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STUDENT LEARNING REFLECTION THROUGH E-MAIL LOGS

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This research investigated the use of a reflective learning log as a tool to encourage students to reflect on their English learning experiences at a university in Thailand. Thirty-eight undergraduate English major participants e-mailed their instructor their learning reflection after each lesson over a 16-week period. The students' e-mail learning logs and group interview responses were analysed using a content analysis method by coding and creating categories or themes. The findings indicated that the students were aware that they gained more knowledge from reading texts and sharing and exchanging ideas and opinions amongst their peers. However, the students experienced difficulties with grammar and unknown words, distinguishing facts from opinions, being critical when reading texts, and finding reasons to support their arguments in group discussion related to the text they had read. The students perceived an e-mail learning log as a useful tool for recording and reflecting on their learning experiences, increasing awareness of their own learning and enabling them to understand their own learning process, giving them an opportunity for self-expression in English, fostering analytical and critical thinking skills, improving writing skills, and providing an interesting and meaningful way of learning English. Overall, they had positive attitudes towards e-mail learning logs. The implications of e-mail learning logs for English language teaching and learning will be discussed in this paper.

Keywords: Learning reflection, e-mail log, Learning experience, Learning process, Analytical and critical thinking skills.

Introduction

In a modern world with rapid changes, students need to be 'active learners' who are engaged in the learning process. They need to be aware of their learning process and learn not only the subject matter but also 'how to learn'. Thus, they should employ life-long learning skills, which include analytical thinking, critical thinking, creative thinking and problem-solving skills. These skills are vital for them to effectively participate in the socio-economic, technology- and knowledge-based world. Learning reflection is viewed as a means to foster these skills. With a large class of 38 university students, many of whom are reluctant to think about their learning experiences, it is rather difficult to encourage individual students to express their voices, perceptions, attitudes and feelings towards each lesson. Therefore, a learning log or reflective journal is viewed as a tool for helping them and enhancing their overall English language learning. I decided to use e-mail learning logs as a means for students to reflect on their learning experiences, since the advancement of Internet technology provides a fast and convenient channel of communication. The students can send e-mail logs to the instructor from anywhere and at any time, and the instructor can read the learning logs at her convenience. This helps reduce use of paper and eliminates

the need for students to deliver their work to the teacher's office. In addition, only the instructor can view their e-mail messages in case the students do not feel comfortable letting others know their thoughts.

Using these logs helps me learn more about my students' insights, perceptions, attitudes and feelings, as well as their questions and concerns which they feel they may not able to voice in class. Their learning reflections provide me with insights that assist me in assessing their learning, helping them to achieve in learning, and helping me plan my subsequent and future teaching.

Literature Review

Learning log and reflective journal are terms used interchangeably with others, such as learning journal and reflective diary. Moon (2003: online) points out that their purposes may differ slightly: in a learning log, people record events that have occurred, while a learning journal emphasises making explicit and recording the learning that occurs. The latter focuses on ongoing issues over time and on the intention to learn from either the process or the results of writing it. A reflective diary is more concerned with demonstrating reflection on an experience. However, as asserted by Moon (2003: online), all three have an aspect of reflection in them. Therefore, they are the place for recording events that occur over a period of time and reflecting on them. Baker (2003: online) describes a 'learning log' as a learning diary where students record learning experience, report learning content and learning processes. Ballantyne and Packer (1995, cited in Bain and others, 1997: online) also note that "in journal writing, students can reflect their understanding of, reflection on, response to or analysis of an event, experience or concept". Learning logs or reflective journals can be kept in different forms depending on their purposes: either paper-based or electronic (e-mail, blog, and discussion board) (Du & Wagner, 2005).

Potential Values of Learning Logs

Learning logs or reflective journals, extensively used in education, have great potential value for both students and the teacher.

To Students

Learning logs facilitate and enhance students' learning in several ways. Firstly, they can be a valuable learning tool that encourages students' active involvement and independent learning, and an opportunity for self-reflection and self-expression (Hiemstra, 2001; Moon, 2003; Miller, 2007; **Moore & others, 2010**). Students are actively engaged in learning when they record and reflect on their learning experience in learning logs. They are involved in the learning process and have responsibility for and ownership of ideas and thoughts. They demonstrate their own learning processes, recall and make sense of their learning experience, look at this experience critically, order the events and their thoughts, and record them in their logs (Higgs, 1988; Barth, 2001). This process helps deepen and support students' personal understanding and the representation of that understanding (Ballantyne & Packer, 1995, cited in Bain & others, 1997: online). This view is supported by Moon's (2003: online) assertion that "journal writing encourages reflection and reflection is associated with deep approach to learning or with deep learning, the intention of the learner is to develop a personal understanding of the material and to relate it to what is already known." That is to say, students can also learn and construct new knowledge from their recorded and reflected experience. Chickering and Reisser (1993 cited in Moore & others, 2010: 37) believe that "in learning, students can learn better by talking about what they are learning, write about it, relate it to past experiences, and apply it to their daily lives. They must make what they learn part of themselves".

