

Techniques for Managing Stress According to the Process of Contemplative Science for Secondary School Students in a Disrupted Classroom Situation

Kanokphat Phattarataweephon¹, Nitikorn Kaewpanya¹ & Nitpaporn Rujiwattanakul¹

¹Chiang Rai Municipality School 6, Muang District, Chiang Rai, Thailand.

Correspondence: Nitikorn Kaewpanya, Chiang Rai Municipality School 6, Muang District, Chiang Rai, 57100, Thailand. E-mail: nitikorn.mith@gmail.com

Received: October 20, 2023

Accepted: November 10, 2023

Online Published: November 11, 2023

doi:10.5539/hes.v13n4p161

URL: <https://doi.org/10.5539/hes.v13n4p161>

Abstract

The objectives of this research were to 1) study the stress levels of secondary school students in a disrupted classroom situation and 2) propose techniques for managing stress according to the process of contemplative science for secondary school students in a disrupted classroom situation. It is action research. The research samples are 1) 300 secondary school students and 2) 9 experts in learning management and contemplative education, totalling 309 people, using the purposive sampling. The research instruments were 1) a stress level questionnaire, 2) a techniques for managing stress quality assessment form, and 3) a group discussion recording form. Quantitative data were analyzed by averaging, and standard deviation and qualitative data was analyzed by content analysis. The results found that.

1. Study the stress levels of secondary school students in a disrupted classroom situation. It was found that from a survey of secondary school students in the upper northern region of Thailand, their stress levels were at the highest level. Which consists of 4 aspects of stress, consisting of 1) academic aspect, 2) economic aspect, 3) social aspect, and 4) family aspect. 2. Propose techniques for managing stress according to the process of contemplative science for secondary school students in a disrupted classroom situation found. The researcher studied research and documents related to the concept of contemplative science and synthesized techniques for managing stress according to the process of contemplative science for secondary school students, it is called Techniques for managing stress according to the process of contemplative science, PATAES model, consisting of 1) Perception 2) Assesses 3) Technique 4) Action, 5) Empathy and 6) Support had the highest level of results for evaluating the quality of appropriateness.

Keywords: stress management guidelines, contemplative science, secondary school students, Disruptive Classroom

1. Introduction

The 20-year national strategy (2018-2037) in the strategy for developing and strengthening human resource potential mentions relevant factors and environments to create an ecosystem that is conducive to comprehensive human resource development, consisting of "Develop people's potential throughout their lives along with important reforms in terms of changing values and culture so that people have goodness in their "way" of life and have a common conscience in creating a liveable society. and there is revolutionary learning reform at every level, from early childhood to lifelong learning. By developing a learning system that responds to changes in the 21st century, a new learning system is designed. Changing the role of teachers, increasing the efficiency of the educational management system, and developing a lifelong learning system to develop students to be able to continuously direct their learning that is appropriate for them even after they leave the education system. (Office of the National Economic and Social Development Board, 2018) Changes in science and digital technology affect the population of the world community. There is a flow of casting. Promote people to be citizens of the world and join in the same society. That world society can exist in peace The masses must be good citizens both at the global level and at the national level, down to the smallest society. Social studies are very important in developing desirable characteristics. creative thinking Firm in morality Brings knowledge to live a happy life Using techniques from science, technology, social sciences, and humanities. Let's apply it to living happily in

both the natural and social environment. Social studies subjects require students to acquire knowledge and experiences related to groups, communities, and societies that have similar and different cultures. There is socialization both direct and indirect. As members living together which have social norms, systems, values, beliefs, social traditions Related institutions that influence social behaviour Including being able to analyze the social, cultural, and living conditions between Thai society and other societies in the world to gain a good understanding between each other. (Ministry of Education, 2002)

Modernism and Neo-Humanism concept has raised questions about the saturation point of the digital age that is approaching. The advancement of technology is reducing the value of humanity. And as a result, people lack a sense of participation in society. giving rise to the concept of Post Digital Society, which aims to present an alternative perspective between humans and technology (Knox, 2019), with the challenge of studying progress and the efficiency of technology in the future that will have to change the perspective of citizens to be more “natural” and “human”. They can still live amid technology that changes the world in a profound way (Disruption) to drive equal humanity in the future society. (Mangkhang, & Kaewpanya, 2021)

Disruption Society is a phenomenon in which humans try to adapt to a society that has undergone drastic changes to traditional beliefs that are deteriorating. The society is facing a new phenomenon arising from migration. Natural disasters, the environment, technology, population reduction, economics, politics, and epidemics are situations in which humans have changed their way of living in the future (Beck, 2017). The condition of society has changed (The Transformational Society). Society has changed. The basic paradigm which will be challenged During the call for society to preserve but they also value new technology (Bezold, 2009). This phenomenon is what causes the education system to be revisited. and prepare students for the possibilities in various dimensions that will occur to global citizens. whether it is climate change epidemic situation Artificial intelligence that replaces human resources in the production system or the interactions of people that have changed All of which will have an impact on people's lifestyles that will completely change in the future.

