

# The Development of Learning Management Strategies of English Writing Using the Process Approach Combining an Information Processing Theory and Metacognitive Strategies for Upper Secondary School Students

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## บทคัดย่อ

การวิจัยครั้งนี้มีวัตถุประสงค์เพื่อ 1) พัฒนายุทธศาสตร์การจัดการการเรียนรู้การเขียนภาษาอังกฤษแบบเน้นกระบวนการ 2) เปรียบเทียบความสามารถในการเขียนภาษาอังกฤษก่อนและหลังการทดลอง 3) เปรียบเทียบเจตคติต่อวิชาภาษาอังกฤษก่อนและหลังการทดลอง และ 4) ศึกษาความคงทนของการเรียนรู้การเขียนภาษาอังกฤษภายหลังการทดลอง 2 สัปดาห์ 4 สัปดาห์ และ 6 สัปดาห์ กลุ่มตัวอย่าง 3 กลุ่มคือ 1) กลุ่มผู้ให้ข้อมูลโดยการสัมภาษณ์ ได้แก่ ครูภาษาอังกฤษ จำนวน 8 คน นักเรียน 30 คน 2) กลุ่มผู้ให้ข้อมูลในการตอบแบบสอบถาม ได้แก่ นักเรียน 60 คน และครูภาษาอังกฤษ 6 คน และ 3) กลุ่มตัวอย่างเป็นนักเรียนชั้นมัธยมศึกษาปีที่ 6 จำนวน 17 คน ผลการวิจัยพบว่า I) ยุทธศาสตร์การจัดการเรียนรู้ประกอบด้วย การสอน 9 ขั้นตอน ได้แก่ 1) นำเข้าสู่บทเรียน 2) เพียรแจ้งจุดประสงค์ 3) มุ่งตรงตัวอย่าง 4) วางแผนศึกษา 5) หาข้อมูลทางอินเทอร์เน็ต 6) ตรวจเช็ครายละเอียดและแลกเปลี่ยนเรียนรู้ 7) มุ่งสู่การปฏิบัติงานเขียน 8) เพียรแก้ไขข้อผิดพลาด และ 9) ประเมินความสามารถของตนเองและเพื่อน II) นักเรียนกลุ่มตัวอย่างมีคะแนนความสามารถในการเขียนหลังการทดลองสูงกว่าก่อนการทดลองอย่างมีนัยสำคัญทางสถิติที่ระดับ .05 III) นักเรียนกลุ่มตัวอย่างมีคะแนนเจตคติต่อวิชาภาษาอังกฤษหลังการทดลองสูงกว่าก่อนการทดลองอย่างมีนัยสำคัญทางสถิติที่ระดับ .05 IV) นักเรียนกลุ่มตัวอย่างมีคะแนนความคงทนของการเรียนรู้หลังการทดลองผ่านไปแล้ว 2 สัปดาห์ 4 สัปดาห์ และ 6 สัปดาห์ และ V) นักเรียนกลุ่มตัวอย่างมีคะแนนความคงทนของการเรียนรู้การเขียนภายหลังการทดลองผ่านไปแล้ว 2 สัปดาห์ 4 สัปดาห์ และ 6 สัปดาห์ไม่แตกต่างกัน

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## ABSTRACT

The purposes of this study were: 1) to develop learning management strategy of English writing, 2) to compare the ability in English writing before and after using the learning management strategy, 3) to compare the students' attitude towards the English subject before and after using learning management strategy, and 4) to study the endurance of English writing after the experiments for 2, 4, and 6 weeks. The population of the study were divided into 3 groups included: 1) informant group by interviewing with 8 English teachers and 30 Grade 12 students,

2) informant group by questionnaire answers with 60 Grade 12 students and 6 English teachers, and 3) the sample group by using the strategy model with 17 Grade 12 students. Results of the research revealed that 9 steps of teaching for increasing the writing abilities were included: 1) leading in, 2) clarifying the objective, 3) presenting the pattern, 4) writing planning, 5) exploring the Internet, 6) checking and sharing, 7) writing practice, 8) correcting, and 9) doing self and peer assessments. After applying the strategy model, students gained higher scores than the pretest at the .05 of significance, students' attitude towards English subject was significantly higher than the pretest scores. In addition, students' endurance in English writing was found and there were no significantly differences of students' endurance in English writing after the periods of 2, 4 and 6 weeks.

