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An EMI Pedagogy That Facilitates Students' Learning

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Abstract

In recent decades, increasing numbers of EMI (English as Medium of Instructions) courses have been added to university course offerings in countries where English is not the first language, as a way of supporting university internalization and addressing the global status of English. However, some studies argue that EMI courses might affect the overall learning of course content because of students' poor lecture comprehension and passive engagement in class. In order to facilitate student engagement and improve learning experiences in EMI courses, the author introduces a pedagogical method that would facilitate students' overall learning in her EMI course. Based on students' overall feedback, the author confirms that her pedagogy is an effective method that improves lecture comprehension, encourages more class engagement, and promotes collaborative learning. Finally, the author recommends that other instructors apply this pedagogy to their EMI classes for better learning outcomes.

Keywords: pedagogy, English as medium of instruction, effective teaching, active learning, computer programming, collaborative learning

1. Introduction

EMI (English as Medium of Instruction) university courses are offered in countries where the English is not the primary language. In order to support university internalization and to address the global status of English in academia, more countries have started to offer EMI courses. According to Ferguson (2007) and Crystal (2012), universities in Europe have started to use English in their classes at an increasing rate. Similarly, in order to improve university internalization, the Taiwanese government encourages universities to offer EMI courses. According to Lin (2010), the number of EMI courses offered from all universities at Taiwan has risen from 2,013 to 4,099 within 5 years. But can these EMI courses improve students' English ability? Would students with inadequate English listening and speaking skills in Taiwan be well-prepared for these EMI courses? What kinds of teaching strategies should be adapted for greater learning satisfaction in EMI courses in Taiwan?

Because of growing interest and positive attitudes toward EMI courses, some scholars have examined student and faculty views of EMI courses. Some studies (Byun et al., 2011; Gerber, Engelbrecht, Harding, & Rogan, 2005; Li, Leung, & Kember, 2001) analyze students' perceptions of performance in EMI courses in higher education. Other scholars examine the perspectives of instructors (Yeh, 2013) and students (Chang, 2010; Huang, 2009; Tzou, 2014; Wu, 2006; Yeh, 2014) in learning experiences, perceptions of learning, and learning behaviors. Moreover, other studies (Ariffin & Husin, 2011; Flowerdew, Miller, & Li, 2000; Taha, 2008; Vinke, Snippe, & Jochems, 1998; Wilkinson, 2005; Yeh, 2013) share their EMI teaching experiences, using practices such as adjusting speech rate, using simple English terms, utilizing additional support or visual aids, encouraging in-class discussion, applying code-switching to Chinese, and constantly checking students' understanding.

The current studies mentioned above employ either qualitative research or surveys to collect instructors and students' experiences and views in EMI courses. However, none of these studies focuses on sharing an effective pedagogical method to facilitate students' overall learning in EMI courses. More specifically, most of these studies only explain the class settings (e.g., the number of students in the class, the durations of the class, the class names, etc.), and do not provide any detailed suggestions on how the EMI course should be conducted and taught. Thus, even though these studies illustrate extensive discussions about students' and instructors' experiences and general attitudes towards EMI courses, other instructors still likely will not know how to apply

these teaching strategies in their EMI classes.

As a result, the above studies have motivated the author to run a trial and share her pedagogical method on her "Website Production" class, an undergraduate elective EMI course in a Taiwanese university that covers website design, web server programming, database language, and web styling language. According to Yeh (2014), it may be valuable to hold pedagogy courses or workshops where EMI instructors can share and discuss their teaching experiences and strategies for better learning satisfaction across the board. Thus, the objective of this paper is to present a pedagogical method for an EMI course, where the aim is to improve students' overall learning experiences with greater class engagement. In this paper, the author first discusses her teaching strategies in EMI courses, then reports the results obtained from her students, and finally demonstrates that her pedagogy can improve lecture comprehension, promote collaborative learning, and increase class engagement. The contribution of this paper is that the author shares her effective pedagogical method for her EMI course with the goal of encouraging other instructors to apply the same teaching pedagogy to their EMI classes and thus achieve better learning outcomes.

