

GROWTH MINDSET TEACHING MODEL IN PRIMARY YEARS PROGRAMME (PYP) CONTEXT FOR SUPPORTING SELF-DEVELOPMENT IN LEARNING LANGUAGE

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Abstract

Teaching growth mindset is considered as a significant motivational factor that positively affects language learners. Students who possess a growth mindset will be more minded to have mastery- oriented objectives which inspire them to persevere through adversity. As a result, language teachers who foster a growth attitude in the classroom can support students' language progress as well as academic success. The creation of a growth mindset teaching methodology to promote self-development in Thai language acquisition. The study attempts to address the research objectives as follows: 1) identify the characteristics of a growth mindset; and 2) develop a growth mindset teaching model for the PYP setting to encourage self-development in learning Thai. The initial stage of the investigation included content analysis by the researcher. The findings demonstrated the five main circumstances in which learners' mindsets significantly influence their ability to build a growth mindset. These findings were also used to design the pre-test, post-test, and satisfaction questionnaires for the research. The findings showed that students applied the five key areas where mindset makes a big difference were ranked highest to lowest mean scores such as making an effort, looking to others' success as putting in effort, having success of others as a role model, facing the challenge, overcoming an obstacle, and receiving criticism in improving and learning Thai language. According to the majority of students who responded to questionnaires, they now have more self-confidence to tackle problems like studying Thai and others. The results showed that using a growth mindset teaching approach for teaching Thai language can successfully leverage self-development for Thai language learners.

Keywords: Growth mindset, Teaching Thai Language, Primary Years Programme (PYP).

INTRODUCTION

Language is central to inquiry and supports students' ability to think critically and innovatively. Students use language to probe and collaborate, to access and to process knowledge and to promote conceptual understandings (IBO, 2018). Plus, language has a motivating role in maintaining and expressing identity, impacting on self-efficacy and students' belief in their capacity to succeed (IBO, 2018). Teaching Thai Language and Thai Studies Programme for Thai national students at an international school in Thailand has been observing Thailand's Office of the Private Education Commission (OPEC), Ministry of Education regulations. This integrates the language development of the host country nationals. Thus, all students who are owning a Thai passport are expected by law to participate in this programme throughout their school years including Non-Thai students may collaborate by certifying through a placement test. The Thai programme in PYP provides learners the opportunity to develop their language learning in the domains of, speaking listening, writing, reading, viewing and presenting as well as offering precious links to MYP and PYP framework across the curriculum (IBO,2018).

Learning Thai language for Thai students in an international school in Thailand has been literally challenging for Thai language learners who have various backgrounds in using language (Kohren,2020). Although Thai language learners who are born and raised in Thailand, they can not use Thai language as their mother tongue fluently in speaking, writing, reading and listening. According to Tankarawakhun (2010), Thai parents increasingly send their children to an international school and they neglect to use Thai language at home. As a result, Thai students are not using Thai language frequently. However, there are many factors in learning Thai language in international school that cause the Thai learners to struggle in learning Thai language in an international school in Thailand. Therefore, successful language learning relies crucially on the activity and initiates the learner meaningfully learning language (Van Lier,2008; Liu,2003; Hull, G. & Schultz, K (Eds),2002). Thus, it is important that language learners should have a belief that their behaviors can make a difference to their learning in those challenging settings. Recent studies have demonstrated that learners who have a development mentality as opposed to a fixed attitude are more likely to be successful students and obtain positive academic outcomes. (Dweck, 2006). A growth mindset includes the conviction that everyone can learn successfully if they put in the necessary work and don't rely just on natural aptitude. for instance, intellect. The ideas and attitudes in

connection to learning and intellectual tasks, including language learning, are also helpful in supporting academic achievement. Hence, teaching a growth mindset in Thai language can increase students' belief and confidence that they can learn Thai language successfully by putting effort, facing challenges, and receiving criticism, inspiring by the success of others and deliberating practices are the keys that bring students to learn any language prosperously (Brock & Hundley, 2017). In order to encourage self-development while learning Thai, this study sought to identify growth mindset characteristics and build a growth mindset teaching model for the PYP.