Due to the recent COVID-19 outbreak situation, the education system around the world has experienced a lot of fluctuations and changes. A new method of teaching was born. Teaching and learning management in the hybrid classroom and the learning styles of students that are different from before This is something that causes a lot of stress for students. This is due to sudden changes in the education system that students are not prepared for. or preparing to support various aspects such as expenses, and learning support equipment Teaching in the hybrid classroom system requires a lot of learning and adjustment. Including managing yourself when stress occurs. If neglected, this group of students will be left behind in the education system. There is inequality and lag among children and youth under the progress of society.

Stress is a normal condition that individuals must face and is a process of life that occurs to help individuals adapt to the environment. When individuals face stressful conditions, they will go through a process of changes in their bodies, minds, and emotions. Thoughts and Behavior These will have a direct impact on a person's health, such as headaches, high blood pressure, heart disease, and stomach ulcer disease. Inflammatory bowel disease, allergies, and cancer, etc. It also causes economic and social loss. This damage is caused by a lack of efficiency (Naowan, & Eamprasert, 2022). Stress management is both cognitive and emotional actions that occur in response to stressors to restore balance. Eliminating chaos in the mind and dealing with stress is a process that occurs at the conscious process level, so it can be practiced making changes and be able to learn more (Frydenburg, 1999). Must rely on cultivating knowledge and awareness about stress. and promote stress management in a variety of ways to reduce problems that will occur to students when they face stress in daily life.

Learning management is based on the concept of contemplative consciousness. It is different from current education which focuses on studying the "outside world" rather than the "world within oneself" because how you see the outside world depends on how you see the world inside yourself. Learning management is based on the concept of mental intelligence, thus making people understand their inner self. get to the truth It is a guideline that will make the connection between learning clear. Connect both the mind and the mind and lead to effective action. It is a way of wisdom that develops a whole person. In addition, learning management is based on the concept of mental intelligence. Contemplative Education is a new educational approach that can change the learning behavior of students. In which traditional teaching and learning focuses on memorization. Lack of rational and sensory knowledge causes learners to have impairments in deep listening skills, while learning management is based on the concept of mental intelligence, which is a process of learning with the mind and thinking. Education that truly emphasizes inner development to create awareness of the value of things without bias Born of love and kindness humble to nature Have conscience towards the public and can connect various

sciences to apply in a balanced life Learning management is based on the concept of mental intelligence. It is a learning process and context that is a supporting factor or element or flow of development from a small mind to a large mind. From a mind that is clinging to a narrow ego and an uncomfortable view of the world in parts. Towards a mind that is aware, able to understand the connection of all things. have love and kindness (Hart, 2004; Wasi, 2006; Center for Contemplative Education, 2007; Wallace, 2007; Garcia-Campayo, López Del Hoyo, & Navarro-Gil, 2021)

For this reason, the researcher is interested in studying the stress level of secondary school students who are faced with a disrupted classroom situation. Also, study research and related documents to propose guidelines for stress management using the concept of contemplative education. For secondary school students in a disrupted classroom situation to create important guidelines for preparing students for future social changes. Be a happy person in living and learning. Having knowledge and awareness of one's own feelings and thoughts Be an intelligent person in dealing with problems and stress in daily life in a balanced way.

2. Method

Step 1 The research model

This research is Action Research (AR) by collecting and analyzing data obtained from document analysis, questionnaires, and focus group recordings. Presentation of study results in descriptive analysis using quantitative and qualitative data, data synthesis and description.

Step 2 Populations and samples

The population used in the study consists of 2 main target groups: 1) a group that provides information on stress levels, namely secondary school students in schools in the upper northern region of Thailand, and 2) the group evaluating the suitability of stress management guidelines includes: Expert in learning management and contemplative education The researcher selected a total of 309 people for the research, consisting of:

- 1) Groups that provide information on stress levels include: 300 secondary school students in schools in the upper northern region of Thailand using purposive sampling.
- 2) The group evaluating the suitability of stress management guidelines included: Nine experts in learning management and cognitive education using purposive sampling.

