An Organization Development Intervention to Enhance the Learning Organization: A Case Study of Student Affairs, Assumption University of Thailand

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Abstract

Higher education is evolving rapidly in today's environment of global connectivity, technological advances, and student diversity. The education industry must respond to these changes to remain viable. As a key division in the university, Student Affairs plays a vital role in helping universities respond to changes by ensuring that students' needs are addressed effectively. To accomplish this, Student Affairs must continuously be able to improve by becoming skilled at creating, acquiring , and transferring knowledge, in short, it must become a learning organization. The purpose of this study is to enhance the Student Affairs Division of Assumption University to become a learning organization by using organizational development methods including diagnostic procedures, organizational interventions, and training programs. Qualitative and quantitative methods were utilized for this study. Data was collected through interviews and questionnaires. Pre-ODI analysis revealed that members of Student Affairs, although cognizant of the importance of some aspects of the learning organization, were not consistent in their behavior and actions. OD interventions were employed to increase both knowledge and behavior regarding learning organization culture. They included team building, coaching, Appreciative Inquiry and SOAR workshops. Post-ODI analysis of the experimental and control groups using a paired samples *t*-test, supported by a calculation of Cohen's effect size, revealed a significant difference in the total gain scores for Pre-ODI and Post-ODI results. The interventions were found to have an effective result in enhancing the learning organization culture in the Student Affairs Division of Assumption University.

Keywords: learning organization, organizational development, organizational development intervention, student affairs,

Introduction

Higher education is evolving rapidly in today's environment of global connectivity, technological advances, and student diversity. What we have known as the 'norm' of higher education institutions will not be the norm in tomorrow's society. New technologies are making teaching and learning through the previous ways obsolete. The future of education will be very different from what we know. Industry 4.0 will be a driver for change, especially in the education sector. Thus, as student affairs is an area that is linked inextricably to the successful administration of institutions of higher education, it becomes an important area for research for the purpose of improving the higher education experience for students and plays an important part in increasing the viability and success of the institution itself.

The student services concepts refer to the department or division in that provides services to support students in the university. This includes services such as improvement of learning skills, career counseling, psychological counseling, social and other skills development programs. It is seen as a major component of the academic system as it supports the students' learning and their academic experience and contributes to reducing the university's overall dropout rate (Ciobanu, 2013). According to Smith & Blixt (2015), there are five megatrends that are affecting the field of Student Affairs. These forces include: 1) Pressure on students to find meaning and purpose; 2) New technologies that shape teaching and learning; 3) Changing student demographics; 4) Rapidly evolving world of work; 5) Increased demand for institutional accountability. These forces are said to be changing the foundations of higher education and people involved in student affairs at the university level are well placed to address these changes and turn these threats into opportunities for their institutions.

The intention of this study was motivated by the curiosity to know the current situation of the Student Affairs Department and the possible room for development in student services in terms of projects, activities, and intervention methods as conducive to experiential learning outside the classroom or extra-curricular activities for student development. As such, the concept of the 'learning organization' as originated by Senge in 1990, was chosen as the focal point in the development of Student Affairs at Assumption University. This study is guided by the following research objectives:

1. To assess and diagnose the current situation of the AU Student Affairs Department regarding it being a learning organization using the framework of Watkin's Seven Dimensions of the Learning Organization as the criterion.
2. To design and implement an appropriate Organizational Intervention (ODI) to improve the AU Student Affairs Department as a learning organization.
3. To evaluate the pre-ODI and post-ODI results of the AU Student Affairs Department as a learning organization.

Literature Review

This research is based on the Learning Organization Theory (Senge, 1990), the Action Research Framework, and organizational interventions typically used to produce a positive change in an organization.

Learning Organization Theory (Senge, 1990)

The learning organization is considered a paradigm shift from what has commonly been perceived as the traditional organization. It is a perspective that is different from traditional bureaucratic models that have traditionally been characterized as having set rules and procedures, top-down management and enforcement of rules and behavior and control of resource. These types of organizations were slow to respond to environmental changes and were successful in older, more static business environments (Abu Khadra & Rawabdeh, 2006). In short, these organizations did not need to learn. However, in the past two decades, the global and business environment have changed greatly and traditional organizations if not already, are mostly extinct or about to become extinct.

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The term 'learning organization' was made popular by Peter Senge in his book, "The Fifth Discipline" in 1990. According to Senge, "A learning organization is where people continually expand their capacity to create results, they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together." (Senge, 1990, p. 3). However, the concept of the learning organization may be somewhat difficult to pinpoint. Three perspectives have been identified from the literature on how to achieve a learning organization. They include the normative perspective; the developmental perspective; and the capability perspective (DiBella, 1995). The normative perspective states that learning will occur only in certain conditions that ensure learning and are intentionally pursued. The developmental perspective views organizations as evolving over time. The capability perspective views learning as embedded in the culture and that all learning styles are appropriate and there are no prescribed learning styles. In their research on learning organizations, Kontoghiorghes, Awbrey and Feurig (2005), have put forth learning organization characteristics based on their summaries of various literature by authors in the field. The following are a summary of features that various authors have stated are characteristics of a learning organization: open communications; risk taking; support and recognition for learning; resources to perform the job; teams; rewards for learning; training and learning environment; and knowledge management.

According to Marsick and Watkins (2003), many organizations want to become learning organizations but are unable to because they have not sufficiently understood what it means to have a learning culture. This also includes not being able to correctly diagnose the current status of the organization in order to implement change. Although there have been other instruments that were developed to diagnose or propose interventions, Marsick and Watkins contended that these instruments were not based on research, but rather the change agent's practice, which may or may not be applicable in all organizations. There are various factors that can affect the successful adoption/adaptation of practices and the degree in which they will be successful in organizations. Research can help to find variables or establish factors that are generalizable to larger groups or organizations and thus, be more applicable. Thus, they developed the Dimensions of the Learning Organization Questionnaire (DLOQ). The DLOQ is used in this research to assess the level of the learning organization of Student Affairs.