Secondly, learning logs encourage students to develop metacognition (Moon, 2003: online), such as self-awareness, self-assessment and self-monitoring of learning (Briton & others, 1975, cited in Audet, 1996: online; Liuolienė and Metiūnienė, 2009). Dawson (2008: online) defined the term "metacognition"

as "an interrelated set of competencies for learning and thinking that includes many of the skills required for active learning, critical thinking, reflective judgment, problem solving and decision making". In writing their own learning logs, the students themselves are aware of their learning, which includes the material learned, the learning process, and their strengths and weaknesses; this enables them to find solutions to the problems they encounter (Andrusyszyn & Davie, 1997; Halva-Neubauer, 1995 cited in King & LaRocco, 2006: online). In other words, reflective learning logs enhance analytical, critical and creative thinking, and problem-solving skills (Fulwiler, 1986; Ballantyne & Packer, 1995, cited in Bain & others, 1997: online; Hiemstra, 2001; Moon, 2003). Students are aware of their learning process, articulate their thoughts and ideas and find solutions for problems they experience in learning. These skills promote student self-empowerment; thus they feel more assertive and are able to show their identities as described by Miller (2007). She asserts that "for students, journals offer a powerful and nonthreatening means of representing and renegotiating their identities", in other words, "the representation of identity (voice in the context) for second language speakers" (p. 27).

Additionally, a number of scholars report the potential value of reflective learning logs in enhancing language development and improvement in writing skills (Carroll, 1994; Myers, 2001 cited in Kerka, 2002: online; Shaaban, 2001; Moon, 2003; Miller, 2007; Lew and Schmidt, 2007). In writing, students have to report their experiences and must reflect on their learning, expressing their thoughts and attitudes towards their learning. Thus they use different genres of writing such as recount, description, explanation, and exposition. Miller (2010: 24) points out that "student journals are an exemplary genre for learning to write and for self-representation and that they have great potential for learning". Myers (2001 cited in Kerka, 2002: online) also reports a potential value of journal writing in enhancing student fluency in writing and language. Shaaban (2001) confirms that learning logs which contain a record of student experiences enhance their writing abilities. They offer a way to practice and experiment with written forms of English. As a result, students are intensively engaged in learning and are connected to higher-level thinking which is vital for more advanced literacy. Moon (2003: online) also asserts that "writing is associated with learning or learning enhancement. Students use expressive language or the language of thought in their journals, which may enable them to "learn better with this language rather than the formal academic language". Lew and Schmidt (2007) conducted research in a post-secondary institution in which students had to reflect on their learning experience every day; they found that the daily journals formed a part of daily assessment and the student use of reflective writing enhanced their learning. Miller (2007: 36) also summarises the advantages of reflective journals from her study: they provide students with a choice of topics and communication contexts that are meaningful to them and they can write in their own time. They have creative freedom to use and develop a sense of ownership of and investment in the writing and the physical journal itself. They are the means to connect experience, reflection, and feelings, thereby engaging affect in the learning process. Furthermore, journal writing gives opportunities for students to use grammar, acquire vocabulary, self-correct and redraft their writing, giving them an understanding of the links between spoken interactions and written accounts. In order to write, they need to construct each sentence using structure and words and then connect these sentences into paragraphs.

Finally, learning reflection via logs provides a motivating, interesting and meaningful way of learning English (Ballantyne & Packer, 1995, cited in Bain & others, 1997: online). Some studies of ESL journal-writing report increased motivation and fluency among students (Holmes & Moulton, 1997, cited in Miller, 2007: 26). Reflective journals are a means of communication between the teacher and students in ways that would be extremely hard face to face, especially where affect is involved (Moon, 2003: online; Miller, 2007: 36). Therefore, students benefit from stress reduction by not having to share their ideas, thoughts and experience in front of the teacher and their classmates (Hiemstra, 2001). For reticent or less confident students who have anxiety about their sense of limited proficiency or about social pressure to discuss their personal experiences, sharing their thoughts, ideas, opinions and insights are more comfortable in writing learning logs (Miller, 2007: 36). Thus, they are more motivated and self-confident in learning.