**คำสำคัญ:** ทฤษฎีประมวลสารสนเทศ กลวิธีเมตาคอกนิชัน การเขียนแบบเน้นกระบวนการ

**Key Words:** Information processing theory, Metacognitive strategy, The process approach

## Introduction

English language has become the worldwide language and internationally used for communication and some other purposes by people in most parts of the world. In many non-English spoken countries, English has been adopted either as their second language (ESL) or as a foreign language (EFL) that serves as one of the main subjects in learning and teaching curriculum of almost all levels of education. Consequently, English is playing the distinguished roles in a wide variety of media for communication and better understanding such as in text

printing, broadcasting and advertising which underlying socio-economic contexts. As Klanrit (2005) [1] stated English is the most important language used widely for communication and as the dominant means by non-native English spoken countries. They emphasize the importance of English as a second language (ESL) or a foreign language (EFL) to be the main subjects in teaching and learning curriculum.

The Thai National Education Act of 1999 [2] has been focused on developing Mathematics and language skills of the

students. Education aims at the encouraging students to manage, their acquired abilities to apply their knowledge to protect and solve problems they are facing. Students should be able to learn what they want and in accordance with their interests, their abilities to use innovation and technology in learning should be increased so that they can search for knowledge by themselves throughout of their lives. The Thai Academic Department (2009) [3] mentioned that in order to improve learners through their life long. Learning processes must get along well with students' interests, capabilities and individual difference. Providing training thinking skills and to encourage students to use technology for self-studying through all their lives. In addition, Uengsakul (2002) [4] said that English learning process arrangement is aimed at establishing and encouraging students to have listening, speaking, reading, and writing skills, so that they are able to implement knowledge and skills in everyday life effectively.

In general, language learning skills mainly consists of four essential skills, namely speaking, listening, reading and writing, but the latter is the most difficult skill for Thai students. Writing is a procedure that the author must synthesize his or her thought and knowledge, and style before the expression for the others' understanding. So the author must be able to use vocabulary, the grammar and idioms, and writing styles that is propitious to communicative skills. In addition, Suwannasom (2001) [5] mentioned that the written language can

help us understand the feeling, requirement, problems and the opinion of the fellow men.

The mastery author who has the strategic means, the author must be qualified about metacognition, which means to have abilities in planning, checking, and controlling learning for themselves. (The Thai Academic Department, 1998) [6] Also the important character of metacognition is focused on the students' realization about the thinking process, and assessment by themselves. The students feel free in learning, and could help their instructors find the good way to assess what the students read as well as to consider that the knowledge that they learned is correct.

This quality will help make the students construct their new knowledge from the prior knowledge and then modify the written strategy with the appropriate objective. In addition, Woolfolk (2003) [7] mentioned that the students who have been the mastery in structure and grammar are more likely to succeed if they learn and practice both about writing strategy. Thus training writing strategy will enhance English writing ability for communication and writing strategy development, too. The instructors have to provide training the students to realize about metacognition, by they must know how to plan, and to check the texts they will write about including using structure and grammar correctly. However, there were some researches' results revealed about the problems in English writing of high school students between 2006-2008 academic years. The problems

were 1) the students had not enough knowledge about writing strategy. They didn't know writing process strategy, for example they could hardly synthesize their thought before writing, and no draft before writing, they didn't know writing orders and they didn't know the editing technique of their work; 2) the students had a little knowledge about language structure including the confusion in using grammar, and 3) They practiced less metacognition and didn't have the motivation in learning, and they didn't know standard criteria of checking. (Termsinsuk, 2005 [8]; Charoensuk, 2006 [9]; Nuengjamnong, 2006)[10]

From the study of information processing theory which related to self-monitoring by getting along with the executive control that control thinking and behaviors (Bronson, 2000). [11] The executive control and metacognition are the means for performing in the characters. The students' competence in using innovation and technology especially computer and internet to support learning is vital skill in their repertoire because it enable them to seek essential knowledge by themselves.

