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The **Development of Jitsuksa's** Training Activities to Promote a Growth Mindset of Secondary School Students

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Abstract

This research aimed to develop the training activities of the Jitsuksa process and promote the growth mindset of grade 9 students. The tools used in the study consisted of (1) 80 Jitsuksa training activity plans, (2) a mindset assessment form in a six-level ratio, ten items, and (3) an assessment form of growth mindset behavior. Statistics used for data analysis were mean percentage and standard deviation. The target group of this research is 18 students from grade 9 of a secondary school, which is collected by purposive sampling. The results showed that after using the Jitsuksa training activities, the scores for the change in the growth mindset by the mindset measure had the percentage scores of 55.55, 38.89, 49.07, 47.23, 51.85, 56.48, 52.77, 46.30, 62.04, and 56.49 in order of questions and the behavioral assessment questionnaire for the change in the growth mindset had the percentage scores of 61.11, 61.11, 44.44, 44.44, 66.67, 55.56, 55.56, 44.44, 58.82, and 66.67, respectively. As a result of the scores, developing the training activities of the Jitsuksa process to promote the growth mindset of grade 9 was successful.

Keywords: mindset, growth mindset, training activities, Jitsuksa, secondary school.

Introduction

Human nature strives for success in all endeavors, yet only some are more successful than others. From those mentioned above, it is clear that numerous things are necessary for success. The most influential factor in success is having a growth mindset, which means thinking and having a self-belief that one's intelligence, achievements, and abilities can be developed (Dweck, 2017). Since a person with a growth mindset enjoys learning and seeking out complex projects to complete for themselves, these thoughts and beliefs are crucial to achieving success (Dweck, 2016). These people enjoy learning and seek challenging tasks to help them grow and develop. A growth mindset is an essential part of education as well.

A growth mindset influences a student's academic success not only through the intellectual and cognitive abilities in that material but also by other non-cognitive factors that influence the student. Factors include student beliefs, attitudes, and values (Limeri et al., 2020). Developing learning-oriented qualities, intelligence and abilities only sometimes brings success. Some brightest students avoid challenges, dislike efforts and wither in adversity. Some less-intelligent students are real aspirants, preferring challenges, standing up to death when things get more complicated, and can eventually succeed (Stoycheva & Ruskov, 2015).

Self-Theory is a theory that believes that intelligence can be changed, in which the expression of perspective determines the person's learning behavior and intrinsic motivation (Koebel 2016. Over the past several decades, research has found that student growth mindsets can be linked to better motivation and academic performance. Students with growth mindsets tend to be more resilient after failure than those with more fixed mindsets (Yeager & Dweck, 2012; Dweck & Yeager, 2021).

Moreover, a growth mindset can change the direction of academic performance at different levels (Blackwell et al., 2007; Dweck, 2012; Yeager et al., 2019). Based on analysis of PISA results confirms a document on growth mindsets that emphasizes a positive relationship between growth mindset and academic performance (OECD, 2019).

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This result is consistent with PISA's measurement and assessment of growth mindsets among OECD member states, finding that most students with growth mindsets have higher reading, math, and science scores than those with a fixed mindset (OECD, 2019). A growth mindset affects motivation and academic achievement (Dweck & Yeager, 2021). Therefore, PISA sets out guidelines for promoting the growth mindset, with guidelines for both the role of teachers and teaching and learning that promote the growth mindset (OECD, 2019).

However, in Thailand, when looking at learning management that promotes a growth mindset, only Lamplaimat Pattana schools and network schools with external and internal intelligence development are believed to affect the development of a growth mindset using the activities of Jitsuksa (Chaibang, 2018). Jitsuksa is the development of inner intelligence, which must mean intelligence for everyone to have a Spiritual Quotient (SQ) and Emotional Quotient (EQ). Which is deposited for one's emotions and feelings (kindness) and others to value themselves, others, and their actions to live with a goal. They set goals and meanings like a brotherhood, accepting respect and dignity. It requires additional self-discipline and collective self-discipline and the need to keep mindful. Emotional awareness to know when to stop or move on. This will help people manage their emotions (Chaibang, 2011). The school of Jitsuksa has developed training activities derived from contemplative education, which has the same objective: to require learners to develop cognitive processes. The training activities of Jitsuksa develop internal intelligence so that learners are EQ and SQ. They can grow from practice and learning new things (Chaibang, 2018), which is consistent with the growth mindset that believes that human abilities can be developed and improved (Dweck & Yeager, 2021).

