# Effectiveness of a multimodal approach In enhancing the English reading ability of EFL students

# ประสิทธิผลของการใช้การสอนแบบสื่อประสมที่มีต่อความสามารถด้านการอ่านของนิสิตที่เรียนภาษาอังกฤษเป็นภาษาต่างประเทศ

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**บทคัดย่อ**

การวิจัยนี้มีวัตถุประสงค์เพื่อศึกษาประสิทธิผลของการสอนแบบสื่อประสมที่มีต่อความสามารถด้านการอ่านในชั้นเรียนภาษาอังกฤษเป็นภาษาต่างประเทศและทัศนคติที่มีต่อการสอน กลุ่มตัวอย่างเป็นนิสิตวิชาเอกวิทยาศาสตร์ จำนวน 30 คน แบ่งเป็น 2 กลุ่มคือกลุ่มทดลองและกลุ่มควบคุม กลุ่มทดลองได้รับการสอนแบบสื่อประสม และกลุ่มควบคุมได้รับการสอนแบบดั้งเดิม เครื่องมือที่ใช้ในการวิจัยได้แก่ แผนการสอน แบบทดสอบการอ่านภาษาอังกฤษ แบบสอบถาม และการสัมภาษณ์ สถิติที่ใช้ในการวิเคราะห์ข้อมูลเชิงปริมาณได้แก่คะแนนเฉลี่ย ค่าเบี่ยงเบนมาตรฐาน

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และสถิติทดสอบที และวิเคราะห์ข้อมูลเชิงคุณภาพโดยใช้การวิเคราะห์เนื้อหา ผลการวิจัยแสดงให้เห็นถึงประสิทธิผลของวิธีการสอนแบบสื่อประสมในการพัฒนาความสามารถการอ่านภาษาอังกฤษของนิสิตที่เรียนภาษาอังกฤษเป็นภาษาต่างประเทศ กล่าวคือความสามารถการอ่านภาษาอังกฤษของนิสิตในกลุ่มทดลองสูงกว่านิสิตในกลุ่มควบคุมอย่างมีนัยสำคัญทางสถิติที่ระดับ .05 นอกจากนี้ยังพบว่านิสิตมีทัศนคติที่ดีต่อกิจกรรมการสอนแบบสื่อประสม ( $\bar{x}$ = 4.28, S.D. = .32)

**คำสำคัญ:** ความสามารถด้านการอ่าน การสอนแบบสื่อประสม นิสิตที่เรียนภาษาอังกฤษเป็นภาษาต่างประเทศ ทัศนคติ การสอนการอ่าน

## Abstract

This research investigated the effectiveness of a multimodal approach in enhancing students' reading ability and their attitudes toward the teaching method. The participants consisted of 30 students majoring in science at a university in Thailand. They were divided into two groups: an experimental group and a control group. The experimental group was taught reading using the multimodal approach while the control group was taught using the traditional method. The research instruments used in this study included lesson plans, a reading test, questionnaires, and an interview. Mean scores, standard deviations, and the t-test analysis were used to analyze the quantitative data, while content analysis was used to analyze the qualitative data. The results

demonstrated the value of applying a multimodal approach to improve EFL students' reading skills. That is, the reading ability of students in the experimental group was found to be significantly higher ($p \leq .05$) than that of students in the control group. In addition, students responded favorably toward the multimodal teaching method ( $\overline{x}$ = 4.28, S.D. = .32).

**Keywords:** Reading ability, a multimodal approach, EFL students, attitudes, teaching reading

## Introduction

It is widely acknowledged that in today's world reading is the most important skill for students learning English as a foreign language (EFL). According to Alderson (2000), the masterly of reading skills can help EFL students not only in English class but also in other contented-based classes where English reading is required. Students acquire needed information through reading different materials such as texts, newspapers, journals, and magazines. In addition, reading ability plays a significant role in English language development. Day and Bamford (1998) assert that reading serves as a fundamental source of vocabulary and grammatical input as well as a means to provide sociocultural information. Reading is also the best model of formal discourse to develop writing skills (Lee & VanPatten, 1995).

