

Proposed Problem-based Blended Learning in Creative Writing: Self-Regulated Learning in EFL Learners

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Abstract

The study objective is to investigate self-regulated learning strategies of undergraduate students in creative writing based on problem-based blended learning (PBBL) instruction. The participants of this study were twenty-nine English as the foreign language (EFL) students enrolling creative writing course in Chiang Rai Rajabhat University, Thailand. The qualitative and quantitative research methods were employed in this study. Qualitative data was in the form of the interview, and quantitative data was applied in the form of questionnaires as the instruments for this research study. Self-regulated learning in PBBL was divided into 3 parts: cognitive strategies, time and study environment, and self-efficacy. The results showed that the PBBL learners performed cognitive strategies at the high level ($\bar{x} = 3.91$). Moreover, PBBL students preferred working in their own space to complete their work. Learners' beliefs towards self-efficacy were positive. They believed they were able to work with computer joyfully and submit the assignment by the deadline.

Keywords: Creative writing, Problem-based blended learning, Self-regulated learning, English as a foreign language

INTRODUCTION

The current net generation learners and educational technologies are the vital part of pedagogical context which leads to a new teaching approach by combining problem-based learning (PBL) with blended classroom, called problem-based blended learning instruction (PBBL). PBBL describes a new teaching approach to integrate the traditional face-to-face, web-based instruction, and problem-based teaching techniques. Web-based instruction provides learners the communication channels, information sources, and management tools [1]. Therefore, the concept of PBBL can be used to communicate, chat, and discuss both synchronous and asynchronous form on web boards, chat room or even at the campus [2]. PBBL offers the convenient online learning with the in-class learning and instructional interactions that learners can apply this learning process to their creative writing for their lifelong learning.

In the 21st century, English writing becomes a part of people's lives because the English written language is everywhere especially in the social media which easily links the communication among people around the world. Thai students are also a part of globalization requiring to get experiences in writing [3] in order to share knowledge with others, accomplish work and the work of others, make connections between ideas and between people, and express creativity. The role of today's writing is not only for communication between a small group of people but also among people around the world through the

online technology. This means that the writers not only write through direct and formal style but also through digital technology. Therefore, Thai graduates from the university are expected to perform English writing creatively in order to deal with complexities of the writing situation in an appropriate and enriching manner.

However, PBBL instructional model requires learners' self-regulated learning to regulate their emotions, cognition, and behavior to create effective learning experiences. Students who have the good self-regulated learning skills performing efficient time management and ability to choose the best problem-solving strategies. PBBL provides possible choice to manage students' self-regulation for creative writing classroom. Numerous studies claim that computer-supported teaching process can help native learners understand the contents and become a more effective writer [4]-[5]-[6]. However, these claims are still ambiguous for EFL learners because the research in the field of technology-supported creative writing has been rarely examined especially non-native speakers as a target participant. Therefore, this research study will contribute empirical evidence on the instructional process in EFL creative writing class with PBBL instructional model which used digital technology-mediated instructional process.

LITERATURE REVIEW

This study explores self-regulated learning in PBBL instructional model for the English creative writing course. Therefore, the context used in this study takes place in a university in Thailand where performs the different learning style and culture from other learning contexts.

CREATIVE WRITING

Creative writing means the writing that delivers the enjoyment and delight to the readers with aesthetic experience in order to provide the readers' amusement or visionary reflection, thoughts, and emotions [7]. Creative writing is an open-ended approach to encourage creative thinking relating to the children development of thinking skills [8].

Creative writing skill is the most complicated activities. This skill relates to the development of visions, innovation, emotions, and experiences on the topics. The effective writing allows the writer to communicate their messages with clarity. To design the instructional model for the creative writing course for EFL undergraduate students, the educators, and instructors need to explore the teaching creative writing

approaches, learning processes, and select the most suitable one to be the basic teaching approach of the course, such as problem-based approach and the blended learning approach including problem-based blended approach.