LITERATURE REVIEW

The growth mindset concept was created by Carol Dweck at Stanford University. This is the new psychology of success and it is able to apply to the classroom. The New Psychology of success has been studied for 30 years of research into how people succeed. Dweck identified two types of mindset, for example A fixed mindset argues that each person is born with a certain level of intelligence and ability, whereas a growth mindset holds that each person has an unlimited capacity for learning and development. Moreover, the idea of a growth mindset is able to support self- belief in all learning abilities that are possible with practice and effort. Besides, the growth mindset shares the commonality to self-efficacy which shows the effect sizes of learning at 0.9 in visible learning research (Hattie, 2012) that growth mindset teaching can impact students' learning. Therefore, teaching a growth mindset will assist the intrinsic and lifelong learner' qualities for example, intention, self-efficacy, forethought, self- regulation and learning reflections and supportive social context (Bandura, 1981) which can cultivate the agency of learners. Moreover, there are five key areas such as challenge, effort, criticism, obstacles, and success of others that can lead to either growth mindset or fixed mindset.

Figure 1: Two mindset (Dweck ,2006)

Five key situations in which mindset makes a big difference by Carlo Dweck		
Situation	Fixed mindset	Growth mindset
1.Facing a challenge	Challenges are avoided to maintain the appearance of intelligence.	Challenges are embraced stemming from a desire to learn.
2.Overcoming an obstacle	Giving up in the face of obstacles and setbacks is a common response.	showing perseverance in the face of obstacles and setbacks is a common response.
3.Having the try really hard to learn how to do something/ Effort	Having to try or put in effort is viewed as a negative; if you have to try, you're not very smart or talented.	Doing hard work and putting in effort paves the path to achievement and success.
4.Receiving criticism	Negative feedback, regardless of how constructive, is ignore.	Criticism provides important feedback that can aid in learning.
5.Success of others	Other people's success is viewed as a threat and evokes or vulnerability.	Other people's success can be a source of inspiration and education.

International Baccalaureate (IB) in Primary Year Programme (PYP)

Transdisciplinary in the PYP framework has key components such as knowledge, conceptual comprehension, disposition and action. These key components are developed through six themes and underpinned by six subjects (IBO,2018). PYP Transdisciplinary themes are arranged on the human commonalities that learners are in the world and with ethnic or cultural groups can examine. These six themes are Who we are, Where we are in place and time, How we express ourselves, How the world works, How we organize ourselves and share the planet.

PYP context in IB curriculum is combined with the five essential components such as knowledge, concepts, skills, attitudes, action. This is the center that supports transdisciplinary learning in the programme.(IBO,2021) Teaching Thai language in IB programme has also been integrated in the five essential components and supported by the subject scope and sequence to support students' authentic learning journey conversation in the inquiry- based classroom. PYP Transdisciplinary approach bridge learning and teaching with the programme of inquiry, using concepts joining a wide-ranging knowledge with conceptual understanding, using approaches to learning and approaches to teaching in order to investigate the knowledge as well as providing opportunities to reflect and take action to magnify students' understanding (IBO,2018).

The idea of a growth mindset is well supported to promote learning agency in IB classrooms where focused on using a growth mindset for

example, facing challenges, giving the freedom to independently overcome failure through trial and error or experiment and encouraging to be risk-takers (IBO,2018). Students who receive an IB education are equipped for a lifetime of learning, both independently and in collaboration with others. It equips a group of learners to address global issues via investigation, action, and reflection.

Approaches To Learning (ATL skills)

In the IB curriculum, the ATL skills are thoughtfully planned, hence; students have the opportunity to develop in all five skill areas. There are five skills in ATL for example communication, social, self-management, research, and thinking. Teaching a growth mindset is well united with self-management skills that this skill should be taught to students. For instance, regulating states of mind (using techniques to control states of mind such as mindfulness, perseverance, emotional management, self-motivation, and resilience) and organizing (successfully managing time and tasks) (IBO,2018)

International Baccalaureate (IB) learner profile

All IB programs are designed to create globally minded individuals who are inquisitive, informed thinkers, communicators, principled, open-minded, caring, risk-takers, and balanced. Therefore, encouraging students to adopt a growth mindset can help them achieve their IB learner profiles. (IBO,2018)

RESEARCH METHODOLOGY

Research Design

This study applies quantitative methods according to the aims of this study as 1) To identify growth mindset characteristics in Thai PYP and, 2) To develop a growth mindset teaching model in PYP context for supporting self-development in learning Thai Language.