The results of the paper are structured as follows. In Section 2, the author describes her course design and pedagogy, followed by methodology in Section 3. After that, the author shows her results in Section 4. In Section 5, the author describes her teaching suggestions & discussion. Finally, the author presents her conclusion and future work in Section 6.

2. The Website Production Course Design and Pedagogy

The Website Production course is an 18-week class that meets two times a week for 1.5 hours a day. The course is an elective class for undergraduate students. There are four important goals for students in this class: a) Obtain programming concepts, b) Participate in in-class programming activities in a group, c) Accomplish programming assignments alone at home, and d) Present a final group project to the class. The instructor and teaching assistants act as moderators during in-class activities, and provide help if needed.

Based on the instructor's past experiences in EMI courses, some students with insufficient English proficiency tend to lose attention easily, and prefer to do other activities instead (e.g. sleep, surf the internet, text or chat with friends). In addition, some past students have stated that it was difficult to acquire programming concepts without any hands-on activities. As a result, the instructor attended several pedagogy-related workshops and international conferences to collect more teaching experiences, and ran several experiments before she developed her current pedagogy method for this class. The instructor figured out that adding weekly in-class activities for her class could further improve students' lecture comprehension and collaborative learning. Students are required to work in groups, discuss their answers with partners in either English or Chinese, and answer questions together for every in-class activity. In addition, during the in-class activities, students with insufficient English proficiency can catch up on lecture materials with their lab partners, and can feel more accomplished since they are not falling behind. Then, after obtaining course concepts from these lectures and in-class activities, students would feel comfortable enough to accomplish their programming assignments at home. Lastly, after the students have completed all the programming assignments and in-class activities, they are required to work on their final projects in a group so that they can gain more collaborative skills.

2.1 Obtain Programming Concepts

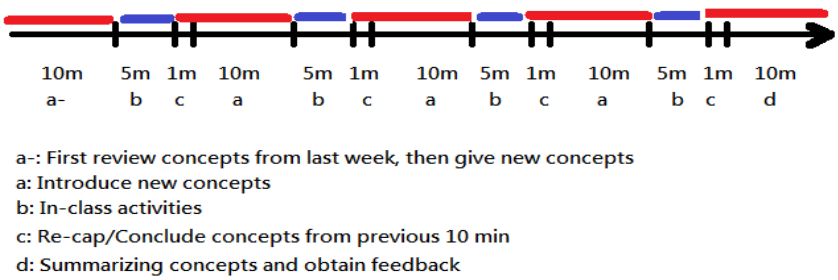

Figure 1. Time and motion analysis of 1st lecture

In the first lecture of the week, the instructor focuses on introducing the programming concepts. According to Yeh (2013), students can better comprehend the class material if the EMI instructor slows down his or her presentation speed. In addition, other scholars (Chuang, 2014, 2015a, 2015b; Tzou, 2014) believe that

immediately obtaining students' feedback gives the instructor a better snapshot of the current understanding of the class; he or she can then adjust the lectures accordingly. Thus, in the Website Production class, the instructor combines all these ideas by introducing the class concepts at a slow pace and obtaining students' feedback right after each lecture session. Moreover, the instructor applies code-switching to Chinese for summarizing important concepts, key terms, and questions. Figure 1 shows the detailed breakdown for the first lecture of the week. In this figure, the red lines indicate the lecturing intervals and the blue lines indicate the in-class activity intervals. In addition, students are allowed to communicate in either Chinese or English during the in-class activity intervals (blue lines). There are five different types of intervals, with explanations below:

· a-: review and lecture session. In this session, the instructor spends about 2-3 minutes recapping the concepts introduced last week, then introduces new concepts for the next 7-8 minutes.

