

The Effects of Teachers' Competence on Designing Mindfulness Learning Activity through a Professional Learning Community

Jakkrit Jantakoon and Suphornthip Thanaphatchottiwat

Abstract--- *The objective of this study was to investigate the effects of teachers' competence in designing Mindfulness Learning Activity through a Professional Learning Community. The sampling consisted of 24 teachers at the secondary school level who were willing to participate in the study. The research instruments were the plans of designing Mindfulness Learning Activity, the competence evaluation form of learning activity design, self - reflection forms, and learning logs. The study was divided into two loops; the first loop was an initiation and the second loop was development and capture lesson learned. The first loop can be divided into 3 steps which were 1) two days of training, 2) planning to Mindfulness Learning Activity design, and 3) observe class and reflection. The second loop consisted of 3 steps that were 1) the revise of Mindfulness Learning Activity design, 2) observe class and reflection, and 3) knowledge management and capture the lesson learned. The statistics for data analysis were Mean, Standard Deviation and Content analysis. The results showed that (1) the competence of teacher on Mindfulness Learning Activity design was rated at a high level ($\bar{x} = 4.35$, S.D. = 0.3) 2.) the mindfulness activity that suitable for secondary school students was moving meditation as are known as Mahasati Meditation: Luang Por Teean developed this mindfulness technique. It was highly used for all teachers in the step of set induction, moreover, when teachers notice that their students were distracted at the present moment, mindfulness activities can be applied while the teacher was in the teaching process. Besides meditation practice as normally use, calm classroom activities concepts; breathing, focusing, stretching, and relaxing or other brain gym activities revealed more useful to apply in the classroom as well. 3) the teacher themselves reflected about the transforming within such as how they feel different for one thing that they ever never noticed before, they have more mindfulness, they let their students think without pursuing them to answer. This was a usual way of teaching that now differs from the traditional one. 4) students have readiness for learning, have confidence, opened minded, having deep listening skills because of meditation practice applied in classrooms.*

Keywords--- *Competence, Mindfulness Learning Activities, Professional Learning Community.*

I. INTRODUCTION

Mindfulness practice is widely used in business, healthcare, and education to improve attention and well-being. This address also correlated with Mindful School (2019)^[15] which mentioned that Mindfulness-Based Interventions (MBIs) have nearly 35 years of research & development supporting them, and have moved progressively through three large institutional cultures: health care, mental health, & education. Association Mindfulness in Education (2019) revealed the various benefits of mindfulness for human life; increased emotional regulation, increased social

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skills, increased ability to orient attention, increased working memory and planning and organization, increased self-esteem, increased sense of calmness, relaxation, and self-acceptance, increased quality of sleep, decreased test anxiety, decreased ADHD behaviors- specifically hyperactivity and impulsivity, decreased negative affect/ emotions, decreased anxiety, decreased depression, and fewer conduct and anger management problems. Nowadays, we have been facing with a rapid change of the world in the 21st century in many facets, this caused both teachers and students stress moreover it's difficult to overwhelm with that causes so that tones of problems may cause from we cannot control our emotion or we cannot find the solution of it appropriately.

II. RESEARCH QUESTION

How Mindfulness Learning Activity will affect teachers and students in what aspects?

III. RESEARCH OBJECTIVE

This study aims to investigate the effects of teachers' competence in designing Mindfulness Learning Activity through a Professional Learning Community.