The positive correlation between a growth mindset and academic achievement shows that a person with a growth mindset affects his thinking and success. Therefore, encouraging human beings to have a growth mindset should be encouraged from childhood to instill the belief that one can develop and improve through learning and effort to develop oneself towards success. In addition to increasing academic performance, helping kids adopt growth mindsets may also increase their ability to handle various obstacles successfully (Anderson, 2019). For the reasons mentioned above, as well as only a few schools in Thailand that organize education that promotes a growth mindset, this is the reason of this research has the following objectives:

1. To develop the training activities of the Jitsuksa process.

2. To promote the growth mindset of grade 9 students using the training activities of the Jitsuksa process.

METHOD

Research Design

This type I developmental research model (Richey & Klein, 2014) focuses on design and innovation in three phases: design, development, and evaluation.

Phase 1: Design Process

Study the intellectual state of current learning management, then study the papers and research related to the problem and design activities that encourage learners to have a growth mindset by designing the Jitsuksa training activities and then bringing them to the experts for review.

Phase 2: Development Process

Take the designed Jitsuksa training activities and submit them to experts to verify their validity and suitability. After that, the completed expert-reviewed Jitsuksa training activities are developed and improved to be accurate and appropriate following the context of the school and the learner to make the Jitsuksa training activities more efficient.

Phase 3: Evaluation Process

After designing and developing the Jitsuksa training activities, the participants were grade 9 students, who would conduct 16 weeks of instruction and periodic measurements of the growth mindset, measuring four weeks each, for a total of four times, and then collecting data and analyzing the data.

Participants

Participants are divided into two groups: 1) five experts consisting of two experts in content and learning materials, one expert in measurement and evaluation, one expert in cognitive processes, and one expert in psychology, and 2) 18 students in grade 9 of a public secondary school in the Northeast of Thailand, who study in the 2022 academic year, collected by purposive sampling.

Data Collection Tools

The tools used in this research were:

1. 80 training activity plans of the Jitsuksa process were used five times a week for 16 weeks for the first semester of the 2022 academic year, 20 minutes for each plan. It has an average suitability of 4.31.
2. Six-level mindset measurement consists of level 1 means strongly disagree; level 2 means disagree; level 3 means rather disagrees; level 4 means entirely agree; level 5 means agree; and level 6 means strongly agree. Ten items were modified from Silpakit et al. (2015), which have moderate contextual alignment and internal consistency.
3. The growth mindset behavior assessment, which has ten behavioral indications, consists of practice and not

practice options. Suppose a student exhibits behavior according to symptoms. In that case, there will be a score equal to 1, and if the student does not show behavior according to the movement, there will be a score equal to 0 from Aodton et al. (2018), which is the average of 0.80.

Data Collection

1. The researchers applied the Jitsuksa training activities to grade 9 students and collected data periodically.
2. Complete the Jitsuksa training activities and use the mindset and growth mindset change assessments to be evaluated four weeks at a time.
3. Use the data collected to analyze the data by determining the average, percentage, and standard deviation.

Data Analysis

1. The appropriateness of the Jitsuksa training activity plans is analyzed using the average, and then the average is interpreted with the appropriate level as follows:
4.51- 5.00 means the most suitable
3.51 – 4.50 means very suitable
2.51 – 3.50 means moderately suitable
1.51 – 2.50 means less suitable.
1.00 – 1.50 means least suitable.
2. The conceptual model is measured at intervals of four weeks at a time and then analyzed using averages, percentages, and standard deviations.
3. The growth mindset change behavior assessment is used periodically with a 4-week-to-1 mindset model and analyzes the data using averages and percentages.