This study utilizes both Senge's Learning Organization Theory and Watkins and Marsick's Seven Dimensions of Learning Organizations, which provide the constructs that are being measured or the independent variables. These variables are further grouped into general areas of Communication, Environment, Organizational Culture. The dependent variable(s) is the measure of learning organization culture at individual, team, and organizational level. Figure 1 depicts the theoretical framework for this study.

Figure 1

Theoretical framework of the study

| Watkins and Marsick's Learning Organization | Element of Communications Support Learning Organization | Learning Organization Culture |
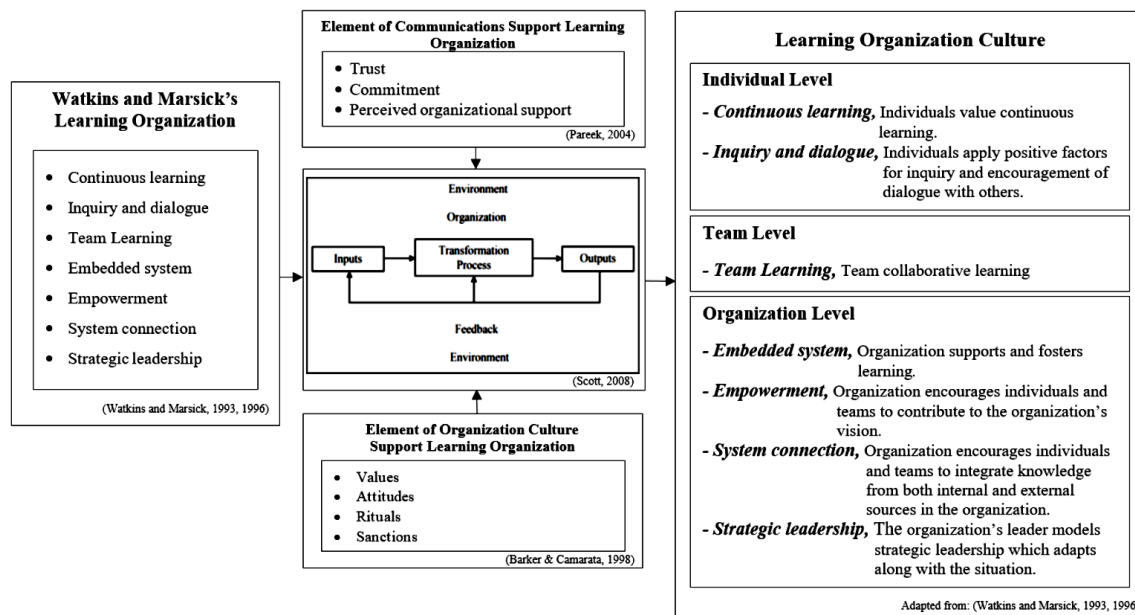
The Action Research Framework

The Action Research Framework regulates the research design. Action research is a method of research that is focused on improving the quality or performance of an organization. It is an approach to research that is both active in trying to implement change and in the creation of knowledge (Coghlan & Brannick, 2005). It involves a cyclical, collaborative process that includes diagnosis of the organizations' problem or need for change, planning and gathering data or information, taking an action or intervention, and then evaluating the results of the action or intervention. Tripp (2005) characterizes action research as:

- Beginning with situational analysis of the current practices, participants, and problems.
- An iterative cycle or ongoing process
- Uses action inquiry in each phase were what to plan, how to start, how to monitor and how to evaluate is done in each cycle.
- Reflective on current practice and on how to solve the problem
- Participatory because it works best with the cooperation and collaboration of those involved.

Organizational Interventions

An intervention is an action that is undertaken purposefully to create a change in an organization (Romme, 2011). Because experimentation is not possible in organizational settings and therefore cannot be truly carried out in the strictest sense with intervention and non-intervention groups, the use of interventions may or may not produce the intended outcomes. Nonetheless, using interventions can increase the understanding of the organizational processes and systems. Organizational interventions can serve the purpose of

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creating knowledge and be useful for the understanding of the organization. OD interventions are essential for the improvement of organizations given the current context of rapid change and turbulence. According to Rothwell, Sullivan, and McLean (1995), there are individual, team, and whole organization types of interventions for organizational development. Goh (1998) has stated that interventions for learning organizations must be those that address or focus on the major strategic building blocks that are said to define or characterize the learning organization. These blocks include:

1. Clarity and support for mission and vision
2. Shared leadership and involvement
3. A culture that encourages experimentation
4. Ability to transfer knowledge across organizational boundaries
5. Teamwork and cooperation

The definition of an intervention refers to any planned activities that are designed to bring about change in the organization. The interventions can be performed by an external consultant or an in-house consultant or even the organization itself. Specific types of interventions (Sadhu, 2009) can include:

- *Person focused interventions*: interventions that are person focused, role focused, action research based focused. They can include self-retrospection, reflection, self-study, or a consultant like a coach or mentor.
- *Team focused interventions*: these are techniques and methods that move the organization as a whole and is expected to improve both person and team performance. They can include activities like team building activities.
- *Role focused interventions* are aimed at improving how the person working at the job can meet the demands and expectations associated with it.
- *Intergroup interventions*: interventions designed to resolve conflicts between groups and increase interaction.
- *Structural interventions*: interventions designed to improve overall work by changing the workflow, procedures, and other arrangements.

With this framework in mind, this research has focused on one type of intervention each for the individual, team and organization to assure that all aspects are addressed. The interventions chosen will be chosen based on their effectiveness at addressing the encouraging support for the learning organization's main characteristics.