· a: lecture session. In this session, the instructor spends about 10 minutes introducing new concepts.

· b: discussion session. After the instructor finishes her lecture session (a- or a session), she assigns one or two questions whose answers involve summarizing the concepts from her previous lecture session. The students have to form a group and discuss the questions together for the next 5 minutes.

· c: answer session. In this session, the instructor randomly asks students to present their answers, and corrects them if needed. If students choose to state their answers in Chinese, the instructor restates the answers in English to make sure no one has any comprehension problems. In addition, the instructor might re-introduce the concepts if she feels that most of the students did not correctly understand the concepts from the previous lecture session.

· d: summary session. In this session, the instructor spends about 5 minutes summarizing all the concepts that she had introduced in the current class, and then leaves the final 5 minutes to obtain students' feedback.

There are some important remarks that must be addressed. First, introducing class concepts slowly gives students more time to translate and comprehend the lecture content. Moreover, the instructor employs teaching aids such as blackboards, PowerPoint presentations, lecture handouts, and videos to facilitate students' understanding of programming concepts. In addition, the instructor watches students' faces to gauge their reactions, and adjusts her speech accordingly. For example, when she sees her students listen with puzzled expressions, she repeats the same sentence more slowly so that they can better comprehend the class material.

Next, during the lecture session, the instructor applies code-switching to Chinese for important key terms that she suspects her students might not know in Chinese. In this way, the instructor can double-check that students all understand the correct meaning of the important terms before she moves on to the next concept. Moreover, using the code-switching strategy is a great way to retain attention in the class, and the students realize that the key terms their instructor made a point of repeating in Chinese are the important words for the concepts.

According to Vygotsky (1980), social interaction is essential for students to develop cognition. Therefore, in these discussion sessions (session c from Figure 1), the instructors asks students to use lecture slides or the textbook to search and discuss the programming concepts with their partners. Students with insufficient English proficiency can then develop cognition with their partners during the discussion sessions. In addition, allowing students to discuss previously learned information and discover the correct answers covers the first category (Remember) and second category (Understand) from Bloom's revised taxonomy of the cognitive domain (Krathwohl, 2002). In addition, during the discussion sessions, the instructor walks to each group to obtain a snapshot of their current understanding of the class. If the instructor sees that none of her students can get the correct answers to the assigned questions, she adjusts accordingly, perhaps re-introducing the class concepts in the next lecture session, translating the discussion questions into Chinese to confirm that everyone can understand them, and having students redo the discussion questions.

2.2 Participate in-class Programming Activities in a Group

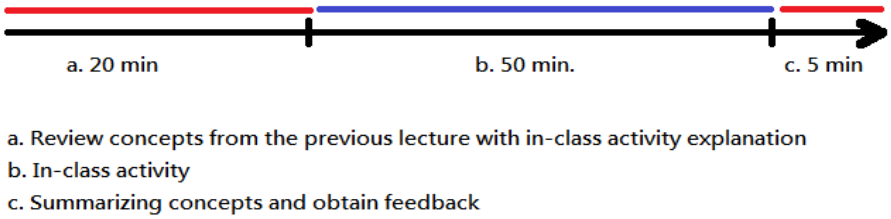

Figure 2. Time and motion analysis of 2nd lecture

In the second lecture of the week, all the students have to participate in in-class group programming activities. According to some studies (Mok, 2014; Nagappan et al., 2003; Williams, Kessler, Cunningham, & Jeffries, 2000), pair programming is an effective way for the beginner to learn programming. Because of this fact, the instructor asks her students to pair up and accomplish in-class programming activities together. Figure 2 shows the detailed breakdown of time for the second lecture of the week. The red lines from this figure indicate the lecturing intervals, and the blue line indicates the in-class programming activities. Students can communicate in either Chinese or English during the in-class programming activities (blue line). There are three types of intervals, with explanations below:

· a: lecture session. In this session, the instructor spends about 2 minutes recapping the concepts introduced in the previous lecture, then introduces necessary programming concepts that the students should know for the in-class programming activities in the next 18 minutes. The instructor also explains to students how they should do these in-class activities—giving hints, explaining activity questions in detail, or showing them what kinds of output she expects to see.

