge to use in planning, making decisions and solve problems. Self-initiative in learning skill was low as they moderately

transferred experience, knowledge and good practices, and somewhat trust in each other in the workplace.

Therefore, to design and implement Organization Development Interventions to improve organizational learning at the individual level researcher performed observation and reflections of the school documentation. Survey and interview were facilitated to make assessment to understand current practice of Organizational learning and factors enabling to learn at individual level, team level, and organization level. All teachers and staff must be introduced about Learning Organization and were engaged to raise awareness and sense of urgency to improve organizational learning. Facilitating sessions during annual general assembly of the beginning of the year 2017 can foster awareness about Learning Organization, to promote best practices and collect the qualitative data for POST ODI. Researcher as a practitioner and facilitator of action research must try to enable space for reflection, learning and growing to improve individuals, team and the organization learning.

At the team level, teachers and staff perceived that encourage collaboration and team learning rarely occurred while they perceived that provide Strategic leadership for learning occurs more. Team leaders had limit passion in personal lifelong learning and learning as a team. Moderately share knowledge and feedback between members in teamwork made the team lack of freedom and flexibility to make decision.

Therefore, workshops and discussion for teachers and staff at different situation of team level of teachers and staff were facilitated to keep engaging teachers and staff to practice organizational learning. Researcher accompanied and had frequent visiting to give/receive feedbacks. The sustainability of implement the organizational learning practice was concerned. Focusing on close collaboration and highly participatory of the participants involved at every stages of the research process, Researcher linked organizational and individual learning with interventions and the improvement of practices to support acquisition and transmission of knowledge among individuals, team and the organization. Periodical on spot training and coaching for individual or teams were essential as researcher success in engaging management team to support, express their re-enforcement and made cooperation in foster OL Network.

At the organization level, teachers and staff perceived that create systems to capture and share learning is rarely occur while empower people toward a collective vision and Systems Connections are neutral. Limitation in Practice knowledge management and fostering organizational learning cause management team avoid supporting risk taking or initiative to think independently and deny innovation. They gave less priority to the organization of learning and did not values knowledge base performance as part of the evaluation and internal audition.

Therefore, getting agreement and cooperation in taking action from the top management administrator of the school and sessions facilitated during annual general

assembly of the beginning of the year 2016 were essential to raise awareness and sense of urgency of the school as an organization to change. The journey of ODI to foster organizational learning concerning about raising awareness and engaging everyone in the school to change process with the use of assembly in the annual seminar as OD Intervention to unfreeze the organization and to motivate change toward organizational learning. Meetings with the school management and various departments of the school to give feedback, discussion and dialogue were essential to build engagement and support by the school management and personnel.

The researcher could conclude the findings for the Pre-ODI about understanding and practicing of individuals, team and organization learning in the school that teachers and staff do not have the courage to take initiative but rely on the commands and directions of the Director. The single opinion leadership style did not enable leader of the organization to facilitate the change process and the transformation in the quality of teaching and learning. Teachers and staff hide themselves from taking any initiative and dare not to liberate themselves. Any innovation must be informed to the top management before implemented. The school has administrative structure and management style that is not support the knowledge management and learning culture. Teachers and staff work have fix mindset to respond to the hierarchical controls and that of external standardization. They primarily stick to the conformity to rules, regulations and the directions from the authority.

### Phase III : ACTION TAKING

Implementing ODI to improve organizational learning

The OD Intervention consisted of the following;

1. Researcher started the ODI by engaging and introducing Learning Organization to the top management administrator of the school to get agreement and cooperation in taking action on the ODI.
2. Consequently, sessions facilitated during annual general assembly were dedicated to raise awareness and sense of urgency to change. All teachers and staff were introduced about Learning Organization and were engaged to raise awareness and sense of urgency to improve organizational learning.
3. Researcher performed observation and reflections of the school documentation. Survey and interview were facilitated to make assessment to understand current practice of Organizational learning and factors enabling to learn at individual level, team level, and organization level.
4. Researcher arranged 2nd Meeting with the school management to give feedback and result of the Pre-ODI and engaged the school management to a greater richness of dialogue and possibility.
5. Research together with administrative management facilitated seminars, workshops and discussion for teachers and staff at different situation of Team/group level of teachers and staff. These activities engaged teachers and staff to practice organizational learning for a greater richness of dialogue and

shift of mindset toward formulating common vision and strategies to implement and to apply new knowledge, skills and attitudes to work environment.