IV. REVIEW LITERATURE

Mindfulness

Mindfulness is a particular state of consciousness that involves awareness and acceptance of whatever is happening in the present moment. You can think of it as "fullness of mind," because you bring your full undivided attention to the present moment. The term mindfulness has been used in various contemplative traditions to refer to very specific type of meditative states and practices.(Patricia A. Jennings, 2015, pp. 1-2)^[1]. Dan Siegel's (2007 cited in Patricia A. Jennings, 2015, p.xxvi)^[1]) wheel of awareness, a model of how we can apply mindful awareness to our inner and outer experience in order to improve our psychological functioning. Moreover mindful awareness activities can be practice on your own. Mindfulness involves three fundamental processes: forming intention, paying attention, and adjusting your attitude (Shapiro, Carlson, Astin, & Freedman, 2006 cited in Patricia A. Jennings, 2015, p.xxvi).^[1]For mindful practice activities that stated in Patricia A. Jennings, 2015, pp. 18-24)^{[1][3]}such as daily mindfulness practice can help you strengthen your "awareness muscles" so you can more comfortably apply them to your teaching. There are numerous approaches to mindful awareness practice. Maybe you already have a practice, and if you do, I encourage you to continue with whatever routine you have established. Focused Attention, the first and most basic form of mindful awareness practice is often called focused attention, and it involves intentionally directing and maintaining attention on a target. This practice helps the mind settle. This form of practice involves intentionally but gently resting your attention on your breath, noticing the sensations of each inhalation and exhalation. This practice will help you build awareness of interior experience and has a calming effect on your body. It involves three primary aspects: posture, focus, and distractions. Mindful Walking, another activity that very helpful for getting students focused attention to the soles of your feet.

As you continue walking, keep your focused attention on the soles of your feet. If your mind wanders, as we did during breath awareness practice, notice that your mind has wandered and bring your attention back to the soles of your feet.

After you have practiced mindful walking this way for a few sessions, you can begin to increase the speed of your steps to a more normal pace. However, if you find you begin to lose your focus, slowdown again. Find a pace that works well for you. Over time you can bring focused attention to your walking during your normal every day activities. Bell Activity describe a series of extensions that increase in difficulty and involve interpersonal cooperation and coordination. This activity can be done with 10 to 12 small hand bells. However, if you don't have access to these, you can use cups of water. The aim of the exercise is to not let the bells ring (or the water spill). The intention of the activity is to promote mindful awareness of the eight senses described in the wheel of awareness: the five senses of sight, smell, hearing, touch, and taste; internal bodily sensations; "mind sight"; and relational sense. Mindful Listening, this is a common mindfulness-based practice that is found in many mindfulness education curricular. Many teachers have found that students derive a lot of value from this exercise and even ask substitutes to do it when their regular teacher is absent. A listening activity that will help our minds relax and become more focused.

Calm Classroom

The Calm Classroom (CC) program is based on the work of Herbert Benson, the Harvard Medical School professor and pioneer in mind-body medicine who developed the relaxation response (RR) method in the 1970s (Benson & Klipper, 2009 as cited in Jennings, P. A.)^{[4][5]} The CC K-12 curriculum introduces a set of techniques that involve mindful breath awareness, concentration, relaxation, and stretching. The techniques are very brief, lasting between 30 seconds and two minutes, and are designed to be practiced several times a day, especially before or after a transition time. The program is designed to increase students' attention spans and decrease stress-related problems, including anxiety and disruptive behavior. Calm Classroom was designed as a school wide intervention. Teachers introduce the techniques to students, but over time the students learn to lead the class during practice time. The practices are introduced and practiced by the entire school staff and are used to help students self-regulate during disciplinary activities. An early study compared high school students who were taught RR versus a typical health curriculum three times per week. Students who learned RR reported significant increases in self-esteem (Benson et al., 1994 as cited in Jennings, P. A.)^{[4][5]}. Benson and his colleagues (2000) conducted a study to examine the effects of practicing the program on middle school students' academic and behavioral outcomes across a three-year intervention period. The study found that students who were exposed to two or more semesters of classes that included these practices had higher grade point averages, better work habits, and higher cooperation scores than students who had less exposure to the program practices.