· b: in-class programming activities session. In this session, students have to pair up with a classmate and work on the programming questions together in the next 50 minutes.

· c: summary session. In this session, the instructor summarizes the concepts or key points that her students ought to be learning from the in-class programming activities.

Again, some important points should be discussed. First of all, having a short lecture session in the beginning of the session allows the instructor to do some program demos so that her students can better understand the in-class programming activities. These demos could include writing actual program codes, compiling codes, demonstrating expected errors, debugging errors, executing codes, and displaying final results. The instructor believes that these demos facilitate student comprehension of programming.

In addition, students with insufficient English proficiency can use these in-class programming activities (session b) to catch up and clarify their programming concepts via their partners or the instructor. Similarly, the instructor visits every group to check on students' coding progress, and makes activity adjustments if needed. If the instructor sees that none of the groups can finish the coding activities within 50 minutes, she may cut down the in-class requirements and ask students to accomplish the rest of the activities at home. The instructor can use these findings from the activities as a basis for further in-class programming activities. In the cognitive domain, guiding students to reach to finish these in-class programming activities covers the second category (Understand) from Bloom's revised taxonomy (Krathwohl, 2002).

2.3 Accomplish Programming Assignments Alone at Home

The main purpose of the programming assignments is to enable students to review the PHP programming concepts from the lecture and in-class activities, compare and contrast between different keywords, and build their own website applications. Recall that during the in-class programming activities, students are allowed to discuss programming concepts with their partners. However, if students are still working together for the program-writing assignments, it might create a "free rider" problem in which some students rely heavily on others and contribute little. In order to avoid such problems, the instructor asks students to complete programming assignments individually. Students will have chances to recap the programming concepts that they learn from the previous lecture and in-class programming activities, and to develop their coding abilities. These processes cover first category (Remember), second category (Understand), and fourth category (Analyze) from Bloom's revised taxonomy (Krathwohl, 2002).

For example, the instructor assigns the following questions to the in-class programming activities:

A1. Insert two student records in the Student MySQL database table, using PHP and MySQL object-oriented methods. Once you are done, show all the records from the Student table.

A2. Now change the two records that you just inserted, and display the current Student table.

A3. Now delete one student record, and display the final Student table.

An example of a program-writing assignment would be:

P1. Build a website with "Add an account", "Edit an account", and "Delete an account" buttons on the home page. Once the student clicks on the "Add an account" button, he/she can insert his/her personal information, and hit enter to create a new account. Once the student clicks on "Edit an account", the system will first retrieve the student's account using the provided student ID, and then update the account accordingly. Similarly, when the student clicks on the "Delete an account", the website should delete the account using the provided student ID.

From the above example, it's obvious that the questions from in-class programming activities and programming assignments are related to each other, and the programming assignments are essentially an expanded version of the in-class programming activities. In addition, since the questions from the in-class programming activities are much simpler and more conceptual than the programming assignments, students can spend more time discussing the programming concepts with their partners during the in-class programming activities. The instructor believes that after students complete these in-class programming activities, they should not have any problem doing programming assignments at home.

After students submit their programming assignments, the instructor and teaching assistants check for plagiarized code, and give zero scores to students that have identical code. The instructor warns the students who have been caught plagiarizing for the first time, and reports them to the department chair if they are caught a second time. The instructor believes that this is an effective way for students to realize the seriousness of plagiarism.