6. Periodical on spot training and coaching for individual or team were essential to re-enforcement and foster OL Network that facilitated interactions between knowledgeable individual and team to promote best practices.
7. Accompaniment and frequent visiting enabled researcher to follow up the change, give/receive feedbacks and ensured the sustainability of implement the organizational learning practice.
8. Research facilitated workshop for the management team to create strategy to re-enforce practice of OL in internal audit system.
9. Periodical meeting with school management enabled research to give/receive feedbacks of the implement the organizational learning practice.

Assessing and benchmarking the learning competency of an organization was an effective approach to initiate and facilitate a change process in building a greater learning competency (Nadler, 1998; Jick, 1994). The internal diagnosis of an organization to create aspiration and sense of urgent could serve to unfreeze the organization and to motivate change (Beer, 1980). Planning and successfully implementing the changes and improvement of organizational learning was therefore an important part of the process of becoming a learning organization.

Table 4.

*The summary of the ODI in the Phase III Action taking.*

Change Process	Activities	Objectives	Target Participants	Time frame/ Frequency
Create a vision	1. Meeting with the school management	Engage and introduce Learning Organization to raise awareness and sense of urgency to change Getting agreement and cooperation in taking action on the ODI	Team leaders Administrators	Dec. – Jan, 2017
Communication the vision and empower to act	2. Facilitating general Assembly	Engage and introduce Learning Organization to raise awareness and sense of urgency to change	All teachers and staff	Dec. 23,2016
Planning for short-term win	3. First assessment	Understanding current practice of Organizational learning and factors enabling to learn at individual level, team level, and organization level	All teachers and staff	Dec. 23,2016
Consolidating improvement	4. 2nd Meeting with the school management	Giving feedback and result of the Pre-ODI and engage the school management to a greater richness of dialogue and possibility	Team leaders Administrators	Jan. 23, 2017

Sustaining improvement	5. Facilitating general Seminar and workshops	Engage to practice Learning Organization for a greater richness of dialogue and shift of mindset Formulate common vision and strategies to implement and apply new knowledge and skills and attitudes to work environment.	All teachers and staff Team/group level of teachers and staff	March 06, 2017
Institutionalizing new approaches	6. Team visiting, on spot training and coaching for individual or team that need re-enforcement	- Apply and practice OL - Follow up the change - Give/receive feedbacks - Foster OL Network facilitate interactions between knowledgeable individual and team to promote best practices	Team/group level of teachers and staff	March – May, 2017
	7. 3rd Meeting with school management	-Give/receive feedbacks - Re-enforce practice of OL in internal audit system	Team leaders Administrators	March – June, 2017

Phase IV : RESULTS EVALUATION

Post ODI Findings

The school gradually has improved its organizational learning and become learning organizations to enable the chance of consciously and continuously pursuing quality improvement.

To determine the initial impact of ODI on individual, team and organizational learning, the progress analysis was determined from the Mean scores of the different gap scores of the variables between the PRE ODI and Post ODI.

Table 5.  
*POST OD Intervention : Descriptive Mean and Standard Deviation (SD)*

Level and Dimension	MEAN	SD	RATING
Continuous learning	4.28	.49	Always true or occurs
Promote dialogue and Inquiry occurs	4.12	.55	Somewhat true or occurs
<b>INDIVIDUAL LEVEL 4.19 .48 Always true or occurs</b>			

Encourage collaboration and team learning occurs	4.04	.57	Somewhat true or
Provide Strategic leadership for learning occurs	4.13	.57	Somewhat true or
<hr/>			
<b>TEAM LEVEL</b>	<b>4.08</b>	<b>.53</b>	<b>Always true or occurs</b>
Empower people toward a collective vision	4.28	.64	Always true or occurs
Create systems to capture and share learning	4.20	.60	Always true or occurs
Systems Connection Connect to organization occurs to its environment	4.14	.62	Somewhat true or
<hr/>			
<b>ORGANIZATIONAL LEVEL</b>	<b>4.21</b>	<b>.54</b>	<b>Always true or occurs</b>

Table 5 indicates teachers and staff perceived that after OD Intervention organizational learning occurs increases to always occur at individual level, team level and organizational level.