However, EFL students face difficulties in English reading. EFL educators have found that EFL students cannot read English texts effectively (Aebersold & Field, 1997). Despite years of instruction and practice in reading, many EFL students have difficulty in making sense of texts they want to read, seem to read considerably more slowly than they read in their first language, and feel less confident about reading in English (Meng, 2009). Some EFL students do not have adequate reading ability; others may have acquired the fundamental reading ability but have never had training or practice in the efficient use of them (Alderson, 2000). These difficulties have resulted in numerous studies investigating the variables that might influence second language reading (e.g. Grabe, 1991; Alderson, 2000; Nation, 2001; Coxhead, 2000).

In Thailand, many studies have shown that most students have poor English reading ability. Thai educators investigated the reading ability of Thai EFL students and found that most Thai university EFL students, especially those who are not English majors, have low to medium English reading proficiency (Anusornorakarn, 2001; Chinwonno, 2001; Rattanawanitpun, 1999). Chaibunruang et al. (1993) found that a large number of students had negative attitudes toward studying English and had problems reading English texts. Liamsakul (1998) pointed out that Thai students had difficulty remembering vocabulary and understanding sentences.

Notably, after the establishment of the Association of South East Asian Nations (ASEAN) Community in 2015, English has become increasingly important for Thai people. According to the ASEAN Charter, Article 34, it is stated that "The working language of ASEAN shall be English" (Association of Southeast Asian Nations, 2008). In addition, professional mobility across ASEAN countries will be encouraged. As a result, there will be an increased competition in professional careers among ASEAN citizens. For better employment opportunities, students need to have additional skills such as English. It is, therefore, crucial for the Thai students to improve their English language, especially reading.

Based on these facts, a remedial or corrective approach to teaching reading in English is necessary. A traditional English reading classroom is based on the single mode of using texts, which poses difficulties to EFL students and cannot capture their attention. It is the teacher's task to engage students in the material. Since modern students have been widely exposed to science and computer technology, teachers can use this to their advantages by creating activities that appeal to students' interests. New findings regarding learning styles, learning strategies, and multiple intelligences help educators to better understand how learners engage with and comprehend information (Jewitt, 2008). Some students find it easier to access information through visual graphics. Some might respond better to

music while others prefer movies. Because of the diversity of learners, many scholars have discussed the benefits of a multimodal approach in the classroom. This study investigated the effectiveness of teaching reading by using a multimodal approach on EFL students.

## Research questions

1. Is the reading ability of EFL students taught by the multimodal approach higher than that of EFL students taught by the traditional method?

2. What are the EFL students' attitudes toward being taught with the multimodal approach?

## The concept of a multimodal approach

In "Contending with Terms," Lauer (2009) writes that "multimodal" was a term coined by members of the New London Group in 2000. These scholars argue that communication is not limited to one mode (such as text) or realized through one medium (such as a webpage or a book). Rather, because of digitalization, all modes can now be realized through a single binary code, and the medium of the screen is becoming the primary way multiple modes can be used to make meaning in dynamic ways. Kress and van Leeuwen (2001) write, "All modes can be operated by one multi-skilled person, using one interface, one mode of physical manipulation, so that he or she can ask, at every point: 'Shall I

express this with sound or music? Shall I say this visually or verbally?'" (p. 2). That is, with the development of technology, people are in the situation where, with the help of computers, they can combine the visual, the verbal and the written, or choose the mode which is most appropriates in a particular situation. Likewise, instructors make choices about when and how to communicate verbally and visually. A multimodal approach is a style of teaching where students learn materials through many different sensory modalities. In other words, the information is presented in multiple modes such as visual and auditory (Chen & Fu, 2003). Multimodality creates meaning through the configurations of image, gesture, gaze, body posture, sound, writing, music, and speech. From a multimodal perspective, image, action, and the like are referred to as modes, as organized sets of semiotic resources for meaning making (Jewett, 2008).