Research Objective One: To identify characteristics of a growth mindset in PYP.

A content analysis was used to explore research objective one. This was done by gathering data from textbooks, journals, research, and articles from 2015 to 2019. In addition, the researcher studied the principles and elements of growth mindset and the implementation in the classroom.

Next, a validation was obtained from 3 experts. After validation, a research instrument was developed containing the five keys of growing growth mindset which were extracted from the content analysis. The five keys of growth mindset characteristics were carefully deliberated to form the statement for the pre-test and posttest. Moreover, the satisfaction questionnaires for supporting self-development in learning

Thai Language were created to ask students of the effectiveness of the teaching model. A 5-point Linkert scale was applied to measure the respondents' degree of effort to each statement derived from the content analysis. Validity, to ensure the quality of instrument, the experts were invited to validate the growth mindset test. The researcher sent Item Objective Congruence (IOC) form to the experts to evaluate the content validity. Comments from the experts were then taken into consideration and some changes were made.

Plus, the reliability process was involved by a group of at least 40 students who were not included in the real sample. The pilot testing was conducted in order to ensure the test reliability. Besides, the Cronbach's Coefficient was used to determine the reliability of the growth mindset test. As a rule of thumb, it is required to have a reliability of 0.70 or higher before they are used as an instrument.

Data for the first research objective was obtained by reading abundant literature, books, research, journal and paper concerning growth mindset in learning language. The five keys in the growth mindset were identified. For example, challenges, obstacles, effort, criticism, and success of others.

1.Pre- test on growth mindset characteristics. The study uses the results from the content analysis-based growth mindset notion to conduct pre-test to explore the current students' characteristics on growth mindset. The pretest statements 1-12 are asked about the five key situations in which mindset makes a big difference include challenges, obstacles, effort, criticism, and success of others. Students did the pre-test with the teacher's explanation one by one statement. All 12 pre-test statements were taken in 40 minutes. The evaluation using rubric scale. The first draft of the pretest was evaluated by 3 experts.

2.Post-test on growth mindset characteristics. The study uses the results from the content analysis-based growth mindset notion to conduct post-test in order to explore students' characteristics on growth mindset after they have learned about growth mindset in self-development in learning Thai language. The post-test statements 1-12 are asked about the five key situations in which mindset makes a big difference such as challenges, obstacles, effort, criticism, and success of others. The post-test was done after learning growth in self-development in learning Thai language and students did the post-test statement in the reflection time.

Research Objective Two: To develop a growth mindset teaching model in PYP context for supporting self-development in learning Thai Language.

The researcher developed a growth mindset teaching model for self-development in learning Thai Language according to the results from content analysis-based growth mindset notion combined with teaching and learning experience activities. Moreover, the researcher applied inquiry-based teaching in PYP context in a growth mindset teaching

model and included all PYP teaching elements in the teaching model. The teaching model was created by focusing the research findings. The model was developed through the research objective one. The findings from content analysis of research objective one revealed the five keys of growth mindset include challenges, obstacles, effort, criticism, and success of others. Later, the teaching model was developed by using the five keys of growth mindset and inquiry-based teaching in the PYP context. The proposed model was validated by the experts with immense experience in the PYP programme. To validate the model, the researcher proposed the teaching model to the experts in the focus group conducted by 3 experts (Head of Thai department) in order to consider the possibility of using the model in teaching growth mindset in self-development in learning Thai language in PYP context. The model has been changed by their comments and suggestions.

The results from the objective one was collected for developing a growth mindset teaching model. The researcher developed the teaching model for utilizing in supporting self-development in learning Thai Language. The focused group was invited to validate the model. The proposed teaching model documents were sent to the 3 experts who have experience in the PYP programme. Development of growth mindset teaching model in PYP context for supporting self-development in learning Thai Language. Stage is explained in terms of learning experience activities in PYP context to be conducted to achieve the goal. There are five stages of the teaching model to be operated. The stages of teaching as following:

Stage 1- Know (What do I think I know?)

