The Student’s Self-Designed Learning Activities Influencing Their Learning Achievement: A Case Study of an English Tutorial Center in Krabi

Onnicha Ariyawong
onnicha.ariyawong@gmail.com

Thanawan Phongsatha, Ph.D.
thanawan@elearning.au.edu
Assumption University of Thailand

Abstract

The implementation of the “self-designed learning activities” method in fifteen secondary school students who were conveniently selected at an English tutorial center in Krabi has been explored. The investigation was carried out by employing the pretest and post-test to determine the level of their knowledge prior to and after implementing self-designed activities. The observation during 36 hours classroom participation had been recorded to see levels of their skills improvement. The questionnaires were used to identify a level of students’ perceptions towards the program whether it is statistically significantly different from the neutral level (3.42). The results revealed that the post-test score was higher than the pretest. The number of students who had generally improved those skills was greater during classroom observation. In addition, the students rated their perceptions towards self-designed learning activities at 4.45, which was statistically significantly higher than the value of 3.42 as hypothesized. It can be concluded that the self-designed learning activities effectively help to enhance students’ learning interests as well as their performance in the subject matter. These findings are also particularly relevant and beneficial to teachers and facilitators as the teaching designers who design the lesson plan in order to increase students’ learning achievement.

Keywords: cognitive style, learning achievement, learning activity, learning need, learning style, lifelong learning, self-awareness, self-designed learning activity, student-centered

Introduction

The processes guiding much of today’s mass education, as well as much of the content served up with it, have not kept up with important new insights about human learning and striving towards the learning goals. These do not reflect insights about how people learn best, or they might not help learners gain deeper insights about how they can achieve more satisfaction in their learning (Maser, 2011). Therefore, most students find many subjects they study to be boring, difficult and generally unnecessary for their desired careers. The traditional classrooms are usually dominated by lecture or direct instruction which comes with the idea that there is a fixed body of knowledge that the student must come to know (Stofflett, 1998) and can sometimes resemble a one-person
show with a captive but largely uninvolved audience (Lord, Travis, Magill, & King, 2002).

On the contrary, a constructivist or student-centered approach encourages the task-based approach towards learning (Brown, 2008). This can encourage students to create their own learning activities by collaboratively working together in small groups to discover and discuss the learning solutions that work for them. This learning approach allows students to move to deeper levels of understanding under their own learning process (Brown, 2008). It perhaps influences their entire life, rather than knowing “just enough” to pass a course.

Self-Designed Learning is based on a belief of a child’s right to self-determined learning. This is a fundamental operating principle of Self-Design (Maser, 2011). Such approach offers a learning experience beyond any traditional classes because it offers learning choices and options that provide learner’s satisfaction outcomes (Cameron, 2012). Hence, “self-designed learning activities” is an option for the students who are looking for a different learning process (SelfDesign Learning Foundation, 2008). Such learning activity serves learners with a self-directed learning approach and reaches them by the rich variety learning activities in their educational process. Self-designed learning activities engage with activities much more dynamic and are emphasized on learner focus (SelfDesign Learning Foundation, 2008). In addition, this learning approach offers a range of educational consulting designs and a variety of educational models to empower students to get their best possible learning options. This learning environment allows the facilitators and students support each other in developing a personalized learning approach as well as self-directed learning techniques to help students actively engage in learning by working from their personal strength and weakness to form their best personal learning activities (Hanover Research, 2012; Brown, 2001) under facilitators’ guidance.

Therefore, this study is aimed to 1) determine the level of students’ knowledge and skills improvement when implementing self-designed activities and; 2) identify whether the level of perceptions the students have towards this learning method display statistically significant difference from the neutral level (3.42).