Step 3 Tools used in research

Tools used to gather data include:

- 1) Questionnaire on stress levels of secondary school students in schools in the upper northern region of Thailand.
- 2) Quality assessment of techniques for managing stress according to the process of contemplative science for secondary school students.
- 3) Expert group discussion recording form.

Step 4 Data collection

- 1) Documentary Study by collecting information from documents, books, journals, both theoretical related concepts, and research to use the obtained data to analyze the study issues.
- 2) Situational Analysis is the collection of quantitative data. By asking about the stress levels of secondary school students in schools in the upper northern region of Thailand. To summarize the current situation and stress levels of students by analyzing data to synthesize techniques for managing stress with the tools used: questionnaire on stress levels of secondary school students in schools in the upper northern region of Thailand.
- 3) Design and Development is the collection of quantitative data. By designing and developing techniques for managing stress according to the process of contemplative science for secondary school students. Then check the quality and determine the appropriateness of the developed approach. Passed quality inspection by experts and conducted group discussions with experts to bring suggestions to develop complete techniques for managing stress according to the process of contemplative science. The tool used is a quality assessment of techniques for managing stress according to the process of contemplative science for secondary school students and an expert group discussion recording form.

Step 5 Data analysis

- 1) Qualitative data the researcher analyzed the data according to the study aims using the data analysis method by interpretation. obtained from document analysis and stress level inquiry. To summarize issues according to

data groups and analyze data relationships.

2) Quantitative data the researcher uses the information obtained from the assessment form. Let's analyze the data with a statistical package that can be used to analyze the data appropriately. It is analyzed using descriptive statistics by displaying the results of statistical data analysis. Results will be analyzed as mean and standard deviation.

3. Results

For the research at this time, the research team has classified the data obtained from the study and presented the research results according to the determined objectives. The study results can be summarized as follows:

1. Study the stress levels of secondary school students in a disrupted classroom situation. It was found that the researcher inquired about the stress levels of secondary school students in schools in the upper northern region of Thailand and found that Stress levels among secondary school students in schools in the upper northern region of Thailand are among the highest. When considering the questionnaire, stress levels can be classified into 4 areas: 1) academic aspect, 2) economic aspect, 3) social aspect, and 4) family aspect. The results of the stress level questionnaire appear as follows.

Table 1. Stress levels of secondary school students in schools in the upper northern region of Thailand (n=300)

No.	Inquiry list	Stress levels		
		\bar{x}	SD	Interpretation
1) Academic aspect				
1	The students thought that they were concerned about hybrid teaching and learning that would affect their learning efficiency.	4.80	0.45	most
2	The students thought that they were less prepared for new learning and had difficulty adjusting to the new teaching style.	4.60	0.55	most
3	The students thought that they had learning support equipment that was not ready for learning.	4.40	0.89	a lot
Academic aspect overview		4.60	0.63	most
2) Economic aspect				
4	The students thought that there is concern about the rising costs of learning in new formats in today's classrooms.	4.80	0.45	most
5	The students thought that there is stress caused by expenses that come from procuring learning support equipment such as tablets, computers, online courses, etc.	4.60	0.89	most
6	The students thought that it is difficult to spend money on online supplementary classes offered by educational institutions.	4.80	0.45	most
Economic aspect overview		4.73	0.60	most
3) Social aspect				
7	The students thought that lack of interaction with classmates in the classroom	4.20	1.10	a lot
8	The students thought that online classrooms could not help them learn effectively with their classmates.	4.80	0.45	most
9	The students thought that teaching and learning arrangements in educational institutions were not consistent with the reality of everyday life.	4.60	0.89	most
Social aspect overview		4.53	0.81	most
4) Family aspect				
10	The students thought that there was concern about family expenses that would affect students' studies.	4.30	0.55	a lot
11	The students thought that families have high expectations for their studies.	4.60	0.89	most
12	The students thought that the family still didn't support the passion. or interest in continuing education of students	4.60	0.89	most
Family aspect overview		4.50	0.78	most
overview		4.60	0.72	most

Source: Phattarataweephon, Kaewpanya, & Rujiwattanukul (2023)

From Table 1, the stress level of secondary school students in schools in the upper northern region of Thailand is at the highest level ($\bar{x}= 4.60$, $SD= 0.72$). When considering each aspect, it is found that Each area has the highest level of stress of any area. The most stress was found in 1) economic aspect ($\bar{x}=4.73$, $SD= 0.60$) 2) academic aspect ($\bar{x}= 4.60$, $SD= 0.63$) 3) social aspect ($\bar{x}= 4.53$, $SD= 0.81$) and 4) family aspect ($\bar{x}= 4.50$, $SD= 0.72$) respectively