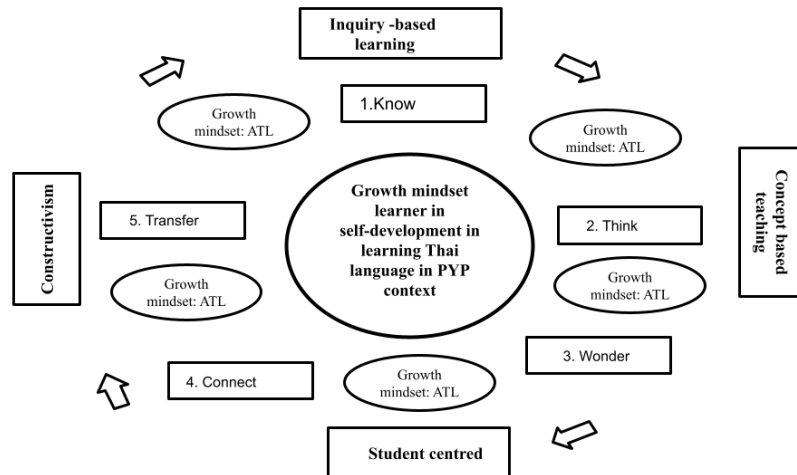
Stage 2 - Think (What is new to know?)

Stage 3- Wonder (How Can I use my knowledge)

Stage 4- Connect (How has my thinking changed?)

Stage 5- Transfer (What can I do with my learning?)

Figure 2: a Teaching model for develop growth mindset teaching model in PYP context for supporting self-development in learning Thai Language



Moreover, the satisfaction questionnaires for supporting self-development in learning Thai Language were created to ask students of the effectiveness of the teaching model. Rubric as descriptions of performance levels were applied to measure the respondents' degree of effort to each statement derived from the content analysis.

Research instrument

A research instrument was a growth mindset test which was designed utilizing The five keys (Dweck, 2015) were identified. For instance, challenges, obstacles, effort, criticism, and success of others. These are the fundamental pillars for the growth mindset test and growth mindset teaching model. This growth mindset test consisted of 12 statements which were asked from students and the test took 40 minutes. The three experts were invited to validate the items suitability and reliability. Comments were considered and the changes were executed before the final outcomes of the items were used in growth mindset pre-test and post-test. Moreover, the satisfaction questionnaire on growth mindset was asked from students on the effectiveness of teaching models. For example, the learning activities meet students' needs, many choices, and a variety of learning engagements and those were meaningful, and the teacher was motivating and being a good mentor.

Population

The research focused on a growth mindset teaching model in the PYP context for supporting self-development in learning Thai Language for international schools with Thai PYP programmes in Bangkok. The population consisted of the 3 schools that offered the three International Baccalaureate programmes, and having received

authorization, Thai PYP programme and members of the International School Association of Thailand (ISAT). The researcher had random sampling and got permission from ABC school which has IB curriculum and Thai study teaching. The scope of this study was Thai Primary Years Programme (PYP), students from G1 - G5 in Thai Class.

Data Collection & Analysis

The study used a quantitative method to gather data: pre-test on growth mindset, post-test on growth mindset and satisfaction questionnaire.

The primary purpose of the teaching model is to support self-development in learning Thai Language. The research was conducted between August to November 2019, In total 18 weeks, 20 hrs per week, 40 mins per day. The 60 students from G1-G5 took a growth mindset test (pre-test and post-test) and the satisfaction questionnaire on growth mindset was distributed. The data analysis of each research objective was quantitative and qualitative methodology. Descriptive statistics including percentage, mean, and standard deviation were employed in the data analysis for this study.

RESEARCH RESULTS

The findings of research revealed the five key situations in which mindset makes a big difference, such as challenges, obstacles, effort, criticism, and the success of others are used and applied to inquiry teaching methods in PYP context which had shown positively to improve student's mindset in self-development in learning Thai language. This research findings are presented according to the two research objectives as follows:

Research Objective One: To identify characteristics of a growth mindset in Thai PYP programme.

A content analysis was carried out. The research found the five key situations in which mindset makes a big difference consist of challenges, obstacles, effort, criticism, and the success of others. These five keys of growth mindset were used as the instrument. This instrument consists of pre-test and post-test on growth mindset behavior. Plus, students applied five key areas in which mindset makes a big difference: ranked highest to lowest mean score such as putting in effort, admiring success of others as a role model, facing the challenge, overcoming an obstacle, and receiving criticism in improving. Moreover, the majority of satisfaction on teaching growth surveyed (88%) showed that students felt more self-confidence to enable them to take on learning Thai language and other challenges.