Buddhist Meditation

Vinai Ussivakul (1996)^{[7][8]} describe that a well-developed mind brings about happiness in life. This mental development leading to high level and subtle happiness can be effectively achieved by practicing Tranquil Meditation (Samatha Kammatthana). It has been confirmed through scientific studies and verifications that there are numerous benefits to be gained from Tranquil Meditation practice. The practice is useful in:

- Promoting physical and mental relaxation and health
- Overcoming stress and strain in life

- Developing a mind with complete freedom
- Lowering the level of high blood pressure
- Increasing self-confidence
- Enhancing good personality
- Improving memory
- Increasing the learning power
- Improving the effectiveness of job performance
- Making effective use of time
- Enhancing creativity
- Contributing to giving up of drinking and smoking habits as well as drug abuse
- Lessening worries and anxieties
- Enriching one's life with subtle happiness and tranquility,
- Acquiring initiative and creative wisdom highly beneficial to one's life
- Relieving physical and mental suffering and ridding the mind and body of certain illnesses
- Providing a wholesome and effective outlet for coping with life's problems and attaining a high level of invaluable tranquility and happiness

As Kabat-Zinn (1993,p. 260)^[17]concluded that mindfulness is a Buddhist concept based on cultivating awareness with the aim of helping people live each moment of their lives even the painful one as fully as possible and we can say that it may be the first step towards transforming insight.

Professional Learning Community

DuFour. R.^[16](cited in Educational Leadership, 2004, pp. 6-11) concluded that the idea of improving schools by developing professional learning communities is currently in vogue. People use this term to describe every imaginable combination of individuals with an interest in education—a grade-level teaching team, a school committee, a high school department, an entire school district, a state department of education, a national professional organization, and so on. Moreover, the professional learning community model has now reached a critical juncture, one well known to those who have witnessed the fate of other well-intentioned school reform efforts. In this all-too-familiar cycle, initial enthusiasm gives way to confusion about the fundamental concepts driving the initiative, followed by inevitable implementation problems, the conclusion that the reform has failed to bring about the desired results, abandonment of the reform, and the launch of a new search for the next promising initiative.

V. RESEARCH METHODOLOGY

The study was divided into two loops; the first loop was an initiation and the second loop was development and capture lesson learned. The first loop was research and develop the Mindfulness Learning Activity through a Professional Learning Community. The objective of this loop was to develop teachers' competency through training workshop which finally they can design the learning activity themselves.

Calm classroom and mindfulness concepts were applied through the workshop program, moreover applying of contemplative education method and Buddhist meditation also fruitful for training. The training program consisted of four activity plans or equal fourteen hours to complete the program. The training program was evaluated by three specialists which revealed that the program was suitable at high level at all aspects.

In this loop can be divided into 3 steps which were 1) two days of training, 2) planning to Mindfulness Learning Activity design, and 3) observe class and reflection.

The second loop consisted of 3 steps that were 1) the revise of Mindfulness Learning Activity design, 2) observe class and reflection, and 3) knowledge management and capture the lesson learned.

First Loop: Initiation

This stage aims at develop a lesson plan which focused on applying calm classroom concept, Buddhist practice, contemplative education, and professional learning community onto the lesson plan. The process used through the workshop based on contemplative education concept cooperated with four plan of training which spent 14 hours to complete the workshop. The plans were evaluated the content and reliability by specialists and they all revealed at high level.

Second Loop: Develop & Implementation

For this stage can be divided into two circles;

Circle 1 workshop period

At this circle the researchers delivers the workshop to teachers by using 4 plans, those 24 teachers were from Bang Rakam Witthaya Suksa School, Phitsanulok province which all they from purposive samplings and would like to take part in the study. Two days of workshop occurred at the school. Before the working start, those teachers were took pre-test about the ability of lesson design and the skill would be evaluated by using scoring rubric and interview in case of mindfulness and transformation within themselves.

Circle 2 initiation of PLC

In this circle can be divided into 3 steps.

First step: planning for mindfulness learning design

There were separated into 4 group of PLC, in each group helped to plan, select lesson and content, design lesson plan. All activity must show how they apply or integrated calm classroom concept, contemplative education and Buddhist practice into the classroom management. After finishing the lesson plan, members and researches discussed and revised the plan before it would be used in classroom. The school academic affairs would identify the date for demonstration and class observation afterward.

Second step: demonstration and class observation

In this step the finalized lesson plan was used in classroom, they have model teachers, members, researchers, and school administrators were take part in the situation as observers from the open class until end of the class. One plan spent at least 1 hours depends on which subjects and educational level.