## Rationale of the study

As we are well-aware new knowledge and information occurs all the time, and learners have to face changes every day in their lives. A number of popular text books and information nowadays are produced in English. Upper secondary school students in Thailand often encounter problems in

achieving writing proficiency when they were studying English writing in the context of English as a foreign language. They are familiar with rote learning, memorization and a teacher-centered approach. Drill is one of the most popular techniques often used for explanation in Thai language classroom. The drawback of this approach is that it leads to inability of the students to use English for communication. Furthermore the teacher may hardly be able to write in English. Therefore, to overcome low levels of English ability is the one of the key problems for language teaching in Thailand, especially in speaking and writing skills.

The new English curriculum is, therefore, focused on the learning processes to promote lifelong development of learners and allow them to acquire further knowledge in their fields of interest so as to satisfy their own personal needs, academic or occupational requirements.

The results of Thailand's education development over the last nine years (Office of The Education Council 2010) [12] reveal that, there were a lot of foundation schools which didn't meet the standard criteria. The first assessment in 2001 shows the students' English achievement to be lower than 50 percent, and in the second assessment in 2007 still shows 20.30 percent of schools from 22,425 in total, the educational quality needed to be developed. A national education assessment, using the English Standard Aptitude Test, found that 164,267 grade 12 students got only 13.99 average scores from 35 scores, and the results of the General

Aptitude Test between the years 2001 to 2008 show that students got only 16.23 average points from 50 points. By these reports the students' achievement should be developed, a finding which corresponds with the quality of education assessment report for the schools under the Department of Local Administration. That report revealed that of those who finished basic education courses in 2009, the grade 12 students got only the point average equals to 3.08 percentages. The schools in Education Local Area 9 under the Department of Local Administration, got 28.73 percentages which was lower than standard criteria, and overall national score was 47.15 percentages on average with the poor level (Department of Local Administration, 2009).[ 13]

From the problems mentioned above, the theoretical principles informing an appropriate strategy are propitious for planning development of English writing ability, improving the attitude towards English subject, and increasing endurance of English writing for upper secondary school students. Hence researchers have to find the appropriate strategy covering arrangement of both learning experience and environments. Vygotsky (1978)[14] believed that the experience and social interaction are very important. He considered that social and cultural backgrounds and identities as the important factors of the students' learning. Individual difference and the interaction between students and teachers or students and students are important to help students progress and reach the development level. In addition, Dewey (1974)[15] presented his

idea of children learning from practicing skills, which would help make them seek direct experiences and have more persistence of knowledge than listening passively to their teachers. The researchers found that alert teachers should manage the learning process to ensure that the students have interaction with the environment, and learning management must be appropriate with the students' styles and levels. Classroom activities should focus on performance and encourage the students to learn by searching for knowledge from the internet through the computers, via instructional technologies that are most appropriate for present upper secondary school students.

## Objectives of the study

The objectives of this study were to:

1. develop Learning Management Strategies of English Writing using the Process Approach combining an Information Processing Theory and Metacognitive Strategies for Upper Secondary School Students.
2. compare the ability in English writing before and after using the Learning Management Strategy Model.
3. compare the students' attitude towards English subject before and after implementing the Learning Management Strategy Model.
4. study the students' endurance of English writing after the experiments for 2, 4 and 6 weeks.

## Design of the study

This study was divided into three phases. (as shown in Figure 1) The first phase consisted of an investigation of the problems and needs for studying English that define the conceptual framework of a Strategy of Learning Management Model based on information processing theory and metacognitive strategies. Thirty upper secondary school students and eight English teachers were administered through directed interview, then the synthesized interviews data in combination with the questionnaires through the survey research by the researcher were gathered.

In the second phase, the tentative of the Strategy of Learning Management Model, three lesson plans were developed based on the draft of a Strategy of Learning Management Model. The three lesson plans, writing ability test, and students' attitude test were performed and validated by 5 experts in curriculum and instruction, as well as educational measurement. Then was determined an appropriate design.