To the Teacher

Learning logs are viewed as an instructional tool for teachers. They are a means for communication or 'reflective and interactive interaction' (Moon, 2003: online) between the teacher and the students and to access students' 'voices' (Miller, 2007: online). The teacher can gain students' insights as to their understanding of learning matter and their thoughts, ideas, opinions and attitudes towards classroom learning experiences (Miller, 2007). The teacher will learn what the students have learned, what problems or difficulties they have experienced as well as the problem-solving strategies they employed. Miller (2007) also asserts from her ethnographic study of ten recently-arrived high school ESL students in Australia that journal writing in English helps her as a teacher to gain insights into students' English language development in classroom and social situations as well as to help her obtain a better understanding of their identity work. She explains that learning journals assist students to value their own voices, which are counted as read and commented on by the teacher. She also asserts that journal writing not only gives students the opportunity to interact with text in a manner that maximizes both individual student investment in learning but also meaning-focused interaction between teachers and students. Additionally, teachers can improve their own teaching to better enhance student learning.

Mojica (2010: 25) also notes that learning logs provide the teacher with insights on both student strengths and weaknesses. Students could be asked to write down how they have performed in their English language class or how they have used the English language during the day. Hansen-Thomas (2003: online) also asserts from his study that the use of learning logs which provides an opportunity for students to participate in the learning and teaching process is a means for the teacher to get to know the students and their writing needs, their concerns and questions. Being aware of and assessing student learning experiences, insights, ideas and attitudes as well as their questions, concerns, strengths and weaknesses assists teachers in providing individual students with scaffolding or assistance and in improving their instruction.

In conclusion, reflective learning logs offer great potential value for both students and teacher. They provide students with an opportunity for active involvement in the learning process as independent learners, as well as for self-expression, self-assessment, self-empowerment, metacognition, language learning and writing skills development. They also offer students a motivating, interesting and meaningful means of English learning and help teachers get to know their students more fully.

In this paper the term "reflective learning log" is used, whose main purpose is to provide an opportunity and a space for students to record and reflect on their learning experiences as well as express their thoughts and attitudes toward their lessons. This research aimed to use e-mail learning logs to provide an opportunity for students to reflect on their learning experiences. With this learning reflection, students are expected to develop an awareness of their own learning and learning process, including what they have learned, difficulties or problems they have experienced, and their problem-solving strategies. In addition, the research investigated students' perceptions and attitudes toward reflective e-mail learning logs. By reading their logs after each lesson, I could assess what students have learned, their learning processes, their concerns about learning and problem-solving strategies, strengths and weaknesses, and their feelings towards each lesson. With these reflections I could plan my future teaching and use them as background information for curriculum improvement.

This research investigated students' learning reflection and perceptions and their attitudes toward not only the lessons of a critical reading course, but also towards the use of e-mail learning logs. The study addressed these research questions:

1. What are students' reflections on their learning experiences in a Critical Reading course?
2. What are students' perceptions of the use of e-mail learning logs?
3. What are students' attitudes towards the use of e-mail learning logs?

The Study

The Setting and the Participants

The research participants were 38 undergraduate English major students – 4 males and 34 females – in the Faculty of Humanities and Social Sciences, Nakhon Pathom Rajabhat University. They were in the third year of their studies. These students undertook eight semesters of coursework and the final two semesters of a teaching practicum in secondary schools. They were preparing to become English teachers at the secondary level.

Method

The research was conducted during the first semester of the academic year 2011. The students were enrolled in a Critical Reading course. This course aimed to enable students to develop critical reading skills and awareness of the underlying ideology in a text, of how a text positions the reader, and of the writer's intention in creating a text. The students met in class once a week – four periods (50 minutes each period) throughout the 16-week semester. The contents of reading included distinguishing facts from opinion, determining the author's purpose, tone, point of view and intended audience of different topics of reading as follows: (1) The Good Life; (2) Money Matters; (3) Life Priorities; (4) How we Bully our Migrant Workers; (5) Cultural Differences: England vs. Italy; (6) Book Reviews; (7) Tragedy of the Tiger; (8) How Green Are You?; and (9) the ASEAN Community.

The students were introduced to and practised distinguishing facts from opinions and identifying an author's purpose, tone, point of view, and intended audience. Then they were assigned to read different genres of texts including various articles, blogs, and critical reviews in class and performed related activities including exercises, summarising, additional information search, group and paired discussion, oral presentation, and paper-based writing. After each lesson, the students were required to e-mail the instructor reflecting on their learning experiences. They needed to look back on what they had learned, what they found easy, what difficulties or problems they experienced and the strategies they used to cope with them, and their feelings towards the lesson. Students' 450 e-mail logs were read and qualitatively analysed. The main emphasis was placed on students' learning reflection rather than on the accuracy of their work. Thus, students' reflections (thoughtful ideas), opinions (beliefs), and expression (showing of feeling) were observed (Bella, 2005).