Review of Literature

Cameron (2012) stated that children do make profound choices from the moment of birth. The human species is highly sensitive, keenly aware, and has a remarkable ontological ability to know how to grow and learn in the first few years of life. Psychologists believe that 90 percent of human learning potential is achieved before school age, and this unfolding of understanding is directed by the interest and enthusiasm inherent in virtually every child. People must remember that, although children may not have the same quantity of life experiences as adults do, they assuredly have a clear awareness of the quality of their lives. Once people make this distinction, it is imperative
to question their prejudice against including children in decisions about their own learning process.

Children’s Right: Freedom of Thought

The society tends to believe that children are incapable of making informed decisions due to their age. Most people disqualify them as participants in their own learning experience. The society believes that until children are educated, they cannot make intelligent choices. This adult logic gives people the excuse to disrespect the stated desires of children in their families and schools. Their decision to marginalize children is caused by their tendency to give weight to quantity over quality. Because children have not had as many experiences as adults (quantity), they assume children are therefore uninformed and unable to make decisions about the conditions of their lives (quality) (Cameron, 2012).

Self-designed learning

Self-Design Learning is based on a belief of a child’s right to self-determined learning. This is a fundamental operating principle of Self-Design (Maser, 2011). Therefore, “Self-Design Learning” offers a learning experience beyond any traditional classes because it offers learning choices and options that provide learner's satisfaction outcomes (Cameron, 2012).

Self-designed learning activities

Due to the fact that the teaching systems used in today’s schools lack flexibility and offer a small opportunity for personalized learning approach that can speak to children who think “outside the box,” self-designed learning activities can be an option for the students who are looking for a different learning process (SelfDesign Learning Foundation, 2008). Such learning activity serves learners with a self-directed learning approach and reaches them by the rich variety learning activities in their educational process. Self-designed learning activities engage with activities and learning process, which are more dynamic and concentrated on learner-focused approach (SelfDesign Learning Foundation, 2008).

In addition, this learning approach offers a range of educational consulting designs and a variety of educational models to empower students to get their best possible learning options. The facilitators and students support each other in developing a personalized learning approach (Hanover Research, 2012) as well as self-directed learning (Brown, 2001) techniques that helps students actively engage in learning by working from their personal strength and weakness to form their best personal learning activities.
Attitude

Attitude is a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor (Eagly & Chaiken, 1993). Psychologists define attitudes as a learned tendency to evaluate people, objects, or events in a certain way. Such evaluations can be positive or negative, as well as they can also be uncertain at times, for instance, people may have mixed feelings about a particular person or issue at time (Kendra, 2017).

According to Kendra (2017) the components of attitudes are sometimes referred to as CAB or the ABC’s of attitude.
- Cognitive Component: refers to thoughts and beliefs about the subject
- Affective Component: refers to how the object, or person makes people feel
- Behavioral Component: refers to how the attitude influences people’s behavior

Attitudes can also be both explicit and implicit. However, the explicit attitudes are the one that people are consciously aware of and which clearly influence behaviors and beliefs (Kendra, 2017). Implicit attitudes, on the other hand, are unconscious, but still have an effect on people’s beliefs and behaviors similarly as the explicit ones.

Attitudes can be formed in several ways including Experience, Social Factors, or Learning. Experience leads directly to form attitudes due to the result of experience. In addition, social norms or social factors can also have a strong influence on attitudes. Social roles directly related to how people are expected to behave in a particular role in society so that the behavior can be considered as appropriate. In terms of learning, attitudes can be learned from classical conditioning, instrumental conditioning, or observing from people (Kendra, 2017).

![Conceptual Framework](image)

**Figure 1:** Conceptual framework of the research
Methodology

Research Design

The study was a quasi-experimental research design, which applied the mixed method approach. The research described the importance of the factor and understanding the phenomenon of self-designed learning activities influencing student’s learning achievement, which comprises of knowledge, skills, and attitude toward the program. Therefore, the descriptive report was aimed to explain the outcomes on student’s knowledge and skill toward the program by using posttest score and classroom observations. Also, the descriptive statistics method was utilized to measure student’s attitude toward the program by using the survey.