The third phase involved an evaluation which was the efficiency of the Strategy of Learning Management Model implemented using three lesson plans with a group of seventeen grade 12 students in the second semester, academic year 2011. One group pretest-posttest design was applied for this phase. The lesson plans were constructed according to the learning management strategy of English writing using the process

approach based on information processing theory and metacognitive strategies. The English writing ability, students' attitude towards English subject scores were compared between pretest and posttest by using t-test value. Students' endurance of English writing was analyzed by using percentage, mean, standard deviation, and F-test value from test applied at intervals of 2, 4 and 6 weeks after the experiment.

## Research instruments

The research instrumentation employed at each phase was as follows:

1. The instrument for the contextual study consisted of a structured interview form to interview participants about the current status, problems and needs of a management strategy for English writing ability.
2. The instruments of the learning management strategy effectiveness assessment were the lesson plans, the English writing ability tests and the students' attitude tests.

## Data analysis

The data were analyzed for percentage, mean, standard deviation, the t-test, and the F-test value. The effectiveness of the developed strategy was assessed in terms of a comparison of the students' achievement mean score with the set criteria.

## The Findings of the study

### *The findings of phase 1*

The findings indicated that most

teachers taught English by translating English into Thai rather than encouraging students to think and ask questions. The teachers controlled teaching activities, and the students tended to follow what the teachers had taught. It is almost impossible for the students to suggest or give any comments on learning. Individual interviewing the students indicated that:

1. Students needed to have learning experiences in many ways and studying from learning sources.
2. Students lacked of knowledge background and group participation.
3. Students would like to have opportunities to express their thinking and share their ideas with others.

The Strategic Model consists of five components as follows: principles, objectives, content, learning procedures, and evaluation.

For enhancing English writing abilities, the 9 essential activities for writing were 1) leading in, 2) clarifying the objective, 3) presenting the pattern, 4) writing planning, 5) exploring the Internet, 6) checking and sharing, 7) writing practice, 8) correcting, and 9) doing self and peer assessments.

### ● Activities or learning experiences

There were arranged collaborative learning by combining the learning process of information processing theory and the metacognitive strategy with the process approach developed in this research was grouped into three steps as follows (Figure 1)

### ● Evaluation

Both qualitative and quantitative analysis were used to evaluate students' English writing ability and learning behaviors that were affected from the strategy model.

The five components are important for developing strategy model.

Especially, collaborative learning help improving students' achievement: train them to share their ideas, to think, and make good decision. And self-studying is also enhance English writing ability from resources, it's the way to integrate of both knowledge and learning process to develop thinking, writing ability, and ability of lifelong learning.

As strategy model emphasizing information processing theory and metacognitive strategy with the process approach developed in this study was grouped into three steps as follows: (Figure 2)

### *Stage 1: Pre-writing*

This stage is aimed to preparing students to take new lessons and the learning experiences that students are expected to learn to develop the English writing abilities. There are five-sub stages as follows:

1. Leading In: the students are encouraged to prepare themselves by reviewing their previous knowledge. There were many ways to motivate students to recall their experiences such as asking questions or presenting a short paragraph related to a new lesson through a video, television or computer.
2. Clarifying the Objective: the students and the teacher discuss about writing goals that students have to set up

the individual goals and the class's goal for themselves in order to learn.

3. Presenting the Pattern: the students analyze sentence structure in the pattern and complete the following exercises through group discussion. The teacher and students survey the organization of a pattern and analyze to see how the paragraph was developed through class discussion.

4. Writing Plan: the students make a writing plan and write a topic sentence, supporting sentences, and a concluding sentence. And the students pay attention to their learning goals, writing criteria, stage of writing development and strengths and weakness in their writing.

5. Exploring the Internet: the students write the first draft on a computer or with paper and pencil and write as much as they can. The students write concisely by checking the topic sentence, supporting sentences, whether they're placed in the right order for the paragraph writing and revise the first draft, emphasizing word choice, spelling and sentence structure.