At the end of the semester 17 students were selected based on their informative e-mail learning logs. Then these selected students were interviewed in groups. The interview questions aimed to elicit the students' perceptions of and attitudes towards learning reflection through e-mail logs. Students were asked to respond if they knew what learning reflection was, whether it was important to reflect on their learning experience, the potential of learning logs in assisting their English learning, their English improvement after keeping e-mail learning logs, and what they had learned from reflection. They were also asked if they liked keeping reflective learning logs and which type of writing they preferred – paper-based or electronic. Finally they were asked if they were going to keep e-mail reflective learning logs in other English classes.

Interview responses were coded in accordance with content analysis and identified to find major issues.

Findings

The findings of the research are reported in three sections: students' reflections on their learning experience, their perceptions of the impact of e-mail learning logs on English language learning, and their attitudes towards the use of e-mail learning logs.

Students' Reflections on Their Learning Experience

What the Students Learned

In their e-mail log entries, students described and reported teaching, learning activities and classroom atmosphere, and reflected on their learning experiences. All students reported that they learned extensively and gained more knowledge of subject matters, sentence structures, and vocabulary from the lessons. They explained that they learned to distinguish facts from opinions; identify the author's purpose, tone, point of view and intended audience; and read, analyse texts and make arguments. They also learned to express their ideas and opinions about the text they had read and shared them with their classmates in group discussion. In doing so, they learned various ideas and opinions from group presentation. Students indicated that searching for information and discussing in groups helped them increase knowledge and apply it to their daily lives. Moreover, many students noted that they learned to use the Cambridge dictionary online when they encountered unfamiliar words. The following quotes are evidence of what the students reported.

> I had to share my opinion about money that my teacher assigned the homework last week in this course. After that I started a new article. This article which I studied was written about the importance of money and happiness in Asia. This week I studied in a group. My friends and I helped to analyze this article. We had to find the argument in paragraphs. I shared my ideas with my friends in my group. Dr. Usa assigned the homework to write the essay of money. I was very excited because I like to write the essay. Because it can improve my writing skill (Molwipa).

> This class we had present about the impact of ASEAN Community. It had 5 topic such as in education, politics, daily life, economic/ business, and ASEAN citizen. Especially how we will prepare of university and students in ASEAN Community. ASEAN Community had benefit for everybody because it can help prepare suitable life in daily life. …. I had more knowledge about ASEAN Community and it could help prepare everything of life in ASEAN Community (Wikanda).

Students reflected on the subject matters that they had learned. For example, they reported that they learned about cultural differences between Italy and England and compared them with Thai culture. One student reflected that expressing her ideas about the text "How we Bully our Migrant Workers" helped her understand the migrants' feelings and their difficult situation. She noted that to make comments about the text that she had read was a very good idea because she could determine the author's purpose, tone, point of view, and intended audience.

Students expressed their thoughts, ideas and opinions about the texts that they had read and positioned themselves as the readers as follows:

> I learned about "Money Matters". Money is important to happiness in Asia. It gives social approval which is important for most people and gives you respect and approval from others. Money help us more opportunity for love permission to get married. Money is important for good education for children. Money is the most important for me. But it cannot buy everything. It can buy some things when we want but for the feelings or friendships money can't buy it (Namthip).

> In scenario 4 I shared my opinion to my friends that I thought if I had to choose I would not keep that job. This is because I had morals in my mind. I didn't want to make troubles to the others. Everybody wants money, but it should be good money that I earn by myself (Molwipa).

Today I studied about money. … Why money is important? I think money is important in my life because nowadays money can buy everything and it was essential in lifestyle. I can discuss with my partner….When the people had money, they can buy the new thing such as new apartment or new car and more happiness. But it was short time. It have compare in the past and present for the people use money and happiness in them life. I must analyze the word to mistake and underline in the sentence. Answer the

questions and analyze from the text. It was difficult because it must use opinion and analyze from the information. Today, I think it was bore because the information was difficult for analyze and I don't understand. So, I think in this class was very bore and rarely happy in this day (Wikanda).

What the Students Found Easy

Some students noted that they found some aspects of the lessons easy – for example, finding main ideas and arguments and distinguishing facts from opinions. One student mentioned that determining the author's purpose, tone, point of view, and intended audience was easy. Another noted that the lesson would be easy if the teacher explained. A few students said that multiple choice and true/false exercises were not too difficult. Some students found that reading the short article on cultural differences between Italy and England was not difficult and they had fun reading and discussing in group. Only one student indicated that reading book reviews was easy. However, many students reported that a video clip about the ASEAN Community was easy to understand. Some students reported that reading "How Green Are You?" was quite easy.

> Last Saturday 9th June 2011, I studied about how to distinguish facts from opinion. It was rather easy if you know meaning of facts and opinions because its are different. So Aj. Usa taught me about meaning of facts and opinion. Fact is information that can be verified by research, observation, experimentation, or experience. Opinion is information that cannot be proved or disproved. After that she taught me about apply the characteristics of facts and opinions. After I studied I known that good opinion should has well supported. If an author presents no reasons or presents illogical or irrelevant reasons, then the opinion is of no value (Santi).