Conceptual Framework

Figure 2 represents the conceptual framework of this study. It begins with the diagnosis stage using qualitative and quantitative methods to assess the current situation, followed by planning appropriate Organization Development Interventions to apply to three levels (independent variable) the Individual level, Team level, and Organization level to enhance the Learning Organization culture. Marsick's, (2006) Individual and team teaching are integrated with that of the organization and illustrate the connection between each of those dimensions. Learning organizational culture cannot take place without learning individually and learning from environmental developments. The organization has the authority to promote, deter and learn from and overlook trends in its setting. There are seven dimensions of the Learning Organization constructs including: continuous learning, dialogue

and inquiry, team learning, embedded system, empowerment, system connection, and Strategic leadership serve as dependence variable. The research intends to determine whether ODI interventions will be able to enhance Learning Organization culture after integration with Student Affairs member at the individual level, Center and Office or subdivisions team levels, and Student Affairs Department as Organization level.

Figure 2

*Conceptual framework of the study*
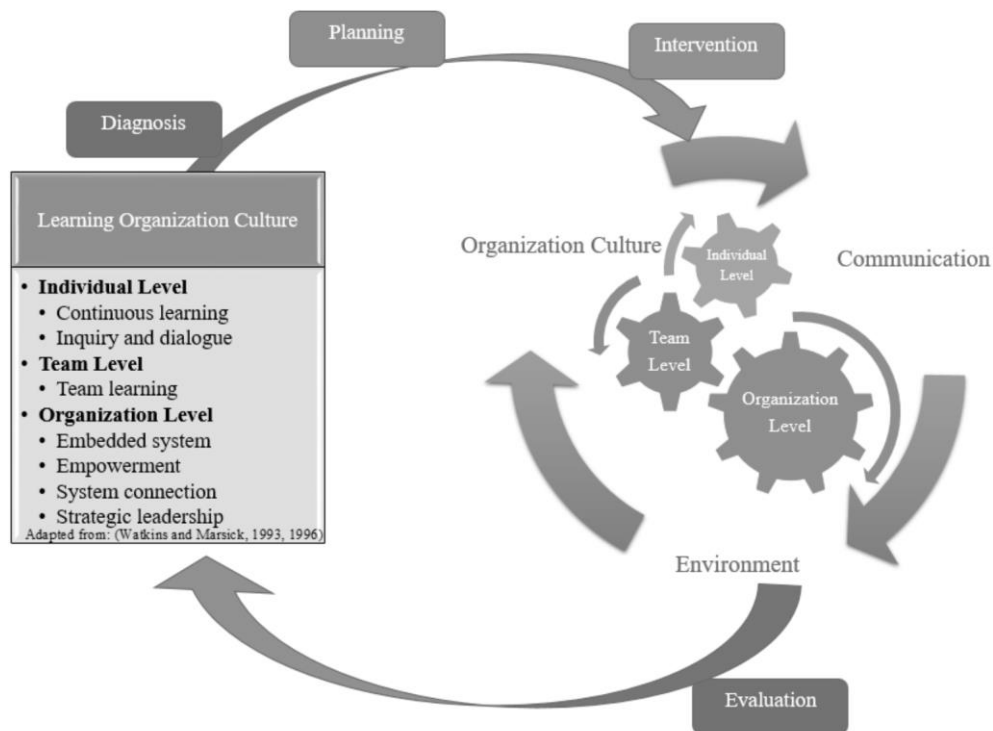
Note. This figure developed by the researcher for this study-based Watkins, K. E., Yang, B., & Marsick, V. J. (1997). *Measuring dimensions of the learning organization*. In R. J. Torraco (Ed.), 1997 Conference Proceedings of the Academy of Human Resource Development (pp. 543-546). Baton Rouge, LA: AHRD.

Methodology

The purpose of this study is to design and implement an appropriate Organizational Intervention (ODI) to improve the AU Student Affairs Department as a learning organization culture and evaluate the pre-ODI and post-ODI results of the department as a learning organization. The following figure depicts the steps used in this study.

Figure 3

Steps of action research used in this study
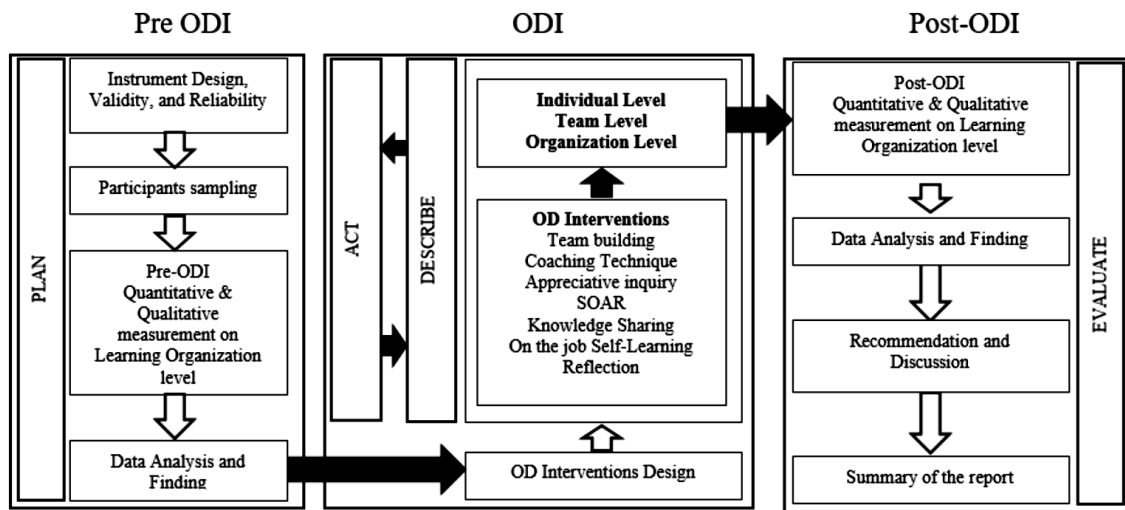
Note. This figure developed by the researcher for this study-based Tripp, D. (2005). Action research: A methodological introduction. Educação e Pesquisa, 31(3), p. 2. Copyright 2005 by University of Sao Paulo.