Third steps: reflection

In this step, model teacher reflected on what he/she did in the classroom such as what it's work, and what's doesn't, what was strong point he/she did, how to develop the plan. Then, school administrators and researchers gave feedback. After finished each step, teachers would write their learning log and After Action Review (AAR). This information would be collect for content analysis on the aspects of mindfulness level of teacher and within students. This kind of analysis were done both two circles. After finished PLC, semi structure interview was operated for investigating and how insight transformation on mindfulness of teacher and students who were taught

Third Loop: Captured Lesson

In this step, the researchers provided a captured lesson by using After Action Review technique in order to seek for factors effects on the success and finding best practices before distribute the body of knowledge to others.

Research results

Instruments for this study consisted of (1) a scoring rubric evaluation form for ability of mindfulness activity learning design (2) semi-structured interview on mindfulness for self-awareness aspect changes in teachers (3) semi-structured interview on mindfulness for self-awareness aspect changes in students, and (4) After Action Review (AAR). The researchers distributed the forms and collected the data by ourselves. Data analysis were analyzed by Mean, Standard Deviation, and content analysis.

VI. RESEARCH RESULTS

1. The quality of mindfulness activity plans which considerate by five specialists revealed as table 1

Table 1: The quality of mindfulness activity plans

Activity plan		\bar{X}	S.D.	Level
Plan 1	Mindfulness for self-awareness	4.41	0.27	High
Plan 2	Mindfulness based on Calm Classroom concept	4.32	0.35	High
Plan 3	Mindfulness based on Contemplative Education	4.34	0.41	High
Plan 4	Mindfulness based on Buddhist Practice	4.33	0.25	High
Overall		4.35	0.30	High

From the table 1 we can concluded that all the four mindfulness activity plans has appropriately for using rated in all high level that the overall $\bar{x} = 4.35$, S.D. = 0.30. When considerate in each plan, we found the first plan was ranked at highest level $\bar{x} = 4.41$, S.D. = 0.27.

2. The results of teachers' ability on mindfulness learning activity design shown as table 2.

Table 2: The ability score on mindfulness learning activity design of teachers in each PLC group

PLC group	First round		Level	Second round		Level
	Scores (20)	%		Scores (20)	%	
1	13	65.00	Average	15	75.00	Good
2	15	75.00	Good	17	85.00	Very good
3	12	60.00	Average	15	75.00	Good
4	14	70.00	Average	16	80.00	Good

From the table 2 we can reported that the second round scores in every PLC group was higher than the first round score. And when consider from group by group, the second PLC group has the highest score in both round 75% and 85% respectively.

3. The ranking for mindfulness practices model from students' viewpoint The table 3 shown the nine model mindfulness practice which were applied into classrooms. From the table told us that which activity was popular used by teachers in their classroom and it was ranked by students.

Table 3: Model of Mindfulness practice

Model of Mindfulness practice	PERCENTAGE (%)	RANKING
1. Moving Meditation (Mahasati Meditation by Luang Por Teean)	13.85	3
2. Light Meditation	9.23	6
3. Breathing	7.69	7
4. Walking Meditation	6.15	8
5. Calm Classroom	12.31	4
6. Coloring Mandalas	10.77	5
7. Intuitive Writing	4.62	9
8. Brain gym	15.38	2
9. Hands Movement to the rhythm	18.46	1

From the table 3, we can inferred that the most popular mindfulness practice applied to classroom was hands movement to the rhythm 18.46%. Most students ranked it in the first one, the second was brain gym 15.38% and the third one was moving meditation (Mahasati Meditation by Luang Por Teean) 13.85%. And the lowest was at intuitive writing 4.62%

4. The research result on in what aspects that mindfulness effects on insight of oneself

From this results the researchers used the content analysis method from the interview both teachers and students who took part in the study completely. Those were partial codes from teachers and students aspects on in what ways that mindfulness practice effects on their own especially the change insight.