2.4 Presenting Final Group Project to the Class

For the final group project, students are expected to complete and present a project in the last week of the class. The final group project covers all the programming concepts that students have learned from lectures, in-class activities, and programming assignments. Since there is no final exam for the class, the final project can be considered a way of testing students' overall learning for the entire class. For the final group project, the instructor divides students into groups of three or four. The instructor first spends about nine weeks getting to know her students, observing how they interact during in-class activities, how they answer questions, and how they make out on midterm grades. When she creates the groups, she makes sure that high-performing students are evenly distributed across groups rather than clustered together. Rather than always pairing up with their friends, students have more chances to work on projects and acquire more programming experiences from other classmates.

Once the group member assignments are set, the instructor explains the project topic to the students. Unlike the case of the programming assignments, the instructor does not provide step-by-step instructions telling students how to complete the final project; rather, she informs them about the project goals and expectations, and asks them to complete the project using their own creativity. For example, the instructor may assign a "Shopping Cart" for the final project that requires students to complete the task using PHP and MySQL languages with insert/edit/delete features for buyers and sellers. In addition, the students can get extra credit if they demonstrate advanced skills, or incorporate features that the instructor never taught in the class. It is hoped that in this way, the students will devote more time to working on their final projects.

After the students complete their final projects, they have to present their projects in the last week of the class. Students can choose to present either in Chinese or in English, and they will earn extra credit if they choose to present in English. The instructor thinks that this will encourage more students to present their work in English, giving them more chances to practice their English communication skills. Every group has up to 15 minutes to introduce their projects, demonstrate them, and finally answer questions. In addition, the instructor allows each team member to rate his/her group members, as well as allowing every group to rate other groups. The final project grades are calculated as follows: a) the instructor's grades contribute 70%, b) the average of other groups' grades contributes 10%, and c) the average of group members' grades contributes 20%. The instructor has noticed that in her previous classes, students pay little attention to other groups' presentations. Therefore, the aim of the grading system is to encourage students to pay more attention and respect to other groups, thus promoting better in-class engagement. Furthermore, by asking every team member to rate his/her team members, the

instructor can have a better snapshot of group work and team roles for each group.

Right after the final project presentation, all of the groups are expected to submit a final group report that includes the following components: a) the purpose of the report, b) implementation of the system/work, c) demonstration of the system (e.g., explaining what has been done, including screenshots), d) what students have learned from this class (e.g., obstacles students faced and how they solved them), and e) conclusion. The instructor pays particular attention to the fourth section, so that she can learn more about how students face the obstacles, how problems are solved, how students collaborate, and what students have learned from completing the project. Having students do a final project covers the second category (Understand), third category (Apply), and fourth category (Analyze) from Bloom's revised taxonomy (Krathwohl, 2002).

3. Method

The instructor has taught EMI courses in the department of Information Management at a public university in Taiwan for the last three years. In order to help her EMI students achieve better learning outcomes, the instructor employs an EMI pedagogy that combines lectures, in-class activities, a final group presentation, and after-school homework. The detailed implementations of the class are described in Section 2.

3.1 Participants

The participants in this study comprise 42 undergraduate students (3 seniors, 15 juniors, and 24 sophomores) from the Website Production class in the department of Information Management at a public Taiwanese university. The course is an elective class for undergraduate students, and there were 26 males and 16 females students enrolled in this class. All of the participants were Taiwanese, and most of the students were Information Management majors (28 Information Management majors, 11 Computer Science and Information Engineering majors, 1 Psychology major, 1 Economics major, and 1 Communication Engineering major). Even though there were 42 students in the class, 5 of them were absent or chose not to participate at the time when we distributed the questionnaires. Most of the students began their college studies right after they graduated from high school. A majority of the students have very limited experience in English listening prior to taking this class because English listening ability is neglected in most high schools in Taiwan.