Students' Concerns

Several students reported their concerns about problems and difficulties in reading texts in terms of grammar, unknown words, complex sentences and word order, distinguishing facts from opinions, being critical, sharing their thoughts and opinions, and finding reasons to support their arguments in group discussion. One student reported that text analysis was difficult. Interestingly, another student explained that fact and opinion were quite similar so it was difficult to distinguish one from the other. Another student indicated that it was difficult to be critical when reading if she did not know word meanings.

Some students thought that discussing the ASEAN Community was difficult. One of them explained that the contents of the ASEAN Community were difficult to understand, so she used a dictionary to find word meanings. Some students also found that they did not understand the information about the ASEAN Community while watching the video clip. Thus they watched it several times until they could understand it.

Some students also found that reading "Cultural Differences: England and Italy" was difficult because of unknown words. They solved this problem by using a Cambridge dictionary online and trying to memorise the vocabulary.

Moreover, some students noted that reading and giving a presentation on "How Green Are You?" were difficult. They responded by trying to memorise the content and practise their presentation.

One student noted that it was difficult to understand and determine the author's tone because of unfamiliar words. Another student said that she tackled this problem by reviewing the reading after class.

> And the last time she gave me an exercise about determining an author's purpose, tone point of view, and intended audience. It was rather difficult because I need to understand the meaning of the story, so I use dictionary to help me more understand (Santi).

Many students reported their use of problem-solving strategies such as asking friends for help, guessing word meanings, using an online dictionary, and reviewing what they had learned to overcome their difficulties.

The students not only reported and reflected on their learning experiences, but they also described the class atmosphere. For example:

> Today, before teacher came to teach. In between we wait for the teacher. We talk very loudly. Because we don't know that teachers are going to walk into it. My teacher then punished them by letting them stand to answer questions one by one. If anyone answer the question are correctly the person to get sit down. We stand to learn approximate 1 hour. But it's good. Because it makes them soundless down and are interested in lesson more (Thararut).

It is obvious that the students realised what happened in the classroom and they could improve in the next lessons. They were aware of not only their learning and learning process but also the learning environment.

Students' Feelings towards the Lessons

All students expressed their positive feelings towards the lesson, the instructor and the learning atmosphere. All of them reported that they found the articles interesting, useful, and meaningful to read because they could understand current issues. Many students said that they enjoyed the lessons in spite of some difficulties.

The lesson that the students most enjoyed reading, doing research on and presenting was the one concerning the ASEAN Community, in spite of some difficulties. They noted that this topic was interesting, motivating and meaningful. One student commented that she was interested in finding information about the ASEAN Community and enjoyed listening to group presentation. She could learn more ideas from other students. However, many students were under pressure while they were presenting the results of their research on the ASEAN Community because they worried about their pronunciation. The following quote from a student provides an illustration:

> Today, I learned about The ASEAN Community and we discussed in group. Next time, when we have idea about the mean of ASEAN Community, what country in the ASEAN and why have ASEAN Community. The ASEAN Community is the Association of South East Asian Nations. Which have 10 members of ASEAN are Thailand, Singapore, Malaysia, Viet Nam, Brunei Darussalam, Philippines, Indonesia, Laos, Cambodia, and Myanmar. Now have 3 countries come to be ASEAN is China, South Korea, and Japan. The goal of ASEAN Community is prosperity, People have better life. …This day, I can more understand to ASEAN Community because this story is interesting and have more knowledge for class. Today, I so glad because on next week don't have class (Wikanda).

Some students noted that they enjoyed reading and discussing the text "How Green Are You?" because it was interesting, meaningful and exciting. One student mentioned that she was interested in reading this topic because she wanted to save the world and improve her life.

A number of students also reported that reading the text "Cultural Differences: England vs. Italy" and discussing and comparing with their own culture were interesting, meaningful and useful. However, one student mentioned she was stressed when reading it because of text difficulty.

Some students reported that they found reading book reviews meaningful and useful and they could apply it to their daily lives.

One student noted that learning to determine the author's purpose, tone, point of view and intended audience was useful because she could apply this skill to her outside reading.

Many students enjoyed doing group work and liked the group presentation because they could learn other people's different information and ideas. Some students mentioned they enjoyed group discussion because they could share their ideas and opinions. Interestingly, one student mentioned she liked this course because she had freedom to learn and express her ideas and opinions:

> Dr. Usa assigned to write my opinion about money that I agree or disagree. My attitude in this subject I think, it is the best subject that can develop my English skills. I have a good teacher who

have many experiences. She can teach me to learn in a right way and get a lots of knowledge. If every subjects can be like this I think every students can study well (Molwipa).