Research Objective Two: To develop a growth mindset teaching model in PYP context for supporting self-development in learning Thai Language.

The essence of the teaching model is to support self-development in learning Thai Language in students who learn Thai in PYP context and to develop them to be self-regulated learners, taking ownership in learning, having voice and choices and lifelong learners. Stage is explained in terms of learning experience activities in PYP context to be conducted to achieve the goal. There are five stages of teaching model to be operated as below:

Stage 1- Know (What do I think I know ?) Brain muscle VDO clips are presented in the classroom. After watching VDOs, See Think Wonder, thinking routines was used for discussion. Later, students' thoughts upon the topic were shared. (2 week)

Stage 2 - Think (What is new to know ?) Teacher told story about the world successful people such as JK Rolling, Bill Gates and Jack-Ma to class and then Connect, Extend Challenge was used for finally and discussing. (1 week)

Stage 3- Wonder (How Can I use my knowledge) Class started to conduct research on the world's successful people. This activity was taking for 1 week.

Stage 4- Combine (How has my thinking changed?) Following up research projects and reports on progress. (1 week)

Stage 5- Transfer (What can I do with my learning ?) Presenting project research on world success people and later students making gallery walks regarding this project. (1week)

DISCUSSION AND CONCLUSION

After implementing a growth mindset teaching model in Thai classrooms, students have changed their belief that all learning is possible with practice, perseverance, and effort can bring them to be successful in learning. Plus, most of the students had shown the growth mindset qualities in Thai classrooms such as demonstrating a desire to learn and grow, facing obstacles in learning, putting effort, and working hard, being open-minded to the feedback and appreciating the success of their peers. Moreover, with a great result of implementing growth mindset ideas successfully in PYP Thai classroom is due to the Thai classroom following the pedagogy of IB teaching and learners philosophy. For instance, using an inquiry method which allows learners to explore and investigate the topic with their interest. Therefore, the students enjoy learning without fear even though they face the mistake. Besides, Thai class strongly believes in constructivism philosophy that can nurture students by openly experimenting their prior learning and their new learning through a learning process which allows students to meet different challenges and face many problems.

Moreover, giving students access to a learning center in their classroom gives them a wonderful opportunity to experiment with their learning and choose their favorite activities. (IBO, 2018 and OECD,2009). Hence, these ideas well supported students' growth mindset effectively (edweek.or/media ,2016). Furthermore, teachers should be thinking about learning engagements that beneficially develop knowledge and skills in a growth mindset as well. For example, students writing reflections have mentioned applying a growth mindset in learning and it encouraged them to not give up in learning (Park,2003; Davis, 2016; Cathro, O'Kane, & Gilbertson,D, 2017).

Besides, surrounded with constructivism, the student center and inquiry base are supportive in implementing the growth mindset in teaching Thai in PYP context successfully (Boaler & Anderson, 2018 and William & Lemons-Smith, 2009). Additionally, studying and researching about successful people's projects can inspire students of those people. This learning activity can reaffirm that everyone can be successful if one practices and puts an effort in learning. Students were actively participating in researching Growth mindset people that reveal student's agency and students' self- regulation in their meaningful learning.

Furthermore, Dweck (2018) said ones could not have either growth mindset or fixed mindset. We have both these mindsets. Therefore, teachers should continually encourage students to develop this skill of growth mindset through learning engagement and atmosphere and allow students to feel comfortable to learn and make mistakes in their learning (Dewitt,2015). Plus, teachers who have been doing differentiated instruction in their classroom is an effective teaching tool to develop students' growth mindset. For example, teachers know students' learning profiles, readiness and interest that are useful information to understand the students where they are and where they need to go in their learning. (Tomlinson, 2010 and Loup,2006). Additionally, teachers should regularly continue formative assessment to see students' learning progression. This formative assessment is a significant factor that can align well with growth mindset ideas. Thus, combining formative assessment in teaching growth mindset ideas students will gradually enhance their learning achievement. As a result, there is a lot of potential for improved practice to result in improved learning outcomes thanks to these two concepts, formative assessment and growth mindset. (Bibbens, 2018)

In conclusion, teaching inquiry based and integrating ideas of growth mindset are a good combination and being an effective teaching model to create lifelong learners and student agency because students are gradually developing inquisitive mindset, risk-taking, and desire to learn without fear.

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