Target Population and Sample

The target population was Thai secondary school students in Krabi’s area who would like to attend a self-designed learning activities program for all purposes either for further study or for long-term improvement of their daily English usage.

The sample of the study was conveniently selected from fifteen Thai secondary school students who had been studying at the researcher’s tutorial English Center in Krabi and would like to attend a self-designed learning activities program.

Research Instruments

There were 3 research instruments that were used to assessed the students’ learning achievement when they had studied through their self-designed leaning activities program as follows.

1. *The National English GAT practice exercise* was used to measure students’ English achievement after completing self-designed learning activities program.

2. *The classroom observation report* or teaching log, which comprised of observation date, students’ name, and learning activities (implemented on that day) to record four skills of English—speaking, reading, listening and writing while students participate in class. The log would present students’ learning behaviors and their improvement.

3. *The questionnaire* was employed to gather students’ attitude towards the program. There were three parts in the questionnaire; 1) the demographic information; 2) the 5 level Likert scale statements ranging from 5 = Strongly Agree to 1 = Strongly Disagree which asked students to rate their levels of agreement regarding
their attitude towards the program; and 3) the open-ended questions to ask the respondents about more perspectives.

Self-designed Learning Procedures

The primary procedure of the self-designed learning program was the students’ self-evaluation toward their English performances. The self-evaluation process helps students to be aware of their learning ability and learning styles.

“The self-evaluation process” of this study had been implemented as follows.

1. Implementing pretest to all the students: The researcher used English GAT Test to measure student’s knowledge and skills. From GAT Test, the contents were split into 4 parts: speaking, vocabulary, reading, and structure and writing.

2. After the participants received their own scores for each part, they were then led them to use statistical data to analyze themselves by using the following questions:
   - What are your limitations in each learning part: speaking, vocabulary, reading, structure and writing?
     This question helps students to recognize their learning weaknesses.
   - Why?
     This question tries to lead them to the causes of their problems in each learning part: speaking, vocabulary, reading, structure and writing, as to pave the way for their full learning awareness.
   - How could you learn each learning part well under your learning styles?
     In this section, the researcher added “Listening Skill” which is not tested the in GAT Test, as the other learning part for students to achieve such skill in their classroom. The researcher guided them to think individually to create their own activity plans they think can help them to develop their learning ability and has to match their learning styles and characteristics. If the class was studied by the entire group of students, after getting individual answers, the researcher asked all of them to brainstorm and discuss from all of their lists what learning activities were the best and most suitable for all of them to learn together. This would help them to learn their best by their own learning ways. For example;
     - Structure Part – Some students learn it best when mind mapping method was applied while some might learn better when lessons are applied into real situations.
     - Vocabulary Part - Some students learn it best when they remembered the vocabularies and asked the facilitator to provide them with the vocabulary test words by words, while others might learn better through games such as crossword, etc.
- *Speaking Part* - Some students learn it best when they were allowed to come up with their own topic to speak about (in English) in class while some like to practice it as chitchat and conversations, etc.

- From previous information, students were directed to brainstorm again to create their own learning activities that match their learning goal timeline.

During the entire program in every classroom, the researcher observed all students’ learning behaviors toward their own designed learning activities and recorded the observations into a teaching log form.

When completing the program, the posttest (English GAT Test—the same test paper as the pretest) was provided to all students to check their performance. After that, students continued filling in questionnaire survey (part 1 and 2) and were interviewed individually with the questions in the questionnaire survey (part 3).

Data Collection Procedures

The primary data was collected from the pre-test, utilizing the National English GAT test. The data (scores) from the pretest was used as students’ self-evaluation on their prior English knowledge and skills (before starting the program). The students’ self-evaluation was conducted in order to create their self-designed learning activities under their own learning styles.

During the program, the classroom observation has been recorded to perceive students’ skills development. At the end of each class, after implementing learning activities that students had created into the teaching log form, the researcher reported student’s speaking, reading, listening and reading performances to each student.