2. Propose techniques for managing stress according to the process of contemplative science for secondary school students in a disrupted classroom situation. It was found. The researcher studied research and documents related to the concept of contemplative science and synthesized techniques for managing stress according to the process of contemplative science for secondary school students, it is called Techniques for managing stress according to the process of contemplative science, PATAES model, consisting of 1) Perception 2) Assesses 3) Technique 4) Action, 5) Empathy and 6) Support The details are as follows:

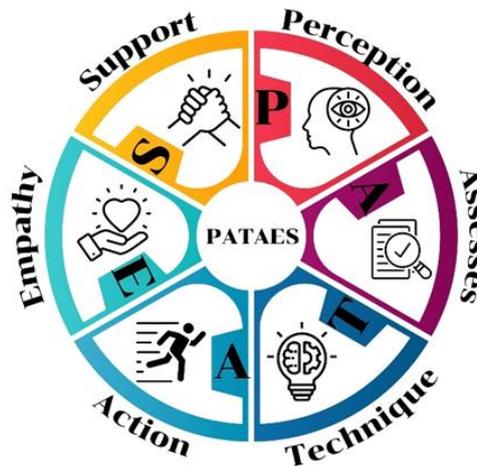


Figure 1. Techniques for managing stress according to the process of contemplative science PATAES model
Source: Phattarataweephon, Kaewpanya, & Rujiwattanakul (2023)

1) Perception: P is acknowledging stress and accepting that it is a normal thing that occurs in daily life. It is an important first step in managing stress using the concept of contemplative education. This is because students should not deny or hide their stress stories. When students recognize and accept the stress that occurs in their lives, they will be conscious and understand the truth of life that must occur.

2) Assesses: A are an attempt to identify the cause of feelings of stress and assess the severity level. of it Recognizing the causes and severity of stress may help students have a better understanding of themselves and find appropriate ways to manage it.

3) Technique: T is learning stress control techniques that help them relax and manage stress effectively. For example, breathing deeply and listening to relaxing music. Techniques for planning and managing time, etc. In the concept of contemplative education, there are also 2 main ways to effectively control stress: 3.1) Exercise. Exercise is a good way to reduce stress. Exercise helps your body release chemicals that help you feel comfortable and relaxed. Students can choose many activities that they can do such as running, yoga, and cycling to increase their physical and mental health. 3.2) Adequate sleep. Adequate sleep plays an important role in treating stress. Getting enough and quality sleep will result in students having good physical and mental health.

4) Action: A If the level of stress is high, there may be an effective practice of contemplative education by contemplative dialogue, which is an activity to recognize and explore within oneself (emotions, feelings, thoughts, beliefs, perspective on life and the world) by learning through direct experience through mindful discussion and deep listening and reflection. The goal is Fundamental changes have occurred. resulting in living life with consciousness and wisdom Have love and compassion for all things, which leads to good behavior towards one another in society. Using Issues as a guide for talking, such as Dream career, hobbies, impressive stories from the past Situations or events in society, etc., are all topics that can be discussed carefully. Then enter self-reflection. To allow students to deeply reflect on the causes of their own stress before crystallizing their thoughts. and finding ways to manage stress. Contemplative dialogue also helps students to vent their inner

depression. To relax and be in a state of awareness. Control your feelings which ultimately leads to managing the cause of stress.

5) Empathy: E is giving one's own time and attention. Do your favorite activities such as travel Eating your favorite food, listening to music, etc., which gives you time to reflect. and precipitate thoughts This method helps students develop a sense of self. which is an important goal of the practice of contemplative education that will create a process for managing stress in the form of the students themselves.

6) Support: S when students experience severe stress and feel unable to manage it on their own. Students should consider seeking advice from a mental health professional, such as a psychologist, or seeking support from family or friends, which may help them cope more with stress. When the researcher synthesized stress management guidelines using the concept of contemplative education, The guidelines were evaluated for suitability by experts. The results appear as follows.