Table 6 : *PRE* and *POST ODI* comparison : *Descriptive Mean and Standard Deviation (SD)*

Level and Dimension	PRE ODI		POST ODI	
	MEAN	SD	MEAN	SD
Continuous learning	2.47	.90	4.28	.49
Dialogue and Inquiry	2.58	.63	4.12	.55
<hr/>				
<b>INDIVIDUAL LEVEL</b>	<b>2.53</b>	<b>.71</b>	<b>4.19</b>	<b>.48</b>
Collaboration and team learning	2.54	.67	4.04	.57
Strategic leadership for learning	2.78	.60	4.13	.57
<hr/>				
<b>TEAM LEVEL</b>	<b>2.64</b>	<b>.62</b>	<b>4.08</b>	<b>.53</b>
Empowerment	2.67	.92	4.28	.64
Embedded System	2.41	.86	4.20	.60
Systems Connection	2.60	.87	4.14	.62

**ORGANIZATIONAL LEVEL 2.54 .73 4.21 .54**

Table 6 indicates teachers and staff perceived that after OD Intervention organizational learning occurs increases at individual level, team level and organizational level. The quantitative data indicates that indicates the perception of teachers and staff that after ODI organizational learning occurs increases to always occur at individual level, team level and organizational level.

**The Paired Sample t-Test: The PRE ODI and POST ODI Research Result**

The researcher determined the significance of means difference by using the Paired Sample t-Test to response to the fourth research objective and find answer to the fourth research question. The fourth research question lead to the hypothesis about testing the significant difference of the school Organizational Learning between Pre-Organization Development Intervention and Post-Organization Development Intervention. The following statistical analysis and data interpretation are presented below.

Table 7.

*POST OD Intervention : T-Test INDIVIDUAL LEARNING*

*The Difference of OD Intervention between Pre OD Intervention and Post OD Intervention*

Dimensions		Paired Differences		t	Sig	Decision
		Mean	Stand Deviation			
Pair 1	Continuous learning POST ODI – PRE ODI	1.8119 5	.96054	24.883	.000	Reject Ho
Pair 2	Dialogue and inquiry POST ODI – PRE ODI	1.5459 8	.78739	25.899	.000	Reject Ho
Pair 3	Individual Level POST ODI – PRE ODI	1.6606 3	.80144	27.332	.000	Reject Ho

Table 7 indicates the results of the effect of OD Intervention on Individual Learning. The significant value in the table is equal to 0.000, which is less than 0.05 of significance level of two tailed, the null hypothesis is rejected. Therefore, the researcher would conclude, there is a significant difference in the level of Organizational Learning at the Individual Level following the OD intervention.

Table 8.

*POST OD Intervention : T-Test TEAM LEARNING*

*The Difference of OD Intervention between Pre OD Intervention and Post OD Intervention*

Dimensions		Paired Differences		t	Sig	Decision
		Mean	Stand Deviation			
Pair 4	Collaboration and team learning POST ODI – PRE ODI	1.49425	.85425	23.074	.000	Reject Ho
Pair 5	Strategic leadership for learning POST ODI – PRE ODI	1.35868	.78826	22.736	.000	Reject Ho
Pair 6	Team Learning POST ODI – PRE ODI	1.43540	.78471	24.129	.000	Reject Ho

Table 8 indicates the results of the effect of OD Intervention on Organizational Learning. The significant value in the table is equal to 0.000, which is less than 0.05 of significance level of two tailed, the null hypothesis is rejected. Therefore, the researcher would conclude, there is a significant difference in the level of Organizational Learning at the Team Level following the OD intervention.