After completing the self-designed learning activities program, another set of primary data was collected again in the form of posttest and questionnaire survey. The posttest, which was the same test as the pre-test, had been re-employed to examine the improvement of students while the questionnaire survey was employed to see the students’ attitudes towards the program.

Results

*Descriptive report analysis: Student’s knowledge and skills toward the program*

- Students’ knowledge toward the program
Table 1

*T*-test for mean difference between Pretest and Posttest

Paired Samples Statistics

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>26.86</td>
<td>15</td>
<td>11.10</td>
<td>2.86</td>
</tr>
<tr>
<td>Posttest</td>
<td>34.73</td>
<td>15</td>
<td>11.11</td>
<td>2.87</td>
</tr>
</tbody>
</table>

Paired Samples Correlations

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Correlation</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td>15</td>
<td>.964</td>
<td>.000</td>
</tr>
</tbody>
</table>

Paired Samples Test

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest - Posttest</td>
<td>-7.86</td>
<td>2.99</td>
<td>.77</td>
<td>-9.52 -6.2</td>
<td>-10.16</td>
<td>14</td>
<td>.000</td>
</tr>
</tbody>
</table>

The results indicated that the mean score for pre-test (M = 26.87, SD = 11.10) was statistically significant different than the mean score for post-test (M = 34.73, SD = 11.12), t(14) = -10.16, p = .000. The post-test mean score was greater than the pretest mean score.

- **Student’s skills toward the program (qualitative data from class observation)**
  - **Speaking skill improvement**
    - All of them were able to ask/answer questions in English regarding topic discussion, apply more vocabularies, and answer more basic questions.
    - 20% of them were able to initiate, maintain and respond to the conversation for 20-30 minutes.
    - 80% of them were able to express reasons for opinions
    - 60% of all students could describe what was happening when given the simple action pictures of common storybooks.

- **Reading skill improvement**
  - All students recognized more basic sight words.
  - 87% of them recognized common signs.
  - 67% of them understood basic advertisements and quotes.
  - 27% of them were able to rely on context clues to determine meaning.
3% of them can distinguish between main idea and supporting details and read for comprehension of a basic article (approximately 250-300 words).

**Listening skill improvement**
- All of students were able to identify items according to more prepositions, locations and shapes, distinguish people according to more physical and emotional states and understood the main ideas during facilitator’s discussions, explanations and directions.
- 20% of them could understand main ideas according to basic audio conversations.
- 13% of them can distinguish main ideas from supportive details.

**Writing skill improvement**
- 67% of all students were able to generate simple sentences (i.e., friendly notes, letters) and write multiple sentences around a topic and write short paragraphs.
- 53% of them could use basic grammatical constructions in simple sentences.
- 33% of them were able to complete writing expression according to the topic chosen by students (approximately 150 words).

**Descriptive statistics analysis:** Students’ attitude towards self-design learning activities

- **Quantitative data report:** Students’ attitudes towards self-design learning activities

**Table 2**

<table>
<thead>
<tr>
<th>No.</th>
<th>Statements</th>
<th>Mean</th>
<th>S.D.</th>
<th>Level of Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I enjoy and feel happy during the learning process.</td>
<td>4.47</td>
<td>.640</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>2</td>
<td>I am satisfied with the activities.</td>
<td>4.33</td>
<td>.488</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>3</td>
<td>I get better understandings in the learning content when I am studying under my own designed activities.</td>
<td>4.40</td>
<td>.507</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>4</td>
<td>I find it easy to get myself motivated to study on my self-designed activities.</td>
<td>4.53</td>
<td>.640</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>5</td>
<td>Self-designed activities really help me develop my skills.</td>
<td>4.20</td>
<td>.414</td>
<td>Agree</td>
</tr>
<tr>
<td>6</td>
<td>Self-designed activities really help me apply the concept learned into my real life.</td>
<td>4.27</td>
<td>.458</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>
Respondents rated the attitude towards self-designed learning activities at 4.45, signifying the strongly agree level, according to Yamane (1999).