Pre-ODI Stage

The current situation or Pre-ODI phase was evaluated to obtain the baseline data for the Student Affairs Department. The researcher adapted the instrument of Watkin's Seven Dimensions of the Learning Organization (Watkins & Marsick, 1993, 1996) to fit the context of Student Affairs. The seven dimensions or constructs included: continuous learning, dialogue and inquiry, team learning, embedded system, empowerment, system connection, and Strategic leadership. As an instrument, it has been used extensively by researchers in Human Resources Development (Kim et al., 2015). The instrument was used to assess both the control group and experimental group. The researcher also conducted semi-structured interviews with administrators and members of the Student Affairs Department to obtain additional perspectives on which to base the preliminary diagnosis.

ODI Stage

For the ODI stage of the study, the researcher exposed the experimental group to various ODI interventions that included the use of SOAR and Appreciative Inquiry, team building, brainstorming, and coaching.

SOAR

According to Stavros and Hinrichs (2009), SOAR is a strategic planning tool that focuses on strength of the organization to understand the organizational structure by the voice of the relevant stakeholders. It obtains answers by asking questions of the stakeholders such as, "What's the best organization?" and "What capabilities must be improved?". The SOAR method involves five phases which are: initiate, inquire, imagine, innovate, and inspire to implement.

Initiate: in this stage the researcher assembled 18 participants of Student Affairs (the experimental group) to obtain a consensus of the applicability of using SOAR. Once it was obtained, the members participated in the following steps:

1. Set up of a strategic planning team composed of members who were tasked with making decisions. This was the core team.
2. Planning of data collection for the strategic plan.
3. Identification of limitations and decisions that needed to be made.
4. Formation of the questions that were needed to ask the members of SA.

Inquire: in this stage the researcher divided 18 participants of Student Affairs (the experimental group) into small groups or use one-on-one interviews to get information about the SA members' shared values, aspirations, what they thought were the organizational strengths that could make it a learning organization, opportunities for growth and definition of success as a learning organization. The questions asked of the SA members were framed in the Initial phase.

Imagine: the researcher coordinated small group meetings among the 18 participants of Student Affairs (the experimental group) so that they could get together to start 'envisioning' the future of the SA as a learning organization. They were encouraged to be creative and innovative to get good ideas and methods. All these ideas were summarized and provided to every member of SA.

Innovate: in this stage, the ideas and methods from the previous stage were translated into actual action plans to be implemented. The core team helped to implement the action and provided the members of SA with guidelines and recommendations.

Inspire to Implement: in this stage goals and the measurement of those goals were defined so that the success could be evaluated. There was constant feedback so that anything not going according to plan was corrected. The actual implementation was done by various members of SA who will have different skills but the whole implementation process was coordinated and linked together.

Appreciative Inquiry

As mentioned by the developers of SOAR (Stavros & Hinrichs, 2009), the SOAR approach integrates the use of Appreciative Inquiry or AI to transform the organization. Therefore, they are related in the ODI process and thus are being discussed here together as one intervention. Appreciative Inquiry or AI is simply a different perspective at looking at an organization. According to Hammond (2013), when people have tended to look at organizations to solve problems, they have tended to look at the negatives, or what was wrong or broken that needed to be fixed. However, AI takes a different approach. It looks for the positives, or what is working in the organization that can be enhances to help it reach the objectives in transforming the organization. Thus, in using SOAR as one of the OD interventions, the researcher also stressed to the members of Student Affairs that they had to use the framework of Appreciative Inquiry to frame their discussions and conversations to develop SA into a learning organization.

Team Building

Team building is considered an activity that helps members of an organization to become more effective in accomplishing their goals. One way to create impact or change is to expose the whole group to interventions or training. There are many activities that can be used to encourage team building. According to Fapohunda (2013), there are two basic skills need in the team building process. They are the ability to recognize what is the problem or issue that needs to be solved, and the second is how to address these issues effectively. According to Tuckman and Jensen (1977), team building involves five stages: forming, storming, norming, performing, and transforming:

Forming-members of SA came together and focused on a shared goal (that of becoming a learning organization).

Storming-members of SA discussed and shared and maybe even d about how to become a learning organization, but in the end, they resolved the conflicts and got to know each other better.

Norming-the members of SA formed working relationships with each other that helped them to reach the objective of becoming a learning organization.

Performing-the members of SA worked on various processes to achieve the objective.

Transforming-members of SA will reach the stage where they were functioning as a learning organization well and felt successful at doing it.

Coaching

Coaching has received attention as an organizational intervention in recent years. According to Bond and Seneque (2013), although coaching in still considered to be a relatively new approach in organizational interventions, it is now being used more frequently and there are a variety of approaches that can be used. Coaching offers a way to integrate individual, team and organizational learning and change. To use coaching effectively, it has to be systematically conceived from the beginning. The heart of the coaching process involves the development of the individual and team's capacity to identify and find solutions to their own problems in the context of the wider organizational objectives. This research utilized coaching as one of the interventions to enhance Student Affairs to be a learning organization.

The interventions were chosen for their applicability to change the current dynamics of behavior that were shown to be evident at the Pre-ODI phase. Individual and group intervention methods were used and facilitated by experienced leaders. Each of the interventions were selected and implemented for their efficacy in influencing or enhancing the dimensions of communication, environment, and organizational culture. Most of the interventions were carried out at all three levels, however, the Team Building Workshop was only carried out at the Team and Organization levels.