3.2 Data Collection

The whole pedagogical method was implemented and conducted on a weekly basis over 18 weeks. On the last day of the course, the instructor asked her students to participate in a voluntary survey to evaluate her overall teaching effectiveness in EMI. The survey contains various questions that evaluate course content, teaching methods, teaching attitudes, fairness in grading, degree of in-class interaction and engagement, degree of learning motivation, and degree of overall learning. All of the survey questions are on a 5-point Likert scale, with the following five options: a) highly disagree, b) agree, c) neutral, d) agree, and e) highly agree. Table 1 and Figure 1 show the survey questions with the statistics obtained from the students, combining point 1 (strongly disagree) and point 2 (disagree) in one column, point 3 (neutral) in one column, and point 4 (agree) and point 5 (strongly agree) in one column.

4. Results

The survey results show that most students had positive attitudes toward the proposed pedagogy. The survey indicated that most students (average of 4.43) believed the course contained substantial content, and the content was well-prepared/organized (average of 4.22). In addition, students felt that the instructor used clear and structured teaching methods (average of 4.22), adjusted the course load appropriately based on students' learning reactions (average of 4.41), and provided appropriate teaching aids (average of 4.27) (e.g., using blackboard, PowerPoint, computer lab, etc.). Moreover, students also believed that the instructor promoted their critical thinking (average of 4.14) and learning interests (average of 4.24), was enthusiastic about teaching (average of 4.51), and provided constructive feedback (average of 4.49). The results indicated that the course can help students to gain continuous learning abilities (average of 4.32), and that students are satisfied with the overall learning effectiveness (average of 4.32).

In addition, about 73% of students believed that code-switching is an effective way to achieve better lecture comprehension (average of 4.19), and to improve English listening skills (average of 3.97). Students believed that the instructor's speech level was acceptable (average of 4.11), and agreed that the in-class activities and programming assignments were useful and promoted collaborative learning (average of 4.14). However, only 62% of students agreed that the English terms used in the class were simple enough (average of 3.76).

Some of the students' comments and suggestions were:

- Instructor uses clear presentation, provides flexible adjustment for the course load, assigns interactive in-class activities to facilitate overall learning.
- Instructor arranges appropriate discussions and in-class activities, and I would suggest other courses adopt the same teaching strategy as well.
- In-class activities and discussions are helpful to understand programming concepts.
- I truly learn a lot of English keywords and subject knowledge from this course. Thank you!
- I like the in-class activities, and would like to suggest the instructor keep these activities for future courses.
- This course is a great course to learn English.

Table 1. Student survey response

Questions	Agree(%)	Neutral(%)	Disagree(%)	Average
Course contains substantial content	97	3	0	4.43243
Course contains well-prepared and organized materials	84	14	3	4.21622
Instructor uses clear and structured teaching methods	76	24	0	4.21622
Instructor provides multiple teaching methods	81	16	3	4.27027
Instructor encourages in-class interaction (e.g., discussion/activities)	86	14	0	4.40541
Instructor promotes students' critical thinking	78	22	0	4.13514
Instructor promotes students' learning interests	84	16	0	4.24324
Instructor is responsible and enthusiastic about her teaching	97	3	0	4.51351
Instructor always provides constructive feedback	89	11	0	4.48649
Students gain continuous learning abilities	89	11	0	4.32432
Students are satisfied with the overall learning satisfaction	95	5	0	4.32432
Instructor provides flexible course adjustment	86	14	0	4.40541
Students' English listening skills have improved after taking this class	70	30	0	3.97297
Instructor uses simple English terms for easier comprehension	62	38	0	3.75676
Instructor uses code switching for greater comprehension	73	27	0	4.18919
Instructor's speech level is acceptable	84	16	0	4.10811
Discussions/activities are useful for EMI course	78	22	0	4.13514