### ***Stage 2: While-reading***

This stage provides the learning experiences that are learned about editing and getting feedback. There are two categories as follows:

6. Checking and Sharing: the students exchange their tasks with peers in their group and other groups to evaluate their friends' writing task based on the scoring rubrics.

7. Writing Practice: the students write a final drafting on a computer or with paper and pencil.

### ***Stage 3: Post-writing***

This is a stage to conclude what the students have learned and how they can apply their knowledge to another passage writing. There are two-sub stages as follows:

8. Correcting: the students revise the first draft emphasizing word choice, spelling, and sentence structure. And once again the students check the form to work consciously on revising. In addition, the students may search for similar the pattern and insert them into their writing if they want to.

9. Doing self and Peer Assessment: the students do self-assessment for their final draft that is ready to be assessed by the teacher.

These three stages of learning activities under the Learning Management Strategy Model consists of the following factors:

#### **● Providing various learning activities.**

One of the most important factors that supports the Learning Management Strategy Model is to provide a variety of learning activities, in order to be an alternative learning for students. Peer learning, group process learning, and collaborative learning encourage students to share ideas and make reasonable decisions.

#### **● Learning from resources.**

The Strategy of Learning Management Model is to used various information in

learning. For example; learning from internet, article, journal, text book, and video. It helps students to access and utilize many learning resources and helps improving their thinking ability and English writing ability efficiently.

### ***The findings of phase II***

The strategy of learning management model were verified by experts who found the developed strategy to be appropriate.

### ***The findings of phase III***

From applying the Strategy of Learning Management Model, seventeen of grade 12 students enrolled in semester 2 of academic year 2011, were purposive selected into the experiment (one group pretest posttest design). The objective of the study in this phase is to study the effect of the strategy model on developing students' English writing ability. The mean score on the posttest was significantly higher than that of the pretest at a 95 % confidence level ( $\alpha = 0.05$ ). The posttest scores of the students' attitude towards the English subject was significantly higher than that of the pretest scores, the confidence level was 95% ( $\alpha = 0.05$ ). The mean score of students' endurance in English writing was found after the periods of 2, 4 and 6 weeks equal 38.71, 37.88, and 38.18, and there were no significantly differences of students' endurance in English writing after the periods of 2, 4 and 6 weeks.

## **Discussion of the findings**

The findings of this study showed that all students made progress in their writing abilities because of the implementation of the learning management strategy model. The step of learning activities were taken into consideration and proved to be significant in classroom organization: the design of the strategy; the learning procedure of the strategy comprised 9 steps; giving a chance to the students who can use their own learning abilities in the appropriate atmosphere, different acceptance and help each other. Learning in small groups focused on the development of students' characters through their succeed, which related to the research of Anette & Judy (1999: 40) [16] who gave the conclusion that if the teachers give the students a chance to investigate and learning from various environment, the students become who can solve a problem on the database that exists, and correspond with the research of Phongnapharuk (2007: 77) [17] who met that environment learning management that encourage the students centered model and to encourage the students read through the goal and the students can increase the summarize English writing, as well.

## **Conclusion**

The Learning Management Strategy Model emphasizing the learning management strategy was developed to enhance English writing ability for grade 12 students. Three lesson plans of teaching English writing

ability, attitude, and students' endurance of learning English writing were used. The strategies of learning management of English writing using the process approach combining an information theory and metacognitive strategies comprised 5 components: principles, objectives, content, learning procedures, and evaluation. The learning procedure of the strategies comprised 9 steps: 1) leading in, 2) clarifying the objective, 3) presenting the pattern, 4) writing planning, 5) exploring the Internet, 6) checking and sharing, 7) writing practice, 8) correcting, and 9) doing self and peer assessments.