FINDINGS

The development of the training activities of the Jitsuksa is shown in Table 1.

Table 1: The procedures for organizing the training activities of the Jitsuksa process.

Stages	Objective	Activities
Preparatory stage	So that the child can prepare a mental state, stay focused, and make an effort. Stimulates the brain to prepare for learning.	Brain gym activities
Activity stage	for the child to practice. Express opinions, stimulate thought processes, and modify attitudes from simulations.	Letter Activity Verbal activity Tree activity
End-stage	To show love, nurture love, and compassion for all things. Create positive feelings.	"Thank you" activities, empowerment speeches. The activity provides love through hugs and contact.

According to Table 1, there are three stages of development of the Jitsuksa training activities: 1) the preparatory stage, stimulating the brain to prepare for learning; 2) the activity stage, practiced by simulation; and 3) the end stage, creating positive feelings.

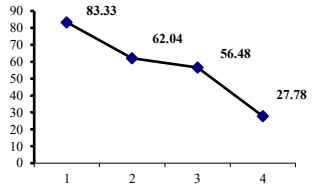
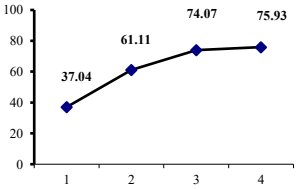
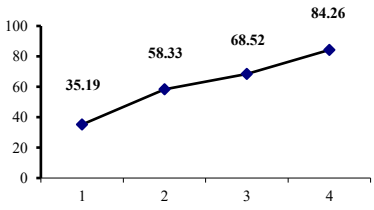
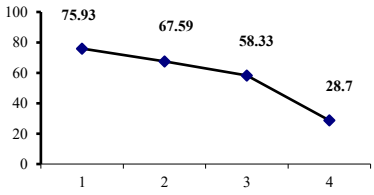
The effect of promoting the growth mindset of grade 9 using the Jitsuksa training activities is shown in Tables 2 and 3.

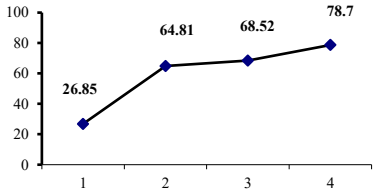
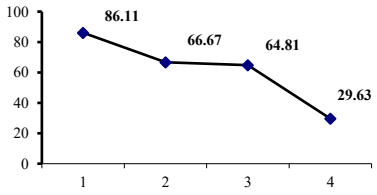
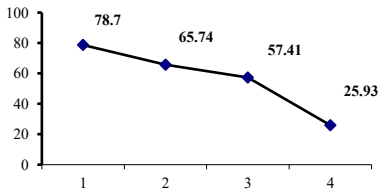
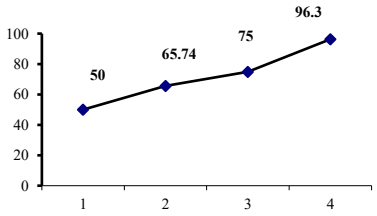
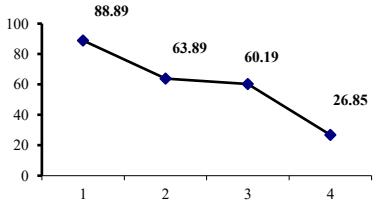
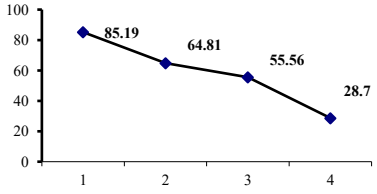
Table 2: The result of Jitsuksa training activities to promote the growth mindset of grade 9 students.