Teaching writing is different from teaching other skills because written language appears in the form of 'graphic representation' of spoken language [9]. The successful writing compounds of many various factors such as idea development and structure, information, language accuracy, appropriate lexical choice, and sentence structures to produce style, tone, and information for the audiences. Therefore, teaching writing is required various processes and strategies in order to develop the learners. Writing instruction in the 21st century is required new teaching strategies, creativity, and several skills. Being an instructor in a writing course is not only good at teaching, but he/she is also supposed to be skilful in theory and research in order to apply the theory into practice [10].

PROBLEM-BASED LEARNING

The process of PBL mainly consists of four steps (Fig 1) including problem analysis, self-regulated learning, brainstorming discussions and solution testing. The learners share ideas about the problem and indicate what is known and unknown. Learners are required to work as a group to analyze the problem and plan to achieve the acquired knowledge to solve the problem. The instructor acts as a facilitator to give the guideline and facilitate learners to find their own answer. After everyone complete their own responsibility by self-regulated learning, the group meeting is required to brainstorm to find out the best solutions. In contrast, if the solution is not based on fact or correct answer, the first step of PBL is repeated. The last step is completed by peer review or feedback after the group discovers the acceptable or satisfied solution [11].

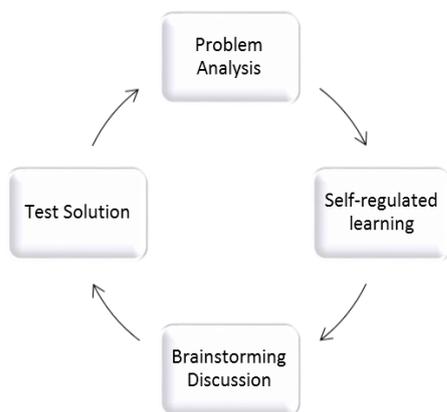


Figure.1: The PBL problem solving cycle

Nowadays, the growing number of PBL process is still widely applied to the class. PBL provides the flexibility to learners and creates learning values; for example, adjusting students learning style, adapting to the real context, and learning relevant culture [12]. Problem-based learning, a part of student-centred approach, supports learning process in pedagogical context because PBL gives the learners opportunities to work as a group, handle the real problems, and create a learning

community [13]. The PBL learning outcomes link with the 21st century expectations to support learners think creatively, self-regulated learning, explore resources, work as a team, and utilize knowledge and intellectual abilities to be a lifelong learner [14].

BLENDED LEARNING

Blended learning is the term to mix the traditional face-to-face teaching method with online instruction[15]. The word 'blend' is defined as a mix something with another thing so that they combine together [16]. The terms of blended learning are defined similarly in pedagogical fields; for example a hybrid of e-learning with traditional instruction, and the combination of face to face learning with online learning [17]. In brief, blended learning is the combination of the use of technology-supported teaching and learning and classroom-based learning as the Figure 2.

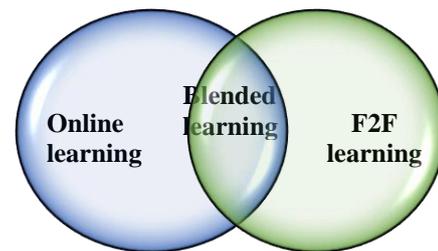


Figure 2: Blended learning

This blended teaching model begins with synchronous learning and shifts to more successful blended learning, then advance on rich experiences in order to achieve performance personalization, the combination of learning and work responsibility as an embedded system [18]. This instructional approach also emphasizes on a blending of synchronous and asynchronous teaching and learning styles. The synchronous activity also includes online conferences and in the face-to-face (F2F) classroom [19].

PROBLEM-BASED BLENDED LEARNING

Learners in problem-based online work collaboratively to solve or handle the given problem. Learners are allowed to manage the problem synchronously and asynchronously, but the key activity of this type of instruction is working together. The learners select their own way of work together at home or on campus. They can work distantly through the online tools like chat, web board, video conference, and group post or blogs to achieve the learning goal or learning objectives in the informal context [20]. The informal learning context can support collaborative work and share knowledge through technology tools such as blogs, wikis, applications, and social networking mobile [21]. Learners can start online group work after gaining experiences and knowledge with face-to-face activities. Consequently, learners in PBBL are encouraged to work as a team, solve problems, and successfully reach their individual responsibility under group assignment [22].