Post-ODI Stage

In the last stage, Post-ODI, the researcher evaluated both the control group and the experimental group on the shift in the individual, team and organization levels of learning organization culture using the framework of Watkin's Seven Dimensions of the Learning Organization as the criterion (Watkins & Marsick, 1993, 1996), after OD interventions were

applied. However, the qualitative technique was also used to monitor, and interview participants and a questionnaire was used for the quantitative technique. To conclude, for the evaluation of information, the findings of both quantitative and qualitative techniques are summarized on the OD intervention to enhance Individual, Team, and Unit Learning Organization Culture.

Population and Sampling

For this study, the researcher engaged with the total population of administrators, instructors, and staff of Assumption University Student Affairs Department including 5 administrators, 23 instructors, and 8 staffs, for a total of 36 people. Student Affairs was structured in to seven subunits. They were: Office of the Vice President for Student Affairs, Center for Career Development and Counselling, Center for Student Leadership & Experiential Learning, Center for Student Personality and Campus Life, Center for Sports & Physical Fitness, Financial Aid Division, and Office of Thai Art and Culture. From the total Student Affairs population of 36 persons, the researcher used cluster sampling to make sure that all groups in the SA department were represented. After that, the researcher used simple random sampling to assign the participants into two groups for the Control group and Experiential group. The results of both sampling techniques are shown in the following table.

Table 1

Control group and experimental group sample size

Control group		Experimental group	
Subunits' Name	**Members**	**Subunits' Name**	**Members**
Center Career Development and Counselling	10	Office of the Vice President for Student Affairs	3
Center for Student Personality and Campus Life	5	Center for Student Leadership & Experiential Learning	9
Office of Thai Art and Culture	2	Center for Sports & Physical Fitness	6
Financial Aid Division	1		
Total	18	Total	18

Data Collection and Analysis

To achieve the research objectives, the researcher used both qualitative and quantitative methods. The qualitative method incorporated techniques including documentary research, social and structured interviews with administrators, instructors, and staff. The following table depicts the summary of the sources of data for this study including the instruments used, the number of individuals who provided the source of data, and those who were included in the interventions.

Three qualitative data types were evaluated, in the following order: survey answers to open-ended questions; interview questions; and notes from the observation of Student Affairs operations and activities. The researchers enlisted the help of three instructors with Ph.D.'s and Master's degrees who were appointed by Vice President for Student Affairs to act as the advisory committee for Student Affairs Learning Organization Culture, to help codify the qualitative information. During the coding phase, meetings were conducted with co-coders.

These meetings were dynamic when comparing coding notes, debating, and defending choices on individual coding, negotiating compromise and refining codes and code definitions. Congruence of the coders' results were triangulated for best results.

The researcher adopted parametric statistics to analyze quantitative data, beginning with assessment of mean Pre-ODI with the whole Student Affairs department (n = 36) in order to answer the first research question. After the ODI intervention with the experimental group the researcher adopted a paired sample t-test (parametric test) to analyze the Pre-ODI and Post-ODI results. In addition, to support the findings from the paired sample t-test, the researcher calculated Cohen's effect size to evaluate the strength of the statistical claim or power of analysis. The paired sample t-test was used to compare of total gain scores for Pre-ODI and Post-ODI between control group (n = 18) and experimental group (n = 18) (test of between-subjects).

Table 2

Summary of data sources

Instrument	Pre-ODI	ODI	Post-ODI
1. Administrators dialogue	5 Administrators		5 Administrators
2. Instructors dialogue	23 instructors		23 instructors
3. Staff dialogue	8 Staffs		8 Staffs
4. Survey	All SA Members		All SA Members
5. Observation Form	Researcher	Researcher	Researcher
6. Training and Workshop Evaluation		Experimental group (18 participants)	
7. Participants' log book		Experimental group (18 participants)	
8. Researcher's log book		Researcher	

Findings

Pre-ODI Stage

In the pre-ODI process, the researcher examined the current situation or Pre-ODI phase to obtain baseline data for the Student Affairs Department of Assumption University in regards to its having a learning organization culture at each level of learning (individual level, team level, and organization level). The researcher adapted the instrument of Watkin's Seven Dimensions of the Learning Organization (Watkins & Marsick, 1993, 1996) to fit the context of Student Affairs. The seven dimensions or constructs included: continuous learning, dialogue and inquiry, team learning, embedded system, empowerment, system connection, and Strategic leadership. The following table depicts the overall level of learning organization culture of Student Affairs.

Table 3

Overall level of learning organization culture measured at the Pre-ODI stage

No.	Dimensions/ Levels	Pre-ODI		
		Mean	S.D.	Interpretation
1	Continuous learning	3.82	.667	Slightly Agree
2	Dialogue and inquiry	4.09	.846	Slightly Agree
	Individual Level	**3.96**	**.693**	**Slightly Agree**
3	Team learning	4.23	.666	Slightly Agree
	Team Level	**4.23**	**.666**	**Slightly Agree**
4	Embedded system	4.01	.671	Slightly Agree
5	Empowerment	4.38	.645	Agree
6	System connection	4.34	.649	Slightly Agree
7	Strategic leadership	4.38	.678	Agree
	Organization Level	**4.28**	**.589**	**Slightly Agree**
	Total	**4.15**	**.608**	**Slightly Agree**

ODI Stage

  The OD interventions were carried out with 18 participants as the experimental group. Throughout all the OD interventions, the Experiential Learning Cycle by Kolb (1984) was used as a framework for the measurement of how learning occurred, by requiring participants of the experimental group to evaluate each activity on the evaluation form to reflect each intervention activity. The intervention evaluation information helped the researcher determine if the ODI activity was successful or not and if it met the standards of the task. The reflection book of the participants helped the participants to discuss what they learned during the interventions, how to use the knowledge in their daily work life and to encourage them to use it in real life activities. Table 4 shows summary of ODI activities during the ODI period.