List	Week 1-4		Week 5-8		Week 9-12		Week 13-16	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
1. I learned new things but could not fundamentally change my intelligence.	5.00	0.59	3.72	1.23	3.39	1.09	1.67	0.59
2. I can increase my intelligence. Yes, of course.	2.22	0.55	3.67	1.03	4.44	0.78	4.56	0.62
3. I can change myself, no matter who I am.	2.11	0.58	3.50	1.47	4.11	0.96	5.06	0.73
4. I can do something differently, but the gist is that I cannot change it.	4.56	1.38	4.06	1.39	3.50	1.42	1.72	0.67
5. I can always change the essential elements of myself.	1.61	0.61	3.89	1.13	4.11	0.83	4.72	0.83
6. Good people do not need to put much effort	5.17	0.38	4.00	1.28	3.89	1.08	1.78	0.65

List	Week 1-4		Week 5-8		Week 9-12		Week 13-16	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
into it.								
7. I avoid having to face new things because I feel pressured.	4.72	0.75	3.94	1.21	3.44	1.15	1.56	0.70
8. When facing something challenging, I try not to be discouraged.	3.00	1.03	3.94	1.16	4.50	0.79	5.78	0.43
9. I feel like I'm not good at it when I must put much effort into it.	5.33	0.59	3.83	1.10	3.61	1.04	1.61	0.61
10. If the subject is to do so. That's not successful. I chose not to act in the first place.	5.11	0.83	3.89	1.13	3.33	1.03	1.72	0.67

Table 3: The average score of growth mindset using the Jitsuksa training activities.

List	The average score of the growth mindset X = 1st-4th of measurement, Y= average score
1. I learned new things but could not fundamentally change my intelligence	
2. I can increase my intelligence. Yes, of course.	
3. I can change myself, no matter who I am	
4. I can do something differently, but the gist of that is that I can't change it	

List	The average score of the growth mindset X = 1st-4th of measurement, Y= average score
5. I can always change the essential elements of myself	
6. Good people do not need to put much effort into it	
7. I avoid having to face new things because I feel pressured	
8. When facing something challenging, I try not to be discouraged.	
9. When I must put much effort into it, I feel like I'm not good at it.	
10. If the subject is to do so. That's not successful. I chose not to act in the first place.	

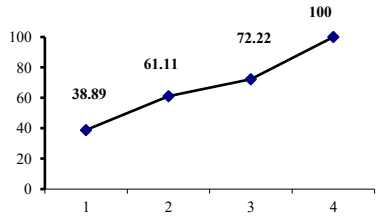
From Table 2-3, the analysis of the growth mindset of grade 9 students after using the Jitsuksa training activities concluded that the learner had a growth mindset from the first to the fourth. The mindset measurement was that the learner was a self-assessor, with some questions having an increased average. Still, some of them had a lower standard, which resulted from questions that included both positive questions 2, 3, 5, and 8 and negative questions 1, 4, 6, 7, and 8, where changes in the mindset grew as a case-by-question basis, with the score of the difference in the mindset growing from the first measurement to the fourth, with a change score of 55.55,