The main factor of PBBL relates to problems or questions to solve and online technology supported language learning and knowledge resources. The problem organization in PBBL is required explanation and content; roles and responsibility of students; collaborative work, time-limitation both in online group work and individual work, milestones, and deadlines, netiquette, databased of frequently asked questions, web tools as relevant interactive tutorials, communication ability, solution skills, self- and peer review strategies by PBBL [2].

SELF-REGULATED LEARNING IN PBBL

Self-regulated learning or self-directed learning consists of the various learning processes like goal setting, self-observation, self-assessment, and self-reinforcement [23]. The good self-regulated learning gains the effective achievement than the poor self-regulators. The self-regulated learners set better goal in learning, use more appropriate learning strategies, evaluate the goal development, set a better new goals after completed the previous work. Self-regulated learning is divided into three main parts: 1) Cognitive Strategies, 2) Time and Study Environment, 3) Self-efficacy [24]

Cognitive strategies - Cognitive processes are divided into two types: explicit cognition and implicit cognition approach. Explicit cognition deal with the fundamental cognitive approach with conscious awareness [25], in contrast, implicit cognition is linked with an independent source of cognition. Implicit cognition means cognitive processes without awareness [26]. Implicit cognition includes stimulus, repetition, learning unconsciously, and rule generalization [25]. Both types of cognition work together to improve learners understand the surroundings and contexts. The cognitive processes can begin with implicit knowledge. This implicit cognition sometimes automatically occurs with unconsciousness and unintentional form. It is difficult to describe verbally how to get the implicit knowledge, while explicit knowledge is the highest level of cognition which is able to describe verbally. Implicit knowledge is transformed to be explicit knowledge in a conscious and verbal form. For instance, people have firstly learned the skills and carry the knowledge out in the form of actions. After that they are able to explain what they do and finally, they can consciously change knowledge or the activities into performance [27].

Time and Study Environment – About time in self-regulated learning, learners in the blended classroom are required to be effective in time management especially, planning for sequencing, scheduling time, and completing assignments. Time management skills are significant for handling with course assignments and completing activities on time. In addition, with the growth of technology, learner-centered environments concern more on the integration of online resources, online community, and computer-assisted teaching as the learning toolkits [28] to provide learners to learn anytime anyplace with their own pace. the effectiveness of learning environment for adult learners has appeared clearly when they learn at their own pace [29].

Self-efficacy - Self-efficacy plays important role in self-development and effective adaptation. Efficacy has the

influences on individual thoughts: positive thinking or negative thinking and this effects on self-improvement/ self-debilitation and self-motivation. Efficacy beliefs involve learners' outcome expectations to create the favorable or opposite consequence. Learners with the low efficacy are easy to face the difficulties and obstacles, while learners with high efficacy view tend to achieve self-improvement by handling the difficulties properly [30].

RESEARCH METHODOLOGY

In order to investigate students' self-regulated learning strategies on PBBL instructional model in the creative writing course, the questionnaire and interview on self-regulated learning were required in this study.

This study is limited to the junior undergraduate students enrolled in the fourteen-week creative writing course. They are the third year students majoring in English Studies Program. The problem-based blended learning instructional model is used as the main teaching model in this study. The results are perhaps restricted in terms of generalizability to the other different contextual settings.

RESEARCH INSTRUMENT

QUESTIONNAIRE

The questionnaire aims to explore self-regulated learning based on the PBBL instructional model in creative writing. The questionnaires were designed to evaluate in the last class of the course. Then it was verified by a panel of three experts. Students who enrolled in the course expressing their attitudes towards their self-regulated learning at the end of the course. The questions about self-regulated learning are divided into three parts: 1) demographic characteristics; 2) attitudes towards self-regulated learning, and 3) suggestions and recommendations.

Part I: Demographic characteristics of the subjects. The subjects needed to identify some information, such as gender and age.

Part II: Attitudes towards self-regulation in the creative writing course based on PBBL instructional model. In this part, the Likert-scale was used to analyse the students' attitudes. The results were designed using a five-point Likert scale "strongly agree" (4.5- 5.0), "agree" (3.5-4.49), "neutral" (2.5-3.49), "disagree" (1.5-2.49), and "strongly disagree" (1.0-1.49) in this section. The questions about self-regulated learning are divided into three parts: 1) Cognitive Strategies; 2) Time and Study Environment, and 3) Self-efficacy.