Table 3

Arbitrary Level

<table>
<thead>
<tr>
<th>Arbitrary Level</th>
<th>Interpretations</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.24 - 5.00</td>
<td>Strongly Agree (SA)</td>
</tr>
<tr>
<td>3.43 - 4.23</td>
<td>Agree (A)</td>
</tr>
<tr>
<td>2.62 - 3.42</td>
<td>Neutral (N)</td>
</tr>
<tr>
<td>1.81 - 2.61</td>
<td>Disagree (D)</td>
</tr>
<tr>
<td>1.00 - 1.80</td>
<td>Strongly Disagree (SD)</td>
</tr>
</tbody>
</table>


- Qualitative data report: Interview
  The structure questions were conducted to collect in-depth perspectives towards the self-learning activities from students. The results were as follows.

  Question 1: What are the factors that you don’t like through the learning under your self-designed activities?
  ✓ Confusion of their own learning styles
  ✓ The limited of time to study the program
  ✓ The difference of their learning styles among others in the group
  ✓ The limitation of learning attention and being attached to the tradition learning method

  Question 2: Overall, what do you feel about learning from your self-designed activities?
  ✓ Enjoy learning
  ✓ Have more freedom of learning and motivation to learn

<table>
<thead>
<tr>
<th></th>
<th>I feel glad that I have an opportunity to create my self-designed learning activities.</th>
<th>4.80</th>
<th>.414</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I think self-designed activities offer me a freedom of learning and serve me with what I really need to learn.</td>
<td>4.67</td>
<td>.488</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td></td>
<td>The self-designed activities make me feel more positive toward the subject.</td>
<td>4.40</td>
<td>.507</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>4.45</td>
<td>0.506</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>
✓ Help them to get more comprehension into the learning contents
✓ Interested to learn as it was the new learning method for them
✓ Aid the students to pay more attention to study
✓ Having more interests on what they do not like to learn.

- Hypothesis Testing

A one-sample t-test was conducted to compare students’ perceptions after the self-designed activities were applied. The results revealed that the sample mean of students’ level of perception on self-designed activities was statistically significant different from 3.42. Therefore, the null hypothesis was rejected.

Discussion

The findings confirmed that the student’s self-designed learning activities influenced student’s learning achievement towards the program. Through the paired samples t-test analysis, it was found that mean score of the posttest (M = 34.73, SD = 11.12) was higher than the mean score of the pretest (M = 26.87, SD = 11.10) which means that the level of students’ knowledge had been improved when implementing self-designed activities. This finding was supported by Birkholz, Clements, & Cox (2004), which showed that self-designed curriculum and student-identified learning needs, had affected students to gain high-quality end-of-life and also high level of congruity with nationally competency standards. Moreover, Hanover Research (2012) mentioned that personalized learning has given the ability to self-direct student’s learning, they will make greater gains in achievement due to increased interest and customization. They can generate their own practice tests or test items using their understanding of the learning targets and working with each other to prepare and deepen their understanding.