Table 9 .

*POST OD Intervention : T-Test ORGANIZATION LEARNING*

*The Difference of OD Intervention between Pre OD Intervention and Post OD Intervention*

Dimensions		Paired Differences		t	Sig	Decision
		Mean	Stand Deviation			
Pair 7	Empowerment POST ODI – PRE ODI	1.60632	1.09593	19.334	.000	Reject Ho
Pair 8	System embedded POST ODI – PRE ODI	1.78603	.97905	24.063	.000	Reject Ho
Pair 9	Systems Connection POST ODI – PRE ODI	1.54023	1.02489	19.824	.000	Reject Ho
Pair 10	Organization Learning POST ODI – PRE ODI	1.66408	.85525	25.666	.000	Reject Ho

Table 9 indicates the results of the effect of OD Intervention on Organizational Learning at Organization Level. The significant value in the table is equal to 0.000, which is less than 0.05 of significance level of two tailed, the null hypothesis is rejected. Therefore, the researcher would conclude, there is a significant difference in the level of Organizational Learning at the Organization Level following the OD intervention.

To determine the initial impact of ODI on individual, team and organizational learning, the progress analysis was determined from the Mean scores of the different gap scores of the variables between the PRE ODI and Post ODI. The quantitative data indicates that indicates the perception of teachers and staff that after ODI organizational learning occurs increases to always occur at individual level, team level and organizational level. The pair simple t-test was applied as statistic analysis to compare the mean score of PRE ODI and Post ODI to find out the impact of the OD Intervention for the school organizational learning. There was a significant difference in the level of Organizational Learning at the Organization Level following the OD intervention.

The following conclusions for the hypothesis are presented base on the quantitative data analysis.

H<sub>01</sub> is rejected, there is a significant difference between PRE ODI and POST ODI on individual learning, team learning and organizational learning.

The qualitative data indicates that after engaged to ODI teachers and staff at the school demonstrated improvement of their interest and support for the school vision. Though, the school adopted the general vision from the Foundation, teachers and staff were involved in the creation of the school vision, their department vision and they appeared to share ownership for it during the annual seminar. The vision was shared with teachers through the communications of the Director during the monthly meeting, meeting of the boards of the Director, and meeting of Department committee. The vision is now widely accepted by teachers and staff. The school gradually have improved its organizational learning and become learning organizations to enable the chance of consciously and continuously pursuing quality improvement.

#### Phase V: REFLECTION AND CONCLUSION

This research was inspired toward healthy change and improvement of the school learning culture in a balance way, which is the key finding of this research. The research provided valuable information on how to give important to development of the school toward being Organizational Learning without leaving schooling identity. The finding is an insight to support the school's aspiration to meet world-class standard that teacher and staff must be able to work together with foreigners as cross-team functions. The school needs to develop itself toward a school fostering learning atmosphere. Organizational learning of teachers and staff as individuals, team, and the whole organization have been improved through OD Intervention that enable them to practice learning and make use in school daily life to enable breaking through the turbulent situation, to ensure sustainability and to retain the school competitive advantage in very competitive and changing circumstances.

This research utilized organizational learning as it engaged with interchange of attitudes, working styles from global to local and shift teachers and staff from local to

global. It inspired atmosphere of practice learning continuously and to recognize its significance in the development of individuals, teams and the school as an organization. It applied organization development in an integrative and holistic approach that allowed the change begin from personal level expand to team level and finally organization level. It reflects the butterfly effect phenomenon. With this approach researcher could deliver positive change management and sustainable performance.

The ODI to improve Organizational Learning brought about good recipe of passion to learn and to work. The ODI was plentiful with consolidation in collaborative, participative, more democratic and community center approach. It gradually made teachers and staff realize that not only working life and family life promotes confrère but also bring their whole person which includes body, mind, and spirit to work or school life with sense of responsibility to the community with public mind. The ODI created positive change that aroused from the awareness of members of organization to keen to develop their family organization with openness to inspiration and creativity.