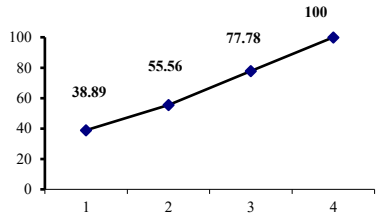
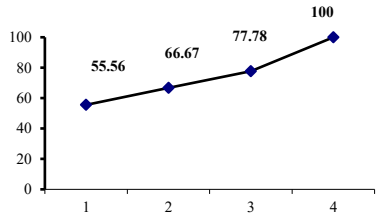
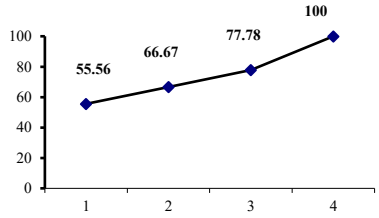
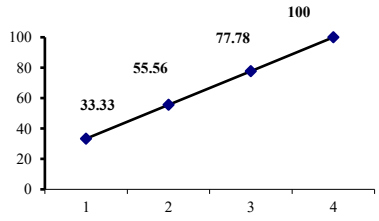
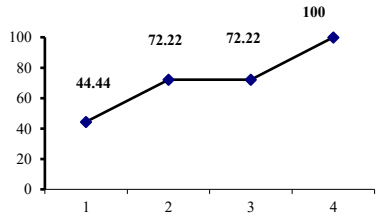
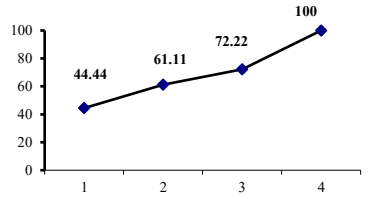
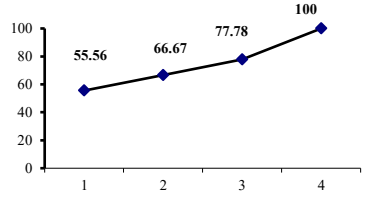
38.89, 49.07, 47.23, 51.85, 56.48, 52.77, 46.30, 62.04, and 56.49, respectively.

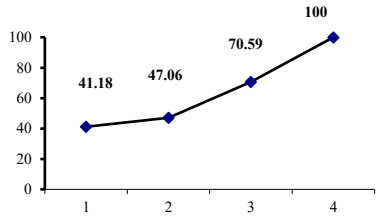
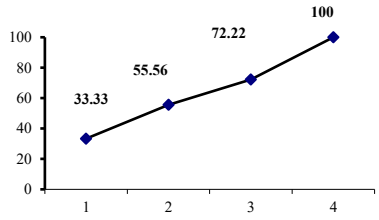
Table 4: The results of the growth mindset study using the growth mindset behavior change assessment model.

List	Week 1-4	Week 5-8	Week 9-12	Week 13-16
	Mean	Mean	Mean	Mean
1. Be more courageous to answer questions or questions in class, such as raising your hand to reply or ask questions. Ask teachers after school hours.	0.39	0.61	0.72	1.00
2. Self-comment in class without the teacher's name being identified.	0.39	0.56	0.78	1.00
3. When answering wrongly, dare to answer again or return to find a new answer and ask for another answer.	0.56	0.67	0.78	1.00
4. When the teacher asks about the development of the student. Students are answering questions that show a more positive attitude towards their abilities and intelligence; for example, students answer that "not yet" can't be done now, but next time they'll try more, or this time "not yet" can't. Nevertheless, next time will make it better.	0.56	0.67	0.78	1.00
5. Focus on training to develop intelligence and abilities on their own, such as when the teacher gives the problem to act on his own first or the student has a problem other than the one provided by the teacher in the class.	0.33	0.56	0.78	1.00
6. Dare to face the problem's difficulty by asking questions at a more complex level.	0.44	0.72	0.72	1.00
7. Be happy about solving complex problems or challenges by taking immediate action when the teacher gives the issue a level up or acting beforehand.	0.44	0.61	0.72	1.00
8. There is a cheerfulness that performs various activities in the subject or looks, and verbs do not express happiness and fun but constantly work.	0.56	0.67	0.78	1.00
9. Not discouraged by obstacles, ready to hit the problem. When your encounter a difficult task, you strive to complete it yourself. Keep working even when the first run goes wrong.	0.41	0.47	0.71	1.00
10. Show the readiness to learn new things, such as preparing school supplies as the teacher informs. Perform tasks or activities with agility and speed. Pay attention to the work you do.	0.33	0.56	0.72	1.00

Table 5: The average score of the growth mindset study using the growth mindset behavior assessment model.

List	The average score of the growth mindset X = 1st-4th of measurement, Y= average score
1. Be more courageous to answer questions or questions in class, such as raising your hand to reply or ask questions. Ask teachers after school hours.	