4.1. Teachers

Teacher A from PLC Group 2

"First time i do not think it will work because it's sound like abstract that i use to hear from general Buddhist practice and it normally bored with by students and I myself, but when I attent to the training and workshop and join into PLC, i found that myself, I means insight feel calm and I have more intenstion on what I am doing at the present which I never fouced on.

Teacher B from PLC Group 4

"I use the activity plan in my classroom in order to let my students not make some noise while theirs friends were studying, I noticed that most of my students have more mindful to do activities in classroom even though it just

a short period. When I spent mindful often, all of them perform good manner to others in class and I myself feel that I was learned to mindful while I teach them”

Teacher C from PLC Group 1

“I think a change insight was I can deal with emotional of eager from student’s mistake, when I compare what feedback I used to give to my students and at this present it all changed. Now I can wait for students’ answer by try to see the process of how they learn.”

Teacher D from PLC Group 3

“I have positive feedback and my mindset was changed by doing more meditation whenever I have time such as walking, focusing on my task or works”

Teacher D from PLC Group 3

“I think I can talk to my headmaster more often and we both open minded, I have a good relationship with my colleague and my family members, they told me that what happened to me but in a good way”

4.2. Students

Student A

“I love to study this subject, I feel it really interesting to see what I and my friends will study today and I what activity will apply into the class which it make me more mindful to do practices and work with my friends happily”

Student B

“I feel it not boring anymore when I learn Physics recently moreover I learn how to perform and give my ideas in front of the class which I never have confident before, I think it because of the environment was changed from the past that teacher just give us lecture and homework.”

Student C

“mindfulness activity that my teacher used in classroom made me easily focus on what teacher was teaching, I took time to do mindful outside and I notice that I feel calm, peaceful and opened minded”

VII. DISCUSSION

The objective of this study was to investigate the effects of teachers’ competence in designing mindfulness learning activity through a Professional Learning Community. The research results showed that

1. The competence of teacher on Mindfulness Learning Activity design was rated at a high level (\bar{x} = 4.35, S.D. = 0.3). It

can be inferred that the process were used through the training and workshop fit for all as stated in the results from specialist. More over, the four plans aim to made teachers see the value of applying meditation practice into classroom and if the way of teaching changed, the way of learning was changed also. As Jennings, P. A. (2015,pp. 22-24)^[3] mentioned that teachers should transform before because teacher were role model for students. Sato, M.(2017)^[14]and Robert. S.M. (2003)^[11] addressed that Enhancing Collaborative Learning can be used for

encouraging teachers to use their teaching as a site for their own professional learnings othatit may caused teachers gave hands to each other within PLC.

2. On the aspects of transforming insight of some one as revealed that mindfulness effects on insight of one self from those partial codes from teachers and students all of them notice the change a bit in themselves normally related to having more mindful in their daily life till others member can noticed the change. This phenomena was actually ocured as in the concluded by Mindful School Organization (2019)^[15]that the roots of toxic stress lie deep in the nervous system, we need tools that go beyond the conceptual mind to directly target that system. To transform our habitual responses, weneed to regularly practice our skills when we are not in “fight – flight – freeze” mode. Moreover in the research of Jennings, P. A. (2015)^[6] revealed that teachers’ social and emotional characteristics may play a critical role in teacher and classroom quality. Mindfulness and self-compassion are important contributors to social and emotional competence by supporting teachers’ well-being and social and emotional competence, wemay improvethair performance and improve classroom quality.
3. The implication for the ranking for mindfulness practices model from students’ view point shown the nine model

Mind fulness practice which were applied into classrooms. The activity that was really popular used by teachers in their classroom and it was ranked by students at the first rank was Hands Movement to the rhythm. This activity was create by one teacher who create on his own. He started to design from analysis of hisstudents, which activity students will joy when they are studying and keep going until end of class, so he used content he will teach in the lesson and composed a rhythm basically memory by students and he always use a familiar sound and song that students are familiar with sot hey just add new content into a composed song, thensing and move together. Fromresearcher’s observation found that both students and teachers were happy and they all smiled while they were learning and they shown a good collaboration for academic achievement.

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