The findings indicated that after engaged to ODI teachers and staff of the school demonstrated improvement of their interest and support for the school vision. Though, the school adopted the general vision from the Foundation, teachers and staff were involved in the creation of the school vision, their department vision and they appeared to share ownership for it during the annual seminar. The vision was shared with teachers through the communications of the Director during the monthly meeting, meeting of the boards of the Director, and meeting of Department committee. The vision is now widely accepted by teachers and staff.

This study drives researcher to feel accomplish by promoting the living person of the school toward of recognition of every single person in organization. The ODI have united every good heart and effort to attain the common goal and shared vision in inspires passion to learn and improving the organization. The school as an organization began treating itself as a living corporate person.

### References

- Argyris, C., & Schön, D. (1978). *Organizational learning: A theory of action perspective*, Reading, MA: Addison-Wesley Publishing.
- Alam, M. F. (2009). Learning organization and development of woman managers in Pakistan. [Article]. *Human Resource Development International*, 12(1), 105-114.
- Arbuckle, M. (2000). Triangle of design, circle of culture. In P. Senge, T. Lucas, B. Smith, J. Dutton, & A. Kleiner (Eds.), *Schools that learn: A fifth discipline fieldbook for educators, parents, and everyone who cares about education*. (pp.325–339). London: Nicholas Brealey Publishing.

- Asadi, H., Ghorbani, M. H., & Naderan, M. (2009). The Relationship Between the Learning Organization and Productivity in Iran Physical Education Organization. *World Journal of Sport Sciences*, 2(3), 160-164.
- Ayupp, K., & Perumal, A. (2008). A learning organization: exploring employees' perceptions *Management & Change*, 12(2), 29-46.
- Basim, H. N., Sesen, H., & Korkmazyurek, H. (2007). A Turkish Translation, Validity and Reliability Study of the Dimensions of the Learning Organization Questionnaire. *World Applied Sciences Journal* 2 (4): ,2007, 2(4), 368-374.
- Beer, M. (1980), *Organization Change and Development: A Systems View*, Goodyear Publishing Company, Pacific Palisades, CA.
- Berg, L. (2004). *Qualitative research methods* (5th ed.). Boston: Pearson Education, 3.
- Berg, B. L. (2007). *Qualitative research methods for the social sciences* (6th ed.). Boston, MA: Pearson/Allyn and Bacon.
- Bradbury-Huang, H. (2010) "What is good Action Research? Why the resurgent interest?" in *Action Research* 8(1)
- Bryson, J., Pajo, K., Ward, R. and Mallon, M. (2006), "Learning at work: organizational affordances and individual engagement", *Journal of Workplace Learning*, Vol. 18 No. 5, pp. 279-297.
- Buijs, P., Aarnoudse, A., Geers, C., Agbenyadzi, E., Kuma, A., and Doppenberg, A.M. (2012) 'The Jigsaw of Mayor Clement: Stories and lessons from an action learning programme in West Africa' *Praxis Note* No. 61, Oxford: INTRAC.
- Chamnan Laoruckphon (2010). Development of knowledge management strategies for schools under the st.gabriel's foundation of Thailand. Department of Educational Policy, Management and Leadership Faculty of Education , Chulalongkorn University Thailand : page 241-247
- Chapman, J. E. (2002). *The Public Schools Accountability Act and the California high school as a learning organization*.
- Chughtai, A. A., & Zafar, S. (2006). Antecedents and Consequences of Organizational Commitment Among Pakistani University Teachers. *Applied Human Research Management*, 11(1), 39-64.
- Creswell, J. & Tashakkori, A. (2007). Differing perspectives on mixed methods research. *Journal of Mixed Methods Research*, 1 (4),303-308.