## Recommendations

Not only the strategy model helped students to develop English writing ability, it also improved analyzing, thinking, attitude, English writing ability, endurance and encouraging them to discuss with each other, and helped them to enhance the abilities to use technology and learning resources for learning by themselves. In addition, the conditions enhance English writing abilities are as follows:

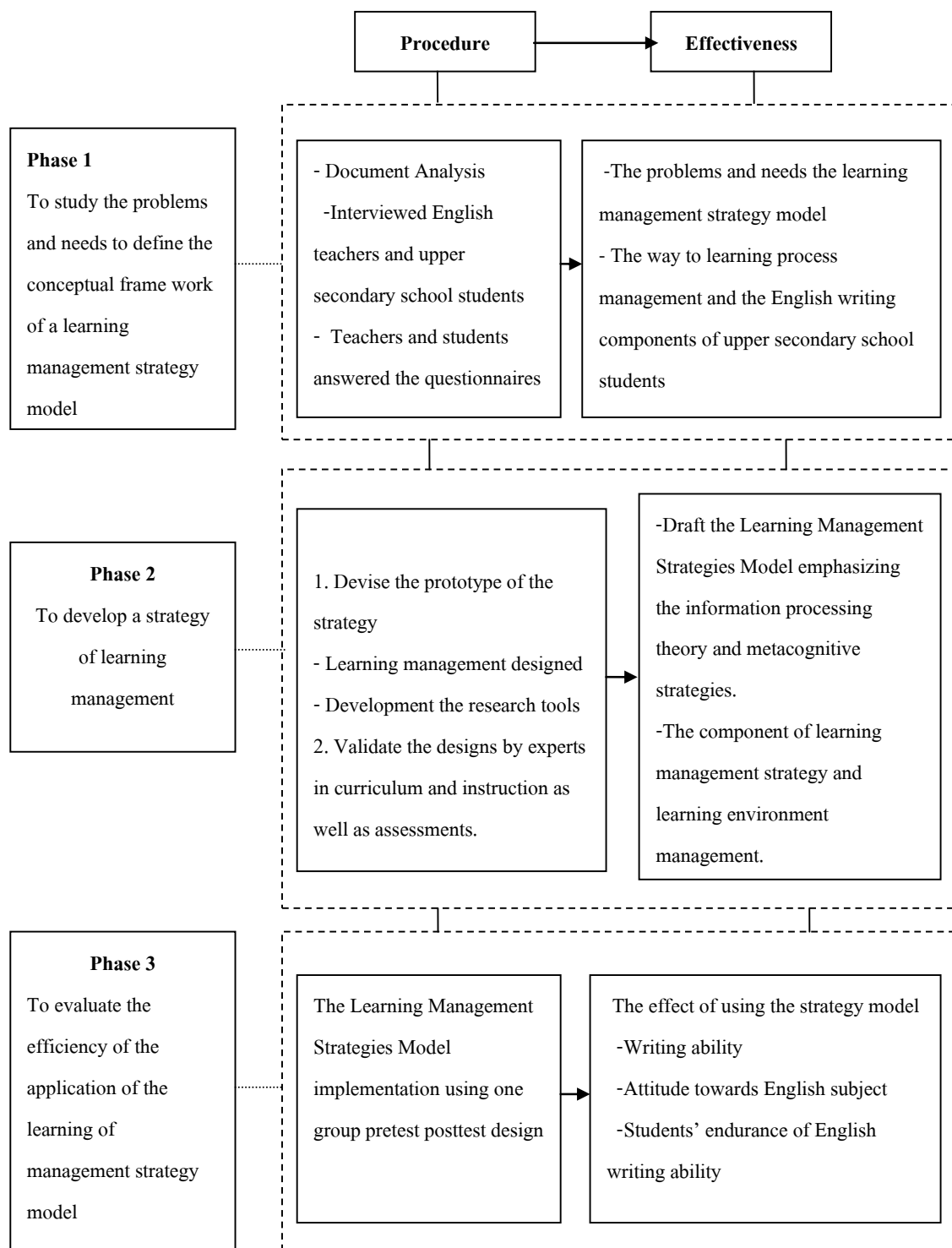
1. Identifying passages that suit for students or the stories that they can link their experiences to new passages and it is not difficult for them to understand the passages.
2. Supporting the students to learn from learning resources. The enables them to search for similar pattern that helps improving their learning processes.
3. Encouraging students to learn by themselves.