In addition, the classroom observation report showed that the students had generally improved their English skills. The obvious results were the speaking and listening skills that had shown satisfactory progress. For instances, they have abilities to ask/answer few questions regarding topic discussions, apply more vocabulary, describe items according to basic prepositions, locations and shapes, answer more basic questions and describe people according to more physical and emotional states. In addition, for the listening skill, students can identify items according to more prepositions, locations and shapes, distinguish people according to more physical and emotional states and understood the main idea during the facilitator’s discussions, explanations and directions. Although reading and writing skills had also demonstrated the progress toward the program, the improvement showed slower results than those of the speaking and listening skills. However, this finding was supported by Good (1998) that empowered the students to design curriculum in a developmental education course to promote and sharpen their essential literacy skills. Throughout the empowerment process, the result indicated that the students’ self-esteem increased in using the skills and through the academic success at the end of the academic quarter.
According to the one-sample T-test analysis, the results revealed that each sample mean of students’ level of perception on self-designed activities as well as the average of mean of all sample (mean of average = 4.45, SD = 0.51) was statistically significantly different from the neutral level (3.42). Additionally, from the interview data, there were some factors that students did not like through the learning under their own self-designed activities. The main unfavorable factors were the confusion of their own learning styles, the limitation of time to study the program, the difference of their learning styles among others in the group, the limitation of learning attention and being attached to the traditional learning method accordingly. However, there were positive perceptions toward the program. Most of them enjoyed learning; some of them had more freedom of learning and motivation to learn. Self-designed learning activities helped them get more comprehension into the learning contents. They were interested to learn as it was the new learning method for them. In addition, the program aids the students to pay more attention as well as having more interests on what they do not like to learn. Therefore, the student’s self-designed learning activities influenced student’s attitudes toward the program. As it was proven by Brown (2002) who had concluded about self-designed curriculum that students got positive attitude toward learning and had ability to engage in serious inquiry about important and timely topics in a method that resulted in powerful learning.

Conclusion

The research model may provide useful learning method for teachers or schools to reach the students’ learning achievement by having appropriate design curriculum as follows.

To improve students’ knowledge toward the self-designed learning activities

As the results revealed and confirmed that self-designed learning activities influenced students’ knowledge since the mean score of the post-test was greater than the pre-test, this learning process allowed the students to look into their learning problems and limitations individually. It also offered them to design their own learning activities under those conditions (problems and limitations) along with their learning styles. Therefore, it helped students to enhance their learning comprehension on what they had been learning.

This learning approach can be attached to the main curriculum in the traditional classroom setting even though there is time constraint. The best approach to implement is at the beginning (first class) of each semester, which would allow teacher to recognize students learning problems, limitations and styles individually.

To improve students’ skills toward the self-designed learning activities

Observation reports reflected that students’ skills were improved while they had been implementing self-designed learning activities. This is because the learning process
allowed the students to have more freedom to study under their own learning styles, and its method supports students to comprehend more on their learning. Also, the students had more learning confidence.

In the classroom, this learning process can be adapted and integrated into some classes especially when students need to focus on skill practice (in any subjects). Since they were getting more learning confidence and gaining more knowledge, they lessened their fears to express or reflect their capabilities while they were practicing those skills to the teacher or among the classmates.

To improve students’ attitude toward the self-designed learning activities

The outcomes demonstrated that when comparing the perceptions of students towards self-designed learning activities, there was statistically significant difference from the neutral level (3.42). Therefore, the student’s self-designed learning activities influenced student’s attitude toward the program. The research results showed that most students enjoyed learning; some of them had more freedom and are eager to learn. In addition, the program aids the students to be more interested in what they do not like to study (subject/learning contents).

These reflections were expressed as the significant point of views in the research purpose toward attitude of learning, not only to increase positive attitude, however, to decrease their negative one as well. Hence, the school and the teachers should apply and combine this learning method into the traditional classroom in order to enhance learning attitude, while at the same time reducing students’ bias toward the subject or the learning contents.

Overall, the self-designed learning activities (learning method) would be handed to the schools or educational organizations to be used for the curriculum set up and lesson plans creation since the findings had confirmed the remarkable results as presented. As such, all parties including the government, school administrators, teachers, parents, as well as students themselves should consider allowing self-designed learning activities to be part of the teaching and learning for not only better in academic achievement, but life skill achievement as well. The “one size fits all” approach should be explicitly diminished, but shifted to the full focus to the actual “student-centered approach”. With these combinations, the Thai education reform would be in a better and effective direction. In turns, the next generation of the Thai citizen will be full effectively equipped with both IQ and EQ as many people hope for.
References