Overall, students liked the lessons and found the activities interesting, meaningful and useful in spite of difficulties that they encountered. They perceived that they learned a lot and had positive attitudes towards the course and employed various strategies to handle problems. It is notable that in some e-mail logs, students reported and explained only what they had learned, not reflecting on what they found easy or difficult or on their feelings towards the lessons. However, in their subsequent e-mail logs they were more reflective.

Writing Improvement in Student Logs

It is notable that at the beginning of the course, student learning logs were mainly recounts rather than description or exposition. Students simply reported precisely what they learned in each lesson. In their subsequent e-mail learning logs, however, they wrote longer recounts with more information and they reflected on their learning experiences. Their writing was more communicative in spite of grammatical and spelling mistakes.

Students' Perceptions of E-mail Learning Logs

Seventeen students were asked to reflect on their experiences of using e-mail learning logs to record and think about their learning experiences after each lesson. Their responses were categorised into major issues and summarised as follows.

Students' Understanding of Learning Logs

Students viewed "learning log reflection" as recording what they had learned –actual learning experience along with problems that they had experienced in class. They were able to remember their learning experience and discover problems they encountered while learning. This helped them improve their learning and encouraged them to concentrate more on what the teacher taught. The students also noted that logs gave them an opportunity to practise writing, and in order to write they had to organise their thinking about what they had learned, thus motivating them and improving their future learning. All students perceived an e-mail learning log as a useful tool for recording and reflecting on their learning experiences, giving them an opportunity for self-expression in English, fostering analytical and critical thinking skills, improving writing skills, and providing an interesting and meaningful way of learning English.

Potential Values of Learning Logs

To the Students

Tool for Recording and Reflecting on Learning Experience

Without exception, all students stated that learning logs provided them with an opportunity to recall and organise and record their learning experiences. They reported that when e-mailing logs to the instructor, they could review and remember what they had learned. Then they revisited their logs and found that they encouraged their learning development. In the logs the students also described their learning strategies and the problem-solving strategies they used:

> It helps me recall what I have learned, problems and difficulties and how to solve problems (Sorasak).

> I can come back to read my journal so that I can revise what I have learned (Kittitorn).

Writing Skills and English Learning Development

A number of students noted that e-mail learning logs provided them with an opportunity for English writing practice and increased their confidence and ability in writing in English. One said that in the past she had had to write a draft in Thai and then translate it into English:

> I like it but it increases my responsibility. If writing on paper I write in Thai and translate it into English. In contrast writing in email, I didn't have to write in Thai first but I write in English straight away (Rapiporn).

> I think my writing is improved and I increased my confidence in writing especially grammar. I also develop thinking skills (Namtip).

> It helps me improve writing, organize ideas in writing, develop critical thinking and writing because we recorded what we have learned. Writing logs also encourages my memory and I can review and summarise what I learned and write in the e-mail logs (Molwipa).

Many students indicated that learning logs assisted their English language learning and understanding and encouraged their improvement in English in terms of grammar and vocabulary knowledge.

> I have more opportunities to write and learned more vocabulary. I have to try to think and analyse what I have learned (Maneerat).

> Normally, I don't like reading but when keeping journals I had to reread the texts before writing (Chonticha).

> My English is better. I practice writing and develop skills in expressing opinions (Apisada).

Students' Awareness of Their Learning

Interestingly, some students noted that writing reflective learning logs fostered an awareness of their own learning. It encouraged student concentration on what they had learned – students paid more attention to the lesson because they had to keep journals later. Otherwise, they would not have enough to record in their learning logs. Thus, it can be asserted that learning logs encourage students' thinking about and responsibility for their learning, increasing their self-discipline.

> We paid more attention to the lesson so I can remember what I have learned and recorded it in the journal (Molwipa).

> We paid more attention to the lesson so I can remember what I have learned and recorded it in the journal (Wikanda).

> My learning habits have changed. I am aware of my learning. I can apply it to other courses that I must be aware my own learning (Rapiporn).

Development of Thinking Skills

All students asserted that writing learning logs provided them with freedom in and development of analytical and critical thinking along with problem-solving skills. One student mentioned that learning logs helped her think systematically before writing.

> It helps me recall what I have learned, problems and difficulties and how to solve problems…I like it because I can revise what I have learned and it helps me develop thinking skills. I can come back to read my journal so that I can review what I have learned (Namtip).

> It helps me think systematically before writing and learn more grammar. It can help me improve learning in the next lessons (Santi).

> ….It helps me plan the next lesson because I know my learning. If I find problems in this lesson, I can prepare learning strategies for the next learning (Kittitorn).