Part III: Suggestions and recommendations regarding an English creative writing course. One open-ended question was provided in this part to give the respondents opportunities to express their suggestions about attitudes towards English creative writing courses and self-regulated learning in PBBL model.

INTERVIEW

The interview protocol was used to gather an in-depth information only from ten participants who had the highest improvement in creative writing performance in order to gather in-depth information about creative writing course based on PBBL model. Interviews were particularly useful for getting the story behind a participant's experiences. The interviewer could pursue in-depth information on the topic. Interviews were useful as the follow-up to certain respondents to questionnaires, e.g., to further investigate their responses [31].

DATA ANALYSIS

Questionnaire - SPSS and content analysis were used in this research study. In Likert-scale questions, mean and S.D. were used to analyse the data from the attitude questionnaire. The acceptable value of the mean represents a positive attitude and an effective level has to be higher than 3.5, both in each question of the questionnaire [32]. In addition, the content analysis was used to analyse the data gathered from the questionnaire in the open-ended questions.

Interview - Verbal protocol analysis was used as a method for collecting and analysing verbal data. The method involved making a detailed record of a person's verbal report while they were engaged in carrying out a task such as solving a problem, making a decision, or interacting with an interviewer. The verbal reports are produced under specific instructions to 'think aloud' and the person is normally given minimum prompting. They are sometimes known as 'thinking aloud protocols'. Moreover, content analysis was used to analyse the data from the interviews. Counting frequencies of occurrence (existing words in the collected data: writing situations, forms and functions, writing contexts, and sociolinguistic knowledge) were employed as a tactic for generating meaning from the collected data for this study [33].

RESULTS AND DISCUSSION ON SELF-REGULATED LEARNING BASED ON PBBL IN CREATIVE WRITING

This part aimed to answer about the students' attitudes toward self-regulated learning among EFL learners. According to self-regulated learning, the approaches consisted of three parts: 1) Cognitive Strategies; 2) Time and Study Environment, and 3) Self-efficacy.

SELF-REGULATED LEARNING: COGNITIVE STRATEGIES

Cognitive learning, as the way to change knowledge to be an experience [34], there are two main types of cognitive processes consisting of explicit cognition and implicit cognition. Explicit cognition deal with the fundamental cognitive approach with conscious awareness [25]-[26], while implicit cognition is linked with an independent source of cognition. Implicit cognition means cognitive processes without awareness [26].

Table 1: Implicit and explicit cognitive strategies

Cognitive Strategies	Items	Mean
<i>Implicit cognitive strategies</i>	1. I understood the lessons through linking writing with the concepts from the lectures/ online teaching materials.	4.03
	2. When I got confused about the lessons, I repeated online lessons and tried to find the solutions.	3.82
Total		3.93
<i>Explicit cognitive strategies</i>	3. I directed myself to keep studying to do well in creative writing course.	4.14
	4. When I studied for this course, I have set my goals in order to support my activities in each study period.	3.66
Total		3.90

According to this study, the results were divided into two parts: implicit and explicit cognition. The findings showed that learners applied both implicit ($\bar{x} = 3.93$) and explicit cognition ($\bar{x} = 3.90$) as the self-regulated learning in the equal level as Table 1.

Implicit cognition includes stimulus, repetition, learning unconsciously, and rule generalization [25]. The lectures/online teaching encouraged learners to think creatively and get knowledge automatically. Moreover, self-repetition as implicit strategies was applied when learners get confused in lessons. Then they were able to find the answer by themselves.

Explicit cognition related to learning behavior with conscious awareness [25]. The explicit cognitive techniques used in the creative writing were goal setting in learning and directing themselves to keep studying. However, some learners applied both implicit and explicit cognition in their learning. Most learners started learning strategies by implicit cognition and transforming into explicit cognition strategies. Consequently, what they have learned from the creative writing course became the long-term memory (Fig 3). The implicit cognition sometimes automatically occurs with unconsciousness and unintentional form. It is difficult to describe verbally how to get the implicit knowledge, while explicit knowledge is the highest level of cognition which is able to describe verbally [27]. Implicit knowledge is transformed to be explicit knowledge in a conscious and verbal form.