Table 2. Results of evaluating the suitability of techniques for managing stress according to the process of contemplative science (n=9)

No.	Evaluation list	Appropriate level		
		\bar{x}	SD	Interpretation
1	Techniques for managing stress are appropriate guidelines consistent with the concept of contemplative education.	4.80	0.45	most
2	Techniques for managing stress have clear steps. Can be put into practice	4.80	0.45	most
3	Techniques for managing stress consistent with the educational situation in a rapidly changing society	4.80	0.45	most
4	Techniques for managing stress are flexible and suitable for the next normal.	4.60	0.55	most
5	Techniques for managing stress have a variety of methods suitable for high school students.	4.60	0.55	most
6	Techniques for managing stress can lead to effective stress management.	4.60	0.55	most
7	Techniques for managing stress have a clear sequence of steps. and corresponds to the severity of the stress condition.	5.00	0.00	most
8	Techniques for managing stress offer a modern approach. Suitable for the post-digital era	4.60	0.55	most
9	Techniques for managing stress help educational institutions have effective ways to care for students.	4.60	0.55	most
10	Techniques for managing stress that can be put into practice in educational institutions	5.00	0.00	most
overview		4.74	0.41	most

Source: Phattarataweephon, Kaewpanya, & Rujiwattanakul (2023)

From Table 2, the appropriateness level of the techniques for managing stress according to the process of contemplative science is at the highest level. (\bar{x} = 4.74, SD = 0.41) When considering each item, it was found that Every evaluation item has the evaluation results at the highest level. which shows that techniques for managing stress according to the process of contemplative science are suitable to be used to promote teaching and learning in educational institutions.

4. Discussion

1. Study the stress levels of secondary school students in a disrupted classroom situation. It was found that from a survey of secondary school students in the upper northern region of Thailand, their stress levels were at the highest level. Which consists of 4 aspects of stress, consisting of 1) academic aspect, 2) economic aspect, 3) social aspect, and 4) family aspect. This is consistent with the Department of Mental Health (2000) which suggests that there are many causes of stress, including psychological causes such as fear of not being as hoped. Afraid that the work you do will fail. Afraid that you will have to do something that is too difficult for you. Worried about family, studies, work, or changes in life such as age change. change of place of residence Familiar environmental changes in addition, it can also be caused by physical illnesses. Changes in life are one of the causes of stress. Especially during adolescence, it is in the same direction as the concept of Tontuan (2010) that stress occurs in each individual. Even though the cause is the same our response to stress, both physical and mental, can be different. Choosing a method for dealing with stress depends on the individual. If teenagers have

inappropriate methods, they will not be able to face problems successfully. and may cause both physical and mental harm. which in addition to affecting teenagers also affects the family, society, and the nation. Both in terms of economy and security teenagers are the future that continues to grow for families and society.

2. Propose techniques for managing stress according to the process of contemplative science for secondary school students in a disrupted classroom situation found. The researcher studied research and documents related to the concept of contemplative science and synthesized techniques for managing stress according to the process of contemplative science for secondary school students, it is called Techniques for managing stress according to the process of contemplative science, PATAES model, consisting of 1) Perception 2) Assesses 3) Technique 4) Action, 5) Empathy and 6) Support had the highest level of results for evaluating the quality of appropriateness. This is in line with Onsri's (2014) idea that contemplative education is a process of learning with the mind through reflection. Emphasizes the true development of thoughts, minds, and emotions within oneself. To achieve self-awareness, Know the value of things without bias. Born of love and kindness humble to nature Have conscience towards the public and can be applied in connection with various sciences in daily living in a balanced and valuable way This is in the same direction as Panich, (2006) who suggested that mental wisdom is a process of learning with the mind and thinking. Focus on developing ideas Truly the mind and emotions within oneself. To achieve self-awareness, Know the value of things Without prejudice, love and kindness arise. humble to nature Have a conscience towards the public and can be applied in connection with various sciences in daily living in a balanced and valuable way. For this reason, mental wisdom is both a concept and a practice. that aims to create learning for change at various levels, including change within oneself, change within the organization, and changes within society. Such changes It is not a small change, but a profound, fundamental change. Contemplative wisdom is the concept and practice while learning towards change is the goal. In addition, Phanchaphetkeao (2017) has also suggested that Learning management is based on the concept of mental intelligence. It is a learning arrangement that emphasizes internal self-awareness. Student-center teaching is consistent with the needs of the student's Emphasis on changes in thinking There is cooperation in seeking answers. Students will be alert and have fun learning. and can link the teaching and learning process in the classroom for use in the future in a balanced way.

5. Conclusion

Stress management among secondary school students is an important aspect that must be paid close attention to. In order not to cause a tragedy or serious offenses caused by stress in students who are not yet mature enough as they should be. Educational institutions, families, and society should pay attention to coordinating cooperation in caring for students so that students can learn happily. There is no stressful situation that can lead to students' learning regressing.