4. Let the students evaluate their abilities.

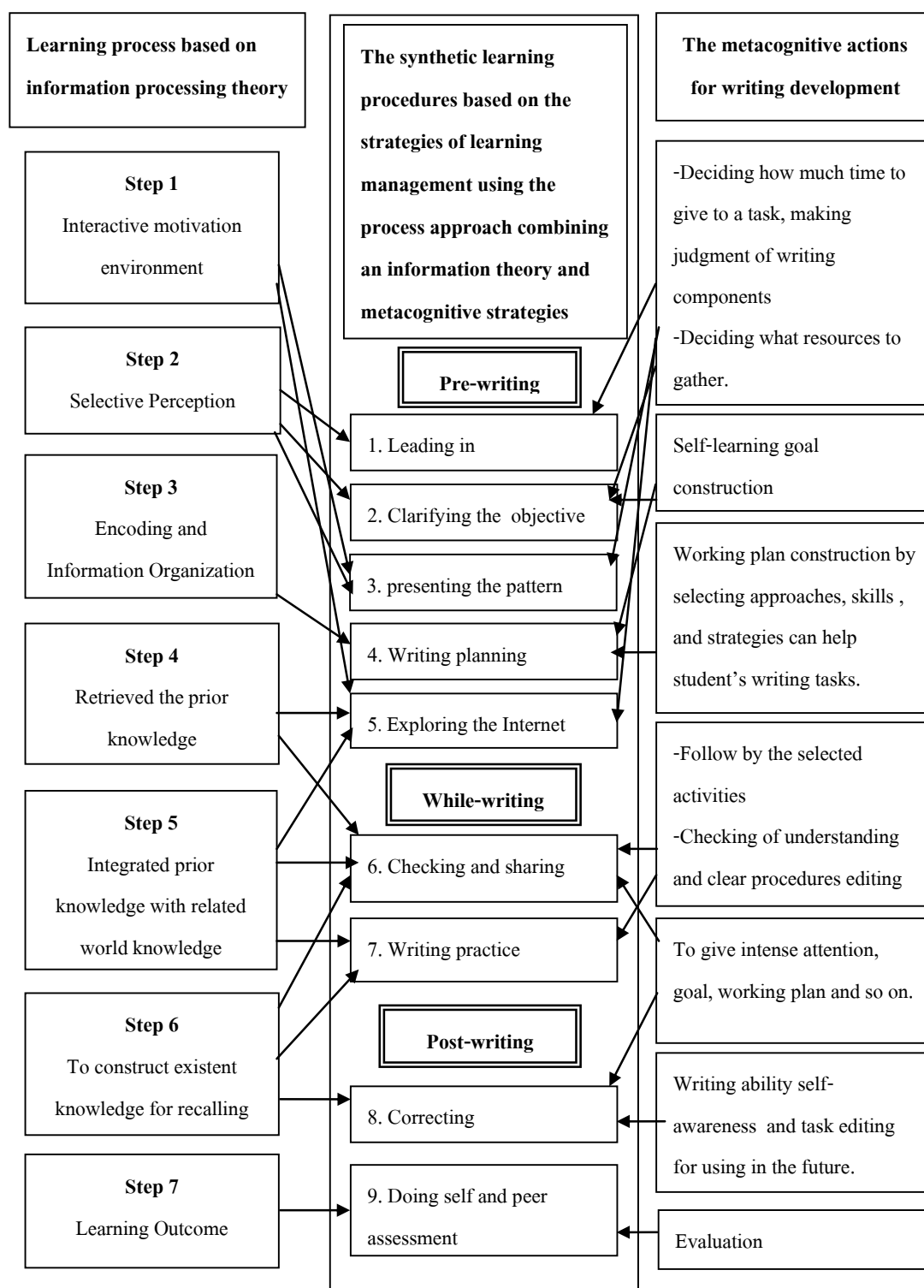
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**Figure 1** Illustration of a research design to develop the Learning Management Strategy Model.



**Figure 2** The synthetic learning procedures based on the strategies of learning management using the process approach combining an information theory and metacognitive strategies.