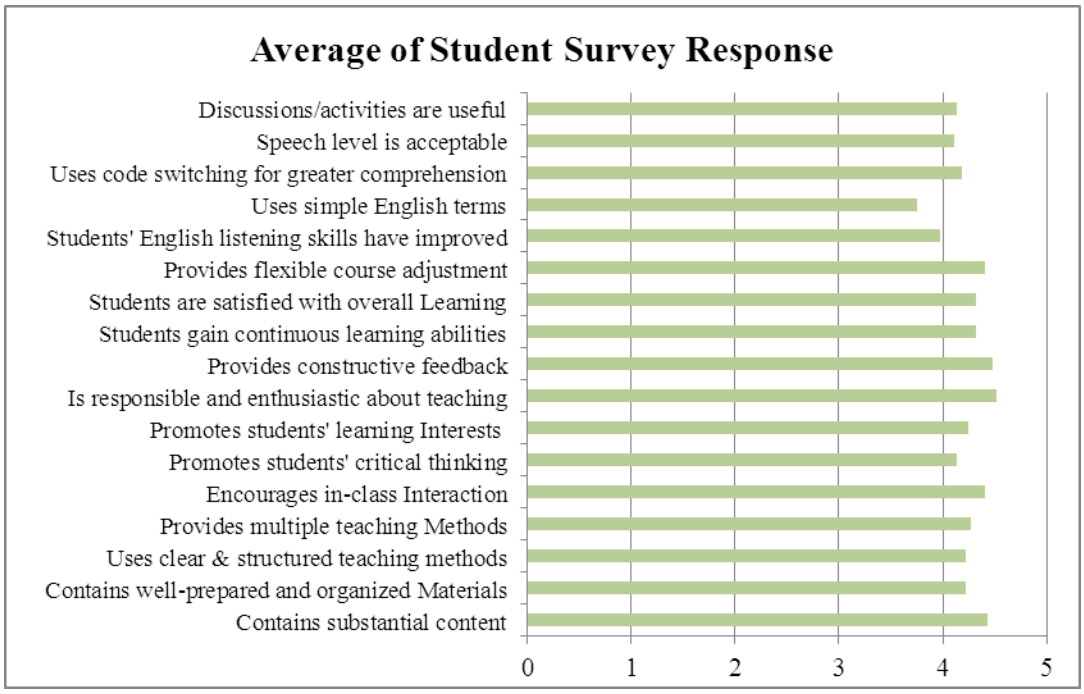

Figure 1. Average of student survey response

5. Discussion

In recent years, various countries including Taiwan have started to offer EMI courses to support university internalization, as well as address the global status of English in academia. Because of this fact, various scholars have conducted qualitative and quantitative research to investigate both instructors' and students' perceptions of EMI courses. However, none of the above studies focuses on sharing detailed pedagogical methods or teaching strategies that other instructors can adapt to their EMI courses to achieve greater learning satisfaction. Therefore, the main goal of this study is to first present an EMI pedagogy, followed by an evaluation to test the effectiveness of this pedagogy in the EMI course.

Based on the above survey results and feedback, there are some suggestions that need to be mentioned. First, the author believes that reducing lecturing speed is an effective strategy to improve learning satisfaction, as well as reducing the students' fear around an EMI course. Most of the students have trouble understanding the lecture content because of their lack of listening skills in English. Students may get lost and lose learning motivation if the instructor presents the lecture content at a rapid clip. The survey confirms that the majority of the students get better lecture comprehension when the instructor presented lectures at a slow pace. The author also suggests that other EMI instructors can first present the lecture materials, then obtain students' feedback and adjust the presentation speed accordingly.

Second, the students' affirmative survey responses indicate that the proposed in-class activities/discussions are the great ways to encourage in-class engagement, promote collaborative learning, and help students with insufficient English to catch up on the lecture materials. In addition, the instructor can obtain immediate learning feedback during activities/discussions, and can make course adjustments accordingly. Currently, the students are allowed to form groups with whomever they are comfortable working with. However, in the future, the author plans to assign students randomly to groups for in-class discussions/activities, so that students can have more chances to obtain programming experiences with more classmates.