- Daly, Alan, Millhollen, Basha, and DiGuilio, Laila, (2007). SOARing Toward Excellence in an Age of Accountability: The Case of the Esperanza School District," *AI Practitioner*. <http://www.aipractitioner.com>)
- Drucker, P. F. (1998) *Peter Drucker on the profession of management*. Boston: A Harvard Business Review Book.
- Duffy, F.M., (2008), 'Open system theory and system dynamics: the twin pillars of transformational change in school district', in Despres B (ed.) *System thinkers in action*, Rowman & Littlefield Education, America, pp. 1-23
- Easterby-Smith, M. and Araujo, L. (1999) 'Current debates and opportunities' in M. Easterby-Smith, L. Araujo and J. Burgoyne (eds.) *Organizational Learning and the Learning Organization*, London: Sage.
- Ellinger, A. D., Ellinger, A. E., Yang, B., & Howton, S. W. (2002). The relationship between the learning organization concept and firms' financial performance: An empirical assessment. *Human Resource Development Quarterly*, 13, 5-21.
- Ferrance, Eileen (2000) *Themes in Education – Action Research*, Northeast and Islands Regional Educational Laboratory, LAB, Brown University, US. Accessed on 2016/04/02; [www.alliance.brown.edu/pubs/themes\\_ed/act\\_research.pdf](http://www.alliance.brown.edu/pubs/themes_ed/act_research.pdf)
- Finger, M. and Brand, S. B. (1999) 'The concept of the "learning organization" applied to the transformation of the public sector' in M. Easterby-Smith, L. Araujo and J. Burgoyne (eds.) *Organizational Learning and the Learning Organization*, London: Sage.
- Frederickson, B. L. (2009). *Positivity; Groundbreaking Research Reveals How to Embrace the Hidden Strength of Positive Emotions, Overcome Negativity, and Thrive*. New York: Crown Publishers.
- Freed, J. E. (2001). Why Become a Learning Organization? *About Campus*, 5(6), 16-21.
- Garvin, D. (2000). *Learning in action: A guide to putting the Learning Organization to work*. Harvard Business School Press, Boston, MA.
- Garvin, D. (2008). Is yours a Learning Organization? *Harvard Business Review*, Vol.86, No. 3.
- Gilley, J. W., & Maycunich, A. (2000). *Organizational learning, performance, and change: An introduction to strategic human resource development*. Cambridge, MA: Perseus.
- Ghosh, A. (2004), "Learning in strategic alliances: a Vygotskian perspective", *The Learning Organisation*, Vol. 11 No. 45, pp. 302-11.
- Groff, T., and T. Jones. 2003. *Introduction to knowledge management: KM in business*. Burlington, MA: Butterworth-Heinemann.

- Hernandez, M. (2000). The impact of the dimensions of the learning organization on the transfer of tacit knowledge process and performance improvement within private manufacturing firms in Colombia. Unpublished Ph. D. thesis, University of Georgia, Athens.
- Hernandez, M., & Watkins, K. E. (2003). Translation, validation and adaptation of the Spanish version of the modified Dimensions of the Learning Organization Questionnaire. [Article]. *Human Resource Development International*, 6(2), 187-196.
- Hyunjoon Park, Yuko Goto Butler. (2010). *Globalization, Changing Demographics, and Educational Challenges in East Asia*. Emerald Group Publishing. Page 17-25
- Jacqueline M. Stavros, Gina Hinrichs, (2009). *The Thin Book of SOAR Building Strengths - Based Strategy*, OR: Thin Book Publishing.
- Jamali, D., Khoury, G. and Sahyoun, H. (2006). From bureaucratic organizations to learning organizations: an evolutionary roadmap, *The Learning Organization* Vol. 13, No. 4, pp. 337-352.
- Jick, T. (1994), *Managing Change: Cases and Concepts*, Irwin, Homewood, IL.
- Johnson, B., & Christensen, I. (2012). *Educational research: Quantitative, qualitative, and mixed approaches*. Los Angeles, CA: SAGE publication.
- Keating, D. (1995). *The learning society in the information age*. Toronto: Canadian Institute for Advanced Research Program in Human Development, Working Paper No.2.
- Lien, B. Y., Hung, R. Y., Yang, B., & Li, M. (2006). Is the learning organization a valid concept in the Taiwanese context? *International Journal of Manpower*, 27(2), 189–203.
- López, S. P., Peón, J. M. M., & Ordás, C. J. V. (2006). Human resource management as a determining factor in organizational learning. *Management Learning*, 37(2), 215-239.
- Moloi, K. C. (2010). How can schools build learning organisations in difficult education contexts? *South African Journal of Education*, 30, 621-633.
- Nadler, D.A. (1998), *Champions of Change*, Jossey-Bass, San Francisco, CA.
- Nelly P. Stromquist, (2003). *Education in a Globalized World: The Connectivity of Economic Power, Technology, and Knowledge*. MD: Rowman&Littlefield.
- Padgett, D. K. (2008). *Qualitative methods in social work research (2nd ed.)*. Los Angeles, CA: Sage.
- Patton, M. Q. (1990). *Qualitative evaluation and research methods (2nd ed.)*. Newbury Park, CA: Sage.