List	The average score of the growth mindset X = 1st-4th of measurement, Y= average score
2. Self-comment in class without the teacher's name being identified.	
3. When answering wrongly, dare to answer again or go back to find a new answer and ask for another solution.	
4. When the teacher asks about the development of the student. Students are answering questions that show a more positive attitude towards their abilities and intelligence; for example, they answer that "not yet" can't be done now, but next time they'll try more, or this time "not yet" can't. However, next time will make it better.	
5. Focus on training to develop intelligence and abilities on their own, such as when the teacher gives the problem to act on his own first or the student has a problem other than the one provided by the teacher in the class.	
6. Dare to face the problem's difficulty by asking questions at a more complex level.	
7. Be happy about solving complex problems or challenging yourself by taking immediate action when the teacher gives the issue a level-up or taking action beforehand.	
8. There is a cheerfulness that performs various activities in the subject or looks and verbs do not express happiness and fun but constantly work.	

List	The average score of the growth mindset X = 1st-4th of measurement, Y= average score
9. Not discouraged by obstacles, ready to hit the problem. When you encounter a difficult task, you strive to complete it yourself. Keep working even when the first run goes wrong.	
10. Show the readiness to learn new things, such as preparing school supplies as the teacher informs. Perform tasks or activities with agility and speed. Pay attention to the work you do.	

From Tables 4 and 5, the analysis results of the growth mindset of grade 9 students after using the Jitsuksa training activity concluded that the students' growth mindset has changed from using the Jitsuksa training activity. From the first measurement until the fourth time, the growth mindset change behavior was evaluated by teachers, which measured the growth mindset, with scores of changes from the first to the fourth measurement with hundreds of change scores each 61.11, 61.11, 44.44, 44.44, 66.67, 55.56, 55.56, 44.44, 58.82, and 66.67, respectively.

Discussion

The findings on developing Jitsuksa training activities to promote a growth mindset in grade 9 students are used for objective discussion.

The process of Jitsuksa developed from contemplative education consists of 3 paradigms: 1) The positive force field is the environment within the school, meaning that the personnel within the school must perform Jitsuksa activities together throughout the school. The school prescribes a period in the morning to create a positive force field for the learner 2) the use of positive psychology to create positive feelings is to reduce the judgment. Reduce the penance but change it to add more words of gratitude and appreciation, in which the use of positive psychology is intertwined in every stage of learning management. 3) Training activities are tailored to each class according to the learner's age, as the training activities' design can be done according to the school context without having to do the same for all schools (Chaibang, 2015).

When the researcher was responsible for managing the 9-grade learning, we designed the training activities of the Jitsuksa process, thus providing a total of 80 activity plans for a total of 4 months, each of which had the same steps: 1) preparing, which preparing for a state of mind; for example, brain management activities using brain gym will result in the learner concentrating and stay focused on what they are doing and make learners ready to learn the next step (Watson & Kelso, 2014). 2) The activity stage is where learners practice using ideas, take action and find solutions to solve the problems from the instructor-designed situation. The chosen activities, such as home-building and failure activities, etc., are characterized by allowing learners to use problem-solving ideas in daily life-linked situations. Then take action and make rational decisions to support it. If learners practice these activities frequently, they will believe they can improve through learning and have the self-confidence to overcome difficult times. 3) The end stage is the stage that creates equality and nurtures love and compassion, which creates positive feelings in life (Ryan & Deci, 2017). The activities are chosen, giving activities such as giving love by touch and wailing. The same applies if learners have raised their hands to pray for each other, show love by touching and hugging, showing respect for others will result in the learner being a loving, compassionate, happy person. Respect for others gives them more self-esteem and self-confidence (Chaibang, 2015).

When the training activities were used in teaching and learning, the growth mindset of grade 9 was seen in terms of their thoughts, attitudes, beliefs, and abilities. What makes it possible to know that change is the measurement and evaluation of the growth mindset of the learner periodically until the end of the course, which is measured and evaluated four times. First, the learner's behavior and thoughts also show that the learner is not

interested in learning. Refrain from cooperating while teaching, prefer to work efficiently on themselves, have beliefs, have a bad attitude towards learning management, and believe that intelligence cannot be changed by practice and learners still believe that ability is an innate blessing (Dweck, 2017).