6. Suggestions from the Research

6.1 Suggestions for Implementing Research Results

1. The preparation of a techniques for managing stress according to the process of contemplative science should be promoted for educational institutions that wish to use it.
2. Cooperation between educational institutions and the community should be created. To improve techniques for managing stress according to the process of contemplative science.

6.2 Suggestions for Next Research

1. Techniques for managing stress according to the process of contemplative science should be developed for students at all educational levels.
2. The results of using the techniques for managing stress according to the process of contemplative science should be studied.
3. The results should be expanded and studied on the results of the use of the techniques for managing stress according to the process of contemplative science in educational institutions in diversity contexts.

Authors contributions

Nitikorn Kaewpanya was responsible for study design, revising and corresponding author. Kanokphat Phattarataweepthon was responsible for data collection. Nitpaporn Rujiwattanakul drafted the manuscript.

Funding

NOT

Competing interests

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Informed consent

Obtained.

Ethics approval

The Publication Ethics Committee of the Canadian Center of Science and Education.

The journal's policies adhere to the Core Practices established by the Committee on Publication Ethics (COPE).

Provenance and peer review

Not commissioned; externally double-blind peer reviewed.

Data availability statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Data sharing statement

No additional data are available.

Open access

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

References

- Beck, U. (2017). *The Metamorphosis of the World*. UK: Polity Press.
- Bezold, C. (2009). Jim Dator's Alternative Futures and the Path to IAF's Aspirational Futures. *Journal of Futures Studies*, 14(2), 123-134.
- Center for Contemplative Education. (2007). *Collection of articles from the 2008 annual academic conference*. Nakhon Pathom: Center for Contemplative Studies. Mahidol University.
- Department of Mental Health. (2000). *Stress relief manual* (4th ed.). Bangkok: Siam M&B Publishing.
- Frydenburg E. (1999). *Adolescent coping: theoretical and research perspective* (2nd ed.). London: Routledge
- Garcia-Campayo, J., López Del Hoyo, Y., & Navarro-Gil, M. (2021). Contemplative sciences: A future beyond mindfulness. *World journal of psychiatry*, 11(4), 87-93. <https://doi.org/10.5498/wjp.v11.i4.87>
- Hart, T. (2004). Opening the Contemplative Mind in Classroom. *Journal of Transformative Education*, 2(1), 28-46. <https://doi.org/10.1177/1541344603259311>
- Knox, J. (2019). What Does the 'Postdigital' Mean for Education? Three Critical Perspectives on the Digital, with Implications for Educational Research and Practice. *Postdigital Science and Education*, 1(1), 357-370. <https://doi.org/10.1007/s42438-019-00045-y>
- Mangkhang, C., & Kaewpanya, N. (2021). The Digital Etiquette Enhancing to Global Citizenship of Social Studies Teachers in a New Normal Society. *Higher Education Studies*, 11(3), 89-94. <https://doi.org/10.5539/hes.v11n3p89>
- Ministry of Education. (2002). *Learning management manual for social studies, religion and culture*. Bangkok: Organization for the Delivery of Goods and Parcels.
- Naowan, W., & Eampraserth, A. (2022). Stress Management and Related Factors of Work Life Quality Management. *Journal of Management Science Review*, 22(1), 223-232.
- Office of the National Economic and Social Development Board. (2018). *National Strategy 2018-2037*. Bangkok: Office of the National Economic and Social Development Council.
- Onsri, P. (2014). Contemplative education: education for human development in 21st century. *Journal of the Royal Thai Army Nurses*, 15(1), 7-11.

- Panich, W. (2006). *Learning with the mind and thinking*. Documents from the 6th National Academic Conference for the Development of Thai Ideal Graduates. Bangkok: Office of the Higher Education Commission.
- Phanchaphetkeao, A. (2017). *Effects of Contemplative Learning in Psychology for Teachers on Learning Achievement and Self-Directed Learning Readiness of Students with Different Learning Levels of Achievement* (master's Thesis). Songkla: Prince of Songkla University.
- Tontuan, S. (2010). *A Study of Stress and Coping Strategies of Secondary school students* (master's Independent). Bangkok: Srinakarinwirot University.
- Wallace, B. A. (2007). *Contemplative science: Where Buddhism and neuroscience converge*. USA: Columbia University Press.
- Wasi, P. (2006). *Community health system development: Community health is the foundation of all health*. Bangkok: National Health Security Office.