Table 4

Organization development interventions summary

Date	Interventions	Participants
Training and Workshop Interventions:		
December 3, 2019	Introduction to Learning Organization Conducted by: Researcher and Student Affairs Vision and Mission Reviews Conducted by: Mr.Sorana Arunrath	Experimental Group: 3 Administrators 11 Instructors 4 Staffs
December 3, 2019	Team Building Workshop Conducted by: Mr.Siripong Rongsirikul	Experimental Group: 3 Administrators 11 Instructors 4 Staffs
January 5, 2020	Peer and Group Coaching Technique Training and Workshop Conducted by: Ms. Pornpavee Suramanee Certified Coach	Experimental Group: 3 Administrators 11 Instructors 4 Staffs

February 7, 2020	Appreciative Inquiry (AI) Workshop Conducted by: Ananya Phunthasaen, Ph.D.	Experimental Group: 3 Administrators 11 Instructors 4 Staffs
March 30, 2020 March 31, 2020	SOAR Workshop (Individual, Team, Organization) Conducted by: Puntharee Israngkul na Ayudthaya Ph.D.	Experimental Group: 3 Administrators 11 Instructors 4 Staffs
Working Processes Interventions:		
December 2019 January 2020 February 2020 March, 2020	Knowledge Sharing Conducted by: Sub-Unit Administrators	Experimental Group: 3 Administrators 11 Instructors 4 Staffs
December 2019 January 2020 February 2020 March, 2020	On the job Self-Learning Reflection Conducted by: Sub-Unit Administrators	Experimental Group: 3 Administrators 11 Instructors 4 Staffs

Post-ODI Stage

To answer the third research question "Is there significant difference between the Pre-ODI and Post-ODI learning organization culture level between the control group and experimental group of the AU Student Affairs Department?" The researcher utilized the paired samples t-test (parametric test) to analyze the Pre-ODI and Post-ODI results. Before utilizing paired samples t-test, the data of this study was required to be validated on the parametric test criterion of normality. According to Liang (2019), the Shapiro-Wilk test for small sample size (n $\leq$ 50) is used to verify the normal distribution of data. Table 5 shows the normality test statistics, Shapiro-Wilk that the Pre-ODI assessment among Individual Level (W = .982, p = .800), Team Level (W = .966, p = .317), and Organization Level (W = .961, p = .233), of experimental and control groups accept the normal distribution hypothesis. The test results for the Post-ODI assessment among the Individual Level (W = .982, p = .810), Team Level (W = .952, p = .117), and Organization Level (W = .970, p = .427), of experimental and control groups also accepts the normal distribution hypothesis. The following table shows the results of the Test of Normality.

Table 5

Test of normality for Pre-ODI and Post-ODI assessments

Stage	Learning Level	Kolmogorov-Smirnova			Shapiro-Wilk		
		Statistic	**df**	**Sig.**	**Statistic**	**df**	**p-value**
Pre-ODI	Individual	.068	36	.200	0.982	36	.800
	Team	.115	36	.200	0.966	36	.317
	Organization	.127	36	.155	0.961	36	.233
Post-ODI	Individual	.070	36	.200	0.982	36	.810
	Team	.111	36	.200	0.952	36	.117
	Organization	.116	36	.200	0.970	36	.427

n = 36.

In addition, to support the findings from paired samples t-test, the researcher utilized Cohen's effect size to evaluate the strength of the statistical claim or power of analysis.

Cohen (1988) stated in his book "Statistical Power Analysis for the Behavioral Sciences" that the difference between the two means (µ1 and µ2) expressed in units of standard deviations are a measure of the effect size, where µ is a shared standard scoring difference in both classes. The value of Cohen's d = 0.2 indicates a small effect, d = 0.50 indicates medium effect, and d = 0.80 indicates large effect. Table 6 shows the compared results of paired samples t-test for Pre-ODI and Post-ODI assessments within the experimental group and control group among the Individual Level, Team Level, and Organization Level.

Table 6

Comparison of Pre-ODI and Post-ODI within experimental group and control group

Test of Within-subjects		Pre-ODI		Post-ODI		Statistical sig.				Practical Sig.	
		Mean	SD	Mean	SD	MD	SE	t-value	p-value	ES	Cohen's
Individual	Experimental	3.671	0.67	4.462	0.70	0.791*	0.144	5.49	0.000	0.800	1.153
	Control	4.218	0.62	4.197	0.45	-0.021	0.092	-0.23	0.818	0.056	0.037
Team	Experimental	3.917	0.70	4.704	0.59	0.787*	0.141	5.60	0.000	0.805	1.205
	Control	4.546	0.46	4.565	0.34	0.019	0.062	0.30	0.767	0.073	0.025
Organization	Experimental	4.000	0.63	4.736	0.64	0.736*	0.115	6.38	0.000	0.840	1.165
	Control	4.551	0.39	4.586	0.26	0.035	0.060	0.58	0.569	0.140	0.121

* p<0.01, Experimental Group n=18, Control Group n=18.

In the experimental group with the treatment of OD interventions, the results of the mean differences (MD) indicated strong evidence that there were significant differences (at p-value < .001) between the Pre-ODI and Post-ODI assessments in all learning levels: Individual Level (MD = .791, p-value = .000), Team Level (MD = .787, p-value = .000), and Organization Level (MD = .736, p-value = .000). With the support of effect-size test results, Cohen's d values show that the OD interventions have large effect sizes for all three learning levels of the experimental group: Individual Level (*d* = 1.153), Team Level (*d* = 1.205), and Organization Level (*d* = 1.165). This can be interpreted that treatment of the OD interventions have large effects on the mean differences between Pre-ODI and Post-ODI assessments.

On the other hand, the test results of the mean difference (MD) for the control group with no treatment of OD interventions, indicated that there are no significant differences (at p-value < .001) between the Pre-ODI and Post-ODI assessments in all learning levels: Individual Level (MD = -.021, p-value = .818), Team Level (MD = .019, p-value = .767), and Organization Level (MD = .035, p-value = .569). With the support of effect-size test results, Cohen's d values show that the control group without the OD interventions have very small effect sizes on the mean differences between both assessments for all three learning levels: Individual Level (*d* = .037), Team Level (*d* = .025), and Organization Level (*d* = .121).