- Philips, D 2006. Relationships are the core value for organisations: a practitioner perspective. *Corporate Communications*, 11: 34–42.
- Reason, Peter and McArdle, Kate Louise (2008) *Action Research and Organization Development*. Chapter 8 for *Handbook of Organization Development*, Editing by Cummings, T. C., Sage Publications, USA.
- Robbins, SP & Barnwell, N (2002), 'Introduction' in *Organisation Theory: Concepts and Cases*, 4th edn, Prentice Hall, French Forest, NSW, PP.4-31
- Rothwell, W. J. (2010;2009;). *Practicing organization development: A guide for leading change* (3rd;3; ed.). San Francisco: Pfeiffer, 27.
- Senge, P. M. (2006). *The fifth discipline: The art and practice of the learning organization*: Vintage.
- Singsuriya, P., Aungsumalin, W., & Worapong, S. (2014). Narrative approach to moral education: A case of thailand. *Education, Citizenship and Social Justice*, 9(3), 209-225. doi:10.1177/1746197914534818
- Smith, M. K. (2001). Chris Argyris: theories of action, double-loop learning and organizational learning. Retrieved April 08, 2016, from <http://www.infed.org/thinkers/argyris.htm>
- Song, J. H., Kim, J., & Chermack, T. J. (2008). Cross-cultural perspectives of the learning organization: Assessing the validity and reliability of the DLOQ in Korea. In T. J. Chermack, J. Storberg-Walker, & C. M. Graham (Eds.), *2008 Academy of Human Resource Development Conference Proceedings* (pp. 130- 137). Panama City, FL: Academy of Human Resource Development.
- Tseng, C. C., & McLean, G. N. (2007). Entrepreneurial team creativity, entrepreneurial leadership, and new venture performance. In M. Xiao, A. M. Osman-Gani, B. Yang, & J. Gong (Eds.), *Proceedings of the Sixth Asian AHRD Conference in Beijing, China, November 2-6, 2007 (Section E-047)*. Beijing, PRC: Peking University and AHRD.
- Watkins, K. E., & Marsick, V. J. (1997). *Dimensions of learning organization (DLOQ) [survey]* Warwick, RI: Partners for the Learning Organization.
- Weldy, TG and Gillis, WE 2010. The learning organization: variations at different levels. *The Learning Organization*, 17: 455–470.
- White, J., & Weathersby, R. (2005). Can universities become true learning organizations? *The Learning Organization*, 12(3), 292-298.
- Wijakkanalan, S., Wijakkanalan, W., Suwannoi, P., & Boonrawd, S. (2013). Teacher and educational personnel development through e-training: UTQ online office of the basic education commission, ministry of education, thailand. *International Journal of e-*

Education, e-Business, e-Management and e-Learning, 3(1), 47-50.  
doi:10.7763/IJEEEE.2013.V3.191

Woodall, J. (2005). Learning effectiveness: Context, impact and critique. *Human Resource Development International*, 8(2), 143-145.

Yang B. (2003), Identifying valid and reliable measures for dimensions of a learning culture. *Adv Dev Hum Resour*;5(2):152–62.

Yang, B., Watkins, K.E. and Marsick, V.J. (2004), “The construct of the learning organization: dimensions, measurement, and validation”, *Human Resource Development Quarterly*, Vol. 15 No. 1, pp. 31-56.