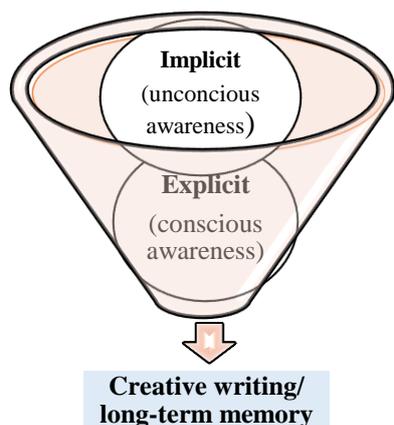


Figure 3: Implicit and explicit cognitive strategies

However, the successful cognition approach could have occurred when the environment and social interaction supported the learners' learning. Therefore, social interaction is a key factor especially constructivist online learning environment through collaborative learning, negotiation skills, debate, and peer review [35]. Learners interact with peers when doing group assignment and also discuss with the teacher via face-to-face or online channels to develop social interaction. PBBL emphasizes on constructivist approach through appropriate activities, so students' cognitive skills were learned by doing given assignments or activities [36].

In brief, cognition strategies were used in creative writing course through both implicit and explicit cognitive strategies. Consequently, learners were able to create their writing work effectively with the long-term memory.

FACTORS AFFECTING SELF-REGULATED LEARNING: TIME AND STUDY ENVIRONMENT

Before the PBBL course, it is significant to prepare learners for face-to-face class and online learning class to inform the learning schedule in creative writing assignments. The instructors were required to respond and handle both face-to-face instruction and online instruction immediately if learners had the problems with content, lesson, and assignments. Learners in the blended classroom were also required to be effective in time management especially, planning for sequencing, scheduling time, and completing assignments [37].

Table 2 indicated the results of self-regulated learning in terms of time and study environment. Learners in the blended classroom were also required to be effective in time management especially, planning for sequencing, scheduling time, and completing assignments [37]. Based on the questionnaire results, most learners reflected about their time-management that they made good use of study time for this course ($\bar{x} = 4.00$). They tried to make sure to keep up with the weekly writing and assignments for this course on time ($\bar{x} = 3.69$). As interview protocol, most interviewees said that they were able to submit the assignment by the deadline with the reason of good time management.

Table 2: Time and Study Environment

Time and Study Environment	\bar{x}	S.D.
5. I normally learned in a place where I could concentrate on my assignments.	4.07	0.75
6. I well managed my study time for this course.	4.00	0.65
7. I had my regular place for studying.	3.62	0.73
8. I attend class both online and traditional F2F class regularly.	4.07	0.70
9. I manage time to catch up with the weekly assignments and for course work.	3.69	0.76
Total	3.89	

The interview protocol was used to gather an in-depth information only from ten participants who have the highest improvement in creative writing performance in order to gather in-depth information about self-regulated learning in PBBL class. Interviews were particularly useful for getting the in-depth information on the topic. Interviews were used as the follow-up to certain respondents to questionnaires, e.g., to further investigate their responses [32].

I always submit my work on time. Although there are many university activities, I can manage it. I think it is a challenge. I just prioritize and plan what to do first. (student #3)

I definitely can make my assignment finish by the deadline because if everyone can do it, I've no choice to send it after the deadline. Otherwise, my scores will be deducted. (student #4)

The analysis of student interviews revealed that learners attended creative writing in PBBL environment were trained to value self-management on time and avoid procrastination. Learners had to select the best ideas with time limitation and complete the task by the deadline.

However, time management was a problem for some learners because the creative writing was different from other writing types. It required time, mood, imagination, vocabulary stores, and experiences to complete their work.

I could complete some assignments by the deadline, but not all. I think creative writing is quite complex and difficult. It doesn't mean I have time and I can do it. Mood, imagination, vocabulary, and experiences are needed, too. If I've everything excepting mood, I can't write creatively. (student #8)

The above interview reflection showed that it was crucial for instructors to ensure that they provided the adequate time. Adequate time for learning should be consist of learners' goal setting an appropriate time to do activities. Then, the learners are able to decide the priorities by doing checklists to complete tasks. However, if learners were unable to assess their learning time, the low performance in class was appeared [38].