Some students indicated that learning logs helped them in planning their learning in the next lesson. One student said that experiencing problems and difficulties encouraged her to try harder. Another student noted that each e-mail log was like her weekly lesson that helped her recall what she had learned. Similarly, another student noted that a learning log was like her personal diary.

When asked if they had learned anything from reflection – in what way they had changed after going through the process of writing learning logs – all students indicated that logs were a reminder of their learning experiences, serving to develop thinking and writing skills. One participant said she developed thinking skills when recalling what she had learned and thinking before writing.

Another student noted that she developed more self-discipline in recording learning experience. She had to analyse what she had learned and organise her thoughts before writing. Another student mentioned she learned more about global issues as well as grammar and vocabulary from her learning logs.

Motivation in Learning

Some students noted that writing learning logs encouraged their motivation to learn and provided an interesting and meaningful way of English learning.

It can be concluded that the students valued logs as a place to record and reflect on their learning experiences. They also perceived that logs promoted their writing and thinking skills, facilitated their learning, and increased their awareness of their learning processes. In addition, they viewed logs as an interesting, motivating and meaningful way of learning.

To the Teacher

All students perceived that learning logs helped the teacher better understand students' thoughts, ideas, problems, concerns, questions, needs and feelings. Some students who were not fond of writing learning logs did agree that it helped them to communicate their thoughts, ideas and feelings with the teacher and ask questions. One student noted that learning logs encouraged the teacher to find new ways to teach students and plan future lessons.

> It helps the teacher to understand the needs and problems and find the ways to teach students and plan future lessons (Sorasak).

> The teacher will be aware of their students e.g. their learning, problems and needs. Therefore the teacher can find the best way to help students (Sopicha).

In sum, students noted that logs offered them a place where they could think about and record their learning experiences. They viewed learning logs as a potential tool to help them develop their writing skills and English learning in general and encourage awareness of learning and development of thinking skills. They agreed that writing learning logs provided them with learning motivation and a channel for them to communicate with the teacher.

Students' Attitudes towards E-mail Learning Logs

When asked if they liked keeping e-mail learning logs, all students reported that they liked it for several reasons. They thought that writing reflective learning logs assisted them in revising their learning experience, developing their thinking and writing skills, and increasing their confidence in writing. They believed that writing logs encouraged self-monitoring of their learning. Many students noted that learning logs increased their responsibilities in learning because they had to pay more attention to the lesson. They needed to memorise what they learned and then record and think about their learning experiences.

> I like it because I enjoy writing and develop thinking skills. When writing I try to think, and reasons to support my ideas. I can apply it to other writing in other courses (Molwipa).

> I like it because I have opportunities to think about learning and write in email logs (Maneerat).

Very interestingly, one student reported that writing learning logs fostered a relationship between the teacher and students.

> Learning logs create relationship between student and the instructor (Apisada).

When asking if they preferred paper-based or electronic logs, more than half of the respondents indicated that they preferred the latter, explaining that this type of learning log was modern, fast and convenient. They could write anytime and anywhere, without the pressure of teacher feedback, and the teacher could read at her convenience. One student gave the reason for her preference for writing electronically as not needing to write a draft on paper.

> I prefer e-mail logs because it is modern. If writing on paper, I worry about teacher corrective feedback (Rapiporn).

> I like e-mail based because the instructor can read at anytime and it is convenient

> I don't need to worry about hand it to the teacher directly (Tararat).

> I like e-mail-based journal because it's more convenient and fast. I can write it anytime and anywhere. If writing on paper we have to hand in at the teacher office. However, I'd like the teacher to give corrective feedback (Nattarika).

However, those (6) students who preferred paper-based learning logs explained that they needed teacher corrective feedback. One student said that she preferred paper-based logs because she had limited Internet access.

> I like paper-based because I'd like the corrective feedback from the teacher (Sorasak).

All students indicated that they would continue writing learning logs in other courses. However, they would prefer writing on paper because they would write only for themselves. They thought that doing this would further improve their writing skills.

It can be concluded that students had positive attitudes towards reflective learning logs because of their perceptions of their potential value in enhancing their English language learning.

Discussion and Conclusion

The results of this study indicate that learning logs encourage students to report and reflect on their learning experience in each lesson. All students reported their increased knowledge of subject matter, grammar and vocabulary from the texts selected by the teacher and from information obtained from the Internet, group discussion, and group presentation.

Student feedback indicated active involvement in learning and the opportunity and freedom for self-reflection and self-expression as asserted by Hiemstra (2001); Moon (2003); Miller (2007); **Moore and others (2010)**.

Not many students reported what they found easy in each lesson. They needed the teacher's explicit teaching and explanation to aid their understanding. In each lesson, before the students were allowed to do tasks, there was a discussion, based on students' prior knowledge of the topic, to prepare them for the reading. As they read, the students were assigned to do a number of related activities that encouraged them to express their understanding. Finally, the students were required to do additional extended activities such as searching for further information, discussing in groups, writing to express ideas and opinions, analysing situations and expressing ideas and opinions.