Second, learners begin to change their behaviors differently. Some learners pay attention to learning management by responding when asked, raising their hands, expressing their opinions without being forced, and being ready to learn new things. However, such behaviors still occur only to a small minority, even if it is a positive change. For the third assessment, learners experienced a more noticeable difference in behavior: enthusiasm for learning, being ready to learn and responding in learning management. The atmosphere in the classroom has changed markedly. Learners are more responsible and confident that they can accomplish complex tasks by observing their behaviors from participating in school activities and classroom learning management that rely on assertiveness—daring to think and make decisions. The fourth assessment found that learners' behavior changed markedly. Learner's value themselves by believing they can develop and improve through practice (Dweck, 2017), be ready to study, cooperate with teachers without over the counter, and give priority to education.

A Jitsuksa training activity makes learners feel calm, relaxed, and aware before class. Therefore, it affects the deep listening of the learners, causes reflection, and affects the ability to connect learning with things more easily. According to research, reflection helps individuals evaluate, review, and critique work participation more efficiently (Gollwitzer & Keller, 2016).

Furthermore, if the learner becomes proficient in self-awareness, resulting in awareness of their own emotions. At the same time, self-esteem is given when students learn to respect each other. A growth mindset was favorably connected with personal self-esteem, happy feelings at school, academic accomplishment, etc. (King, 2012).

In addition, meditation-related activities have increased learners' self-directedness to accomplish their assigned tasks. According to Voskamp et al. (2022), students with a growth mindset are better at self-directed learning, because they do not give up and are quicker to go and attempt something. All results promote a growth mindset; if the learner has a growth mindset, it will result in the learner's love of learning. They like to learn new, challenging things and appreciate the education. If able to encourage students to have a growth mindset since they are young, will have a positive effect on life attitudes.

The measurement and evaluation will not only allow the teacher to evaluate but also allow learners to self-assess themselves to better visualize the change in the growth mindset, with learners having scored from the first measurement to the fourth measurement in the mean value of 55.55, 38.89, 49.07, 47.23, 51.85, 56.48, 52.77, 46.30, 62.04, and 56.49, respectively. Questions and assessments of change in mindset growth scored 61.11, 61.11, 44.44, 44.44, 66.67, 55.56, 55.56, 44.44, 58.82, and 66.67, respectively. Questions, thoughts, beliefs, and attitudes that are bad for themselves and others begin to be refined by the process of the Jitsuksa, allowing the learner to modify the thoughts or behaviors that are expressed, thereby affecting the motivation and achievement of the learner (Dweck & Yeager, 2021).

Conclusion

The development of the training activities of the Jitsuksa process to promote the growth mindset of the grade 9 students can be seen as successful in the design of the training activities, resulting in the learner having an increased growth mindset and the promotion of the mindset. Measuring the growth mindset, both the learner and the teacher has resulted in a change in the mindset, growing in the same direction: Grade 9 students have a growth mindset that is enhanced by the use of the training activities of the Jitsuksa process, which is following the objectives set.

Suggestion

Jitsuksa's training activities should be applied to various forms of learning management to develop a growth mindset and skills in the 21 century, among other areas such as teamwork, communication, critical thinking skills, etc.

Limitation

The management of learning using the Jitsuksa process, if all three paradigms are not done simultaneously, such as lack of positive force field or lack of positive psychology, will result in the ineffectiveness of the process. The lack of positive energy fields will affect the learner's environment, such as the unfavorable atmosphere for learning, and noise causes the learner to lose concentration in learning. The lack of positive psychology affects the learner's thoughts, negative feelings, and emotions making the learner unhappy in learning, not participating in learning, and not having self-confidence. That is the process of Jitsuksa must be done simultaneously if the absence of one of them will impair the effectiveness or render the Jitsuksa process inefficient.

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