According to Study environment or learning environment, it is a crucial component to boost learner performance and allow them to feel engaged, comfortable, and active. With the growth

of technology, learner-centred environments concern more on the integration of online resources, online community, and computer-assisted teaching as the learning toolkits [28] to provide learners to learn anytime anyplace with their own pace. The process of PBBL efficiently developed learners' both online and face-to-face interaction to produce the master creative writing work. In this study, learners agreed to choose their working place where they could concentrate on work. They sometimes set a regular place to study ($\bar{x} = 4.07$). The adult learning effectiveness appears clearly when they learn at their own pace [29], and technology used in PBL class facilitated the new way of learning by setting flexible learning environment both formal and informal situations through virtual learning environment [39].

In addition, the interview protocol revealed that learning environment is important for PBBL course. The flexible environment motivated learners to participate the course.

I appreciate the study place in this course and I think it's important. It's inspired me to learn, participate, and attend the class. It's flexible and not boring. (student #4)

However, some learners were more comfortable to learn with teachers in the classroom because online learning environment could not respond all the questions they have. The interview findings reported that some learners felt more confident when instructors were in the classroom.

I think classroom and computer lab are still important for the blended classroom. Even though we can learn by ourselves through our own laptop and mobile phone, learning with real teachers make me feel warm and confident that we go to the right track. (student #5)

To reduce the gap between online learning and feeling isolated in learners, face-to-face strategy is able to fulfil this gap when using blended learning class [40].

In conclusion, the creative writing course based on the PBBL was effective because the appropriate time and learning environment constructed the positive attitudes towards this course and motivated learners to be more active, flexible, and personalized.

SELF-REGUALTED LEARNING: SELF-REGULATED LEARNING

Self-efficacy plays important role in self-development and effective adaptation. The findings of self-regulated learning in term of self-efficacy implied learners' self-efficacy was at rather a high level. Efficacy has the influences on individual thoughts: positive thinking or negative thinking and this effects on self-improvement/ self-debilitation and self-motivation. Efficacy beliefs involve learners' outcome expectations to create the favourable or opposite consequence [30].

Table 3 showed the results of self-regulated learning in term of self-efficacy. The students agreed that working with the computer was very easy ($\bar{x} = 4.20$) and they enjoyed working with computers ($\bar{x} = 4.20$). Most students indicated that they were able to finish their assignments by deadlines ($\bar{x} = 4.20$).

Table 3: Self-efficacy

Self-efficacy	\bar{x}	S.D.
17. I believed that working with computer was very easy.	4.20	0.82
18. I enjoyed working with computers.	4.20	0.77
19. Before the assignment, I believed that I could finish assignments by deadlines.	4.20	0.86
Total	4.20	

In conclusion, the EFL learners agreed that working with the computer was not difficult and they felt positive to work with a computer. Moreover, most learners could finish the assignment by deadlines. As expected, learners' beliefs towards self-efficacy were positive. They believed they were able to work with computer joyfully and submit the assignment by the deadline. Learners' self-efficacy influenced on what they evaluated themselves in this course. Most people prefer performing based on the beliefs about what they can do. Therefore, self-beliefs of efficacy partly control the motivating influence of outcome expectancies [30].

CONCLUSION

The new generation is greatly relational and high demand to access to information and knowledge through technology. The shift in roles of education is required to add joyous activities in technology inspiring learners to create their writing. Computational technology and online were used to support creative writing course and to respond learners' needs in new learning environment surrounded by technology everywhere.

The results on self-regulated learning in terms of cognitive strategies indicated that the PBBL learners performed cognitive strategies at the high level with the mean of 3.91 out of 5.

As time and study environment, it was found that many students preferred working in a place where they could concentrate on their coursework. The interview data supported that the learning equipment like a computer lab, notebook, and smartphone were important for the learning environment. About time management, most learners agreed that they made a good use of study time for creative writing based on PBBL instruction.

According to self-efficacy, the results of the interview protocol showed that online technology was enjoyable. The learners were satisfied to learn independently anytime and anyplace. Similarly, the findings of questionnaires illustrated that working with a computer was not difficult and enjoyable.

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