Several students expressed their concerns about difficulties in grammar, vocabulary, complex sentences and word order. Their concerns also involved distinguishing facts from opinions; determining the author's purpose, tone, point of view and intended audience; analysing texts, reading critically; sharing and expressing their ideas and opinions; and presenting researched information to the class. In order to address such problems, the students employed various strategies including guessing word meanings, using an online dictionary, asking classmates, repeating the activities, and memorising what they had learned. Students' awareness of their deficiencies in vocabulary, grammar, the ability to distinguish facts from opinions, critical and analytical skills, and making arguments can lead them to monitor the process of their own learning. Such awareness enables them to develop metacognitive skills – self-awareness, self-assessment and self-monitoring of learning. These findings are in accordance with Mojica's (2010) research results and Moon's (2003) assertion.

In spite of problems that the students experienced, most enjoyed the course. Their favourite topic was the ASEAN Community. For this topic I did not select and prepare the text for the students to read. Rather, I allowed them to watch a video on You Tube. They enjoyed watching and viewed the video several times for their better understanding on their own time. They summarised what they learned about the ASEAN Community and then spent time searching for more information, coming back to class to share the information in their group, discuss it and prepare a presentation. Many students noted that they enjoyed reading, searching for, sharing and presenting the information about the ASEAN Community, as this topic is an important one addressed by all educational institutions and other sectors in Thailand. Because the ASEAN Community will have an impact on the economy, business, politics, education, arts, culture and tourism, requiring students to learn about it makes them more aware of its impact. With this awareness, they can be better equipped to effectively participate in the Community.

In order to record their learning experiences, students develop their understanding of various topics, understanding associated with a deep approach to learning which can help construct new knowledge (Moon, 2003: online). They also saw that learning logs encouraged their active involvement in the learning process and awareness of their own learning processes. Students had freedom to express their thoughts, ideas, opinions, questions and concerns, thus developing their metacognition: self-awareness, self-assessment and self-monitoring of learning. They developed thinking skills – critical thinking, creative thinking, and problem-solving. These findings correspond with Hiemstra (2001), Moon (2003), Miller (2007), Moore and others (2010). In addition, writing a learning log after each lesson helped increase student writing development and English language learning. This finding is consistent with the assertions of Carroll (1994), Myers (2001 cited in Kerka, 2002: online), Shaaban (2001), Moon (2003), Miller (2007), Lew and Schmidt (2007), who claim that learning logs which contain a record of student experiences enhance their writing ability. This finding is also consistent with Chickering and Reisser (1993 cited in Moore & others, 2010: 37) who believe that students can learn better by talking about what they have learned, writing about it, relating it to past experiences and applying it to their daily lives.

According to the students, they needed to understand the text when reading and write from their memory and comprehension. They agreed that learning logs offered them a motivating, interesting and meaningful way of learning English. This meets the previous claims made by Ballantyne and Packer (1995, cited in Bain & others, 1997: online), and Holmes and Moulton (1997 cited in Miller, 2007: 26). Students also viewed learning logs as a tool for them to communicate their thoughts, ideas, feelings, problems, questions and concerns with their teachers. These findings support the claims made by Moon (2003), Miller (2007), Hansen-Thomas (2003), and Mojica (2010).In conclusion, the results of this study indicate that learning logs facilitate student thinking about and recording their learning experience.

Student learning reflection through these logs encourages student self-expression and increases metacognitive skills of awareness of their learning, self-assessment and self-monitoring, critical thinking, creative thinking and problem-solving. Additionally, learning logs assist students to improve their writing skills and develop English language learning. They provide motivating, interesting and meaningful ways of English learning and an effective channel for the students to communicate their ideas, thoughts, feelings, problems, questions and concerns with the teacher. This research has implications for both teaching and learning English in EFL contexts and for the notion of a learner-centred approach. The students play an important role in learning and are aware it, thus becoming autonomous learners. The teacher will be aware of student voices and will be able to adjust his or her teaching and learning activities to suit student needs.

The results of this research are important for my teaching and that of other teachers, as well as students who can be regarded as "active learnrs". The findings provide me with insights into my students' thoughts on their learning experiences – their ideas, concerns, and attitudes towards the lessons and the entire course. This can help me improve my teaching and plan future teaching to suit student needs. These findings also have an implication for all teachers and especially EFL students who might be reticent or less confident, encouraging them to express their ideas only between themselves and the instructor. All students develop metacognitive skills as they are encouraged to actively engage in the learning process. Reflective learning logs truly support the notion of "active learners". The skills involved are vital for students' academic needs and beyond.

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