Therefore, the test results in Table 6 strongly support that the OD interventions significantly affect the learning organization culture in all three learning levels for the experimental group. In contrast, there is no statistical difference between both assessments

for the control group with no treatment of OD interventions, indicating no development of learning organization culture in all three learning levels.

To complete the third research objective, the researcher utilized an additional statistical technique to analyze the learning organization culture levels by comparing the mean score of the Pre-ODI assessments between the control group and experimental group. This following test is used to determine the equivalence of Pre-ODI mean score between both groups. Table 7 shows the results of the independent samples t-test on the Pre-ODI mean scores of all three learning levels: Individual Level, Team Level, and Organization Level between the control group and the experimental group. At a 0.05 level of significance, the results indicated that the Pre-ODI mean score between the control group and the experimental group are significantly different on all three learning levels: Individual Level (t = 2.549, p = 0.015), Team Level (t = -3.186, p = 0.003), and Organization Level (t = -3.145, p = 0.003).

Table 7

Pre-ODI Mean Difference between control group and experimental group

Pre-ODI	Group	Mean	SD	MD	SE	t-value	p-value
Individual Level	Experimental	3.671	.669	-0.55*	.215	-2.549	.015
	Control	4.218	.618				
Team Level	Experimental	3.917	.698	-0.63*	.198	-3.186	.003
	Control	4.546	.464				
Organization Level	Experimental	4.000	.630	-0.55*	.175	-3.145	.003
	Control	4.551	.394				

 * p < 0.05, Experimental Group n=18, Control Group n=18

Similarly, to support the findings from the paired samples t-test, the researcher determined the Cohen's effect size to evaluate the strength of the statistical claim or power of analysis.   According to Cohen (1988), the difference between the two means (μ1 and μ2) expressed in units of standard deviations is a measure of the effect size, where μ is a shared standard scoring difference in both classes. The value of Cohen's d = 0.2 indicates a small effect, d = 0.50 indicates medium effect, and d = 0.80 indicates large effect. Table 8 shows the comparisons of the total gain scores for Pre-ODI and Post-ODI between control group and experimental group (test of between-subjects). The results indicate strong evidence that there are significant differences (p < .01) in the total gain scores of the experimental group was greater than control group in all three Learning Levels of Learning Organization culture.

Table 8

A comparison gain score of Pre-ODI and Post-ODI between control group and experimental group. (Test of Between-Subjects)

Test of Between-subjects		Mean			Statistical sig.				Practical Sig.	
Level	Group	Post	Pre	Gain	MD	SE	t-value	p-value	ES	Cohen's
Individual	Experimental	4.462	3.671	.791	.812*	.171	4.759	.000	.632	1.582
	Control	4.197	4.218	-.021						
Team	Experimental	4.704	3.917	.787	.769*	.153	5.008	.000	.720	1.659
	Control	4.565	4.546	.019						
Organization	Experimental	4.736	4.000	.736	.701*	.130	5.399	.000	.679	1.825
	Control	4.586	4.551	.035						

* p<0.01, and Experimental Group n=18, Control Group n=18

Conclusions and Recommendations

This research found, that ODI affected the Learning Organization Culture which substantiates previous findings in the literature. Kaewprasith (2018) studied and applied organization development interventions (ODI) to teachers and staff for Assumption College, Nakhon Ratchasima, Thailand, the study used ODI interventions such as designed planned actions, workshop, and spot training to enhance the quality of current understanding, practice, factors to promote teachers and staff as individuals, team, and organizational learning. The study showed that there was a significant difference in three different levels of learning between Pre-ODI and Post-ODI.

Student Affairs needs to improve positive communication to meet the standards of a learning organization to be successful and to create trust for all Student Affairs members. Positive communication increases and motivates individuals to work harder and produce more effort as they are more committed. Student Affairs should apply job rotation across sub-units in the department or across departments or apply temporary job placements of its members in other departments of the university. This policy can create opportunities for Student Affairs members to show more autonomy and creates opportunities for continued learning. The Student Affairs department should also use reward systems to motivate staff to maintain their positive behavior and to recognize and appreciate their continuous learning and development.

Similarly, learning teams, casual connections and professional groups are very important. The strength of these cultures of informal "learning" is autonomous. They support and renew themselves as they produce knowledge. These relationships are far more important than formal management structures to assist employees to learn about new concepts, to teach each others, to test them and always share experimental guidance and lessons. In this regard, Student Affairs may need to sustain the knowledge and experience sharing gained through the interventions and provide more opportunities for team learning to be more systematic for subunits to practice.

Organizations are social systems where two or more people work together to achieve common objectives (Norlin, 2009). By connecting the organization to the environment, people in the organization are helped to see how their work affects the whole organization. Student Affairs should continue to facilitate its members or subunits to seek networks or partners across departments, private enterprises, and public sectors to cooperate and corroborate and learn. As seen in the current situation of COVID-19 pandemic situations, Student Affairs has been continuing collaborative working across departments and other sectors such as the Academic Department, Administrative Department, Ministry of Public Health, Ministry of Higher Education, Science, Research, and Innovation in order to develop action plans to monitor the situation. There is a direct correlation between corporate culture and performance. In this regard, Student Affairs should implement strategic plans to develop a culture that encourages experimentation and the transfer of knowledge across organizational boundaries. An example of this may be for Student Affairs to systematically evaluate to all subunits projects by needs surveys, satisfaction surveys, feedback surveys, pre and post-test analysis (student training programs), etc.