Third, Wilkinson (2005) states that code-switching can be helpful and effective in the teaching process. Similarly, the current research also indicates that code-switching to Chinese is an effective strategy for an EMI course, since the instructor can use this strategy to explain important key terms, keywords, concepts, and questions. Students can also make sure they get the correct meaning of the important key terms/concepts before they move on to the next topic. In addition, the instructor could also use this strategy to notify students of the important parts of the lecture for better exam preparation.

Fourth, the instructor also discovered that simplifying lecture content with simple vocabulary terms can improve

students' lecture comprehension, preventing them from getting lost and losing learning motivation. The instructor also discovered that obtaining students' feedback at the end of each class, such as asking them to list the terms/keywords that they did not understand from the day's lecture, allowed her to identify the vocabulary that her students did not recognize. However, the survey response indicates that some students are still having difficulty with the vocabulary terms presented in the class. One possible reason for this gap might be misunderstandings of the instructor's pronunciation; mispronounced words could result in bad lecture comprehension. Therefore, in the future, the instructor plans to adjust the strategy, writing down the important key terms and concepts on the blackboard to make sure students understand the true meanings of these important key words or concepts.

Fifth, because of the affirmative student feedback, the author plans to implement the same group-assignment strategy for the final group project in her future classes. According to Taneja (2014), the goal of group work is to allow students to gain experiences working with other people, a situation that they can expect to face when they work in later life. Similarly, the author also assigns students to groups so that they can gain more group experiences and learn programming skills from other classmates. Requiring students to work on their final projects in a group also promotes collaborative learning. In the survey response, students indicate that they are happy about this group assignment, that they truly gained different programming experiences from other classmates, and made good friends with their group partners because of this project.

Sixth, the proposed grading policy for the final group project was calculated as: a) instructor's grades contribute 70%, b) average of other groups' grades contributes 10%, and c) average of group members' grades contributes 20%. The instructor first noticed that when each group evaluates other groups, students pay more attention and show more respect to other groups' presentations. In addition, having each team member evaluate his/her lab partners allows the instructor to have a better view of each team's group collaboration and team roles, such as knowing how the leader divides and assigns tasks to each team member, how team members communicate with other members, who did the most or least work, etc. Based on students' responses, they believe that this is a fair policy for the final project grade, and that students who do more work would definitely deserve higher grades. In the future, the instructor also plans to try Kinser's scoring system (Kinser, 2007), which calculates fair individual grades based on each member's input and the group score, and obtains feedback from the students.

6. Conclusion

This paper describes a pedagogical method in which the instructor presents lecture content at a slow pace, holds several engaging learning activities, employs code-switching to Chinese for important key terms/concepts/questions, simplifies lecture content with simple vocabulary terms, and assigns final group projects in her EMI class. First, most students believe that they get better lecture comprehension when the instructor applies a slower speech rate, code-switching to Chinese, and lecture content with simple vocabulary terms. In addition, students believe that in-class activities/discussions and final group projects encourage in-class engagement and collaborative learning. Students can then actively participate in class, have better understanding of the lecture content, and build up more confidence in the subject matter. The survey responses have shown that most students in the Website Production class believe that this pedagogy was an effective method to improve lecture comprehension, encourage more in-class engagement, and promote collaborative learning in the EMI course. The author finally concludes that her pedagogy in the EMI course is an effective method, and recommends that other instructors consider applying this pedagogical method to their EMI classes.

In the future, the author plans to further adjust her teaching method, writing the important key terms on the blackboard when she first introduces them to avoid mispronunciation and misunderstanding problems. In addition, the author plans to assign students into random groups for in-class discussions/activities so that they can have more chances to obtain programming exercises with other classmates. The instructor also plans to try Kinser's scoring system to calculate fair individual grades based on each member's input and the group score. Lastly, the instructor plans to employ a qualitative measure to further obtain students' perspectives and measure their learning satisfaction.

Acknowledgments

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