Based on the findings of this research and the perceived efficacy of the organizational development interventions, given the challenges of the student affairs department, the results of this study can potentially be beneficial to other divisions or departments in the university. The Student Affairs Department experiences with interventions and enhancement of learning organization culture can be used as an example to engage other units to develop the knowledge and culture of becoming a learning organization. Staff of the SA Department may also share their experiences or be included in strategic planning sessions to introduce and encourage dialogue among staff in other units of the university. The SA department's example can serve as a guidepost for other departments at Assumption University.

This study has limitations in that the sample sizes are small and thus the findings concerning the validity may be questioned. Therefore, it is recommended that further research be conducted using a larger sample size and possibly a longer intervention period to ensure that the results are directly linked to the interventions. Additionally, further studies may want to use other subsets or divisions of the university. By using other departments or divisions in the university, it will also contribute to a better understanding of how the interventions and the concepts of learning organizations can be implemented and sustained. The methodology and interventions used in this research may also be potentially applied to other student affairs organizations in other universities to further test the validity of the interventions and the practicality of implementation.

The profession of student affairs is designed to support students and facilitate their development. Its role in higher education has evolved over the years as the face of higher education has evolved. Higher education in the 21st century is facing many challenges, and this is especially so within the higher education landscape of Thailand. Faced with these challenges, the role of student affairs has become even more difficult to define. It becomes imperative that research is needed to enhance the role and productivity of student affairs to help this unit become a strong unit that can support the university. Developing student affairs effectiveness by developing a learning organization culture is an important means to achieving this goal.

References

Abu Khadra, M., & Rawabdeh, I. (2006). Assessment of development of the learning organization concept in Jordanian industrial companies. *The Learning Organization*, *13*(5), 455-474. **doi:10.1108/09696470610679983**

Bond, C., & Seneque, M. (2013). Conceptualizing coaching as an approach to management and organizational development. *Journal of Management Development*, *23*(1), 57-72.

Ciobanu, A. (2013). The role of student services in the improving of student experience in higher education. *Procedia-Social and Behavioral Sciences*, *92*. **https://doi.org/10.1016/j.sbspro.2013.08.654**

Coghlan, D., & Brannick, T. (2005). *Doing action research in your own organization* (2nd ed.). Sage Publications.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Routledge Academic.

DiBella, A. J. (1995). Developing learning organizations: A matter of perspective. *Academy of Management Journal*, *38*, 287-290. **https://doi.org/10.5465/ambpp.1995.17536560**

Fapohunda, T. M. (2013). Towards effective team building in the work- place. *International Journal of Education and Research*, *1*(4), 1-12.

Goh, S. C. (1998). Toward a learning organization: The strategic building blocks. *SAM Advanced Management Journal*, *63*(2), 15-20.

Hammond, S. A. (2013). *The Thin Book of Appreciative Inquiry* (3rd ed.). Thin Book.

Kaewprasith, S. (2018). *Improving individual, team and organizational learning through organization development interventions (ODI): A case study of Assumption College Nakhonratchasima, Thailand* [Doctoral dissertation, Assumption University of Thailand]. **https://repository.au.edu/handle/6623004553/21730**

Kim, J., Egan, T., & Tolson, H. (2015). Examining the dimensions of the learning organization questionnaire: A review and critique of research utilizing the DLOQ. *Human Resource Development Review*, *14*(1), 91-122.

Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice-Hall.

Kontoghiorghes, C., Awbre, S. M., & Feurig, P. L. (2005). Examining the relationship between learning organization characteristics and change adaptation, innovation, and organizational performance. *Human Resource Development Quarterly*, *16*(2), 185-211**. doi:https://doi.org/10.1002/hrdq.1133**

Liang, G., Fu, W., & Wang, K. (2019). Analysis of t-test misuses and SPSS operations in medical research papers. *Burns & Trauma*, *7*(1). **https://doi.org/10.1186/s41038-019-0170-3**

Marsick, V. J. (2006). Informal strategic learning in the workplace. In J. N. Streumer (Ed.), *Work-Related Learning* (pp. 51-69). Springer.

Marsick, V. J., & Watkins, K. E. (2003). Demonstrating the value of an organization's learning culture: The dimensions of the learning organization questionnaire. *Advances in Developing Human Resources*, *5*(2), 132-151.

Norlin, J. M. (2009). *Human behavior and the social environment: Social systems theory*.

Allyn & Bacon.

Romme, A. G. (2011). Organizational development interventions: An artifaction perspective. *The Journal of Applied Behavioral Science*, *47*(1), 8-32.

. Rothwell, W. J., Sullivan, R., & McLean, G. N. (1995). *Practicing organization development*. Jossey-Bass.

Sadhu, A. K. (2009). *Interventions for change*. **https://www.management4all.org/2009/11/interventions-for-change.html?m=1**

Senge, P. M. (1990). *The fifth discipline: The art & practice of the learning organization*. Doubleday Business.

Smith, L. N., & Blixt, A. B. (2015). *Leading innovation and change: A guide for chief student affairs offices on shaping the future*. National Association of Student Personnel Administrators.

Stavros, J., & Hinrichs, G. (2009). *The Thin book of SOAR: Building strengths-based strategy*. Thin Book.

Tripp, D. (2005). Action research: A methodological introduction. *Educação e Pesquisa*, *31*(3). **doi:10.1590/s1517-97022005000300009**

Tuckman, B. W., & Jensen, M. A. C. (1977). Stages of small-group development revisited. *Group & Organization Management*, *2*, 419-427. **doi:10.1177/105960117700200404**

Watkins, K. E., & Marsick, V. J. (1993). *Sculpting the learning organization: Lessons in the art and science of systemic change*. Jossey-Bass.

Watkins, K. E., & Marsick, V. J. (1996). *In action: Creating the learning organization*. American Society for Training and Development. Watkins, K. E., Yang, B., & Marsick, V. J. (1997). Measuring dimensions of the learning organization. In R. J. Torraco (Ed.), *1997 Conference Proceedings of the Academy of Human Resource Development* (pp. 543-546). Baton Rouge, LA: AHRD.