The multimodal approach is strongly supported by many researchers. It is successful because it appeals to all learning styles. It uses most of the students' senses in constructing understanding and supports the three main learning styles: auditory, visual, and kinaesthetics (Barclay, 2006; Kellner, 2008; Kress, 2000; Jewitt, 2008). This supports understanding of a subject, leading to better academic achievement. Students are sure to receive information by one or more modality, through which they learn best. According to Picciano (2009),

the major benefit of this approach is that it allows students to experience learning in the ways that are most comfortable for them while challenging them to experience and learn in other ways as well. Depending upon their dominant learning style, students may self-select the learning object or representation that best suits their modal preference. Using different modes of presentation of information is a very powerful way to facilitate understanding (Morena, 2002). For example, when written words fail to communicate a concept, a visual presentation can remedy the communication problem. Content delivered in a variety of presentation modes has the potential to facilitate learning and improve attention, thus leading to better learning performance, especially for lower-achieving students (Chen & Fu, 2003). Mayer (2008) writes that students retain more information from lessons featuring a combination of words and pictures than from words alone. According to Siegel (2012), a multimodal approach allows at-risk students to "demonstrate knowledge and critical understandings far beyond that which they displayed when language was the sole mode of meaning making and communication" (p. 671). In addition, this approach to teaching engages students in learning. Shah and Freedman (2003) discuss how a multimodal approach maintains students' attention by making the information more attractive and motivating. Fadel (2008) found that

“students engaged in learning that incorporates multimodal designs, on average, outperform students who learn using traditional approaches with single modes” (p. 13).

In a classroom, the instructor who employs a multimodal approach uses a variety of modes of presentation. Some simple examples of employing multimodal approach include using audio enhanced PowerPoint slides, video presentation, interactive graphs and forms, still images, visualized poetry, digital storyboards, process-drama, comic-book creation, and composing Myspace web page composition. In these examples, additional presentations of information accompany the text-based explanations. Lorence (2008) suggests that employing a multimodal approach, instructors should follow certain guidelines: 1) Change the activity every 15 or 20 minutes and change learning modes when necessary. 2) Repeat the lesson in multiple modes to reinforce the learning. 3) Create supplementary activities if necessary, as sometimes students do not understand the content immediately.

The number of studies of a multimodal approach to education is increasing. For example, Sankey, Birch, and Gardiner (2010) studied the impact of multiple representations of content on learning outcomes, including learning performance and engagement. The participants were 60 undergraduate students studying at the University of Southern

Queensland in Australia. The results of the study showed that although multiple representations of content did not lead to discernable improvements in learning performance, students provided positive feedback to multimodal learning elements and reported that these elements helped in terms of their comprehension and retention of the subject matter.

Grounded in multimodal theories of literacy, Kesler (2011) encouraged his pre-service students to think critically and be inventive when they read a text. His purpose was to have the students transform understandings by building connections and mapping one sign system onto another. For example, his students engaged in a book club activity that involved reading historical fiction texts and then responded through a variety of activities such as sketch-to-stretch, stop and jot, two-sided entries, representational sketches, and character web of relationships. The students created digital stories as their final responses to the texts. Kesler (2011) observed that students' multimodal engagement with the text deepened their meaning-making; they also realized multiple layers of literacy.

Callahan and King (2011) investigated two high-school class's creative writing lessons. The students were required to interpret poems using visuals, animations, sound, color, and font in PowerPoint. The researchers realized that three kinds of classroom "remix" (that is, integration) were

related to the exercises. The visual, linguistic and auditory composition elements afforded by Power Point technology were blended to form the composition remix. The teachers and students created a remix of insider and outsider mindsets where students were often positioned as experts in the classroom. The third remix was participation; this challenges the notion of classroom hierarchies, which consist of those who do well and those who do not. Through the three kinds of remixes, students with various talents could be successful in their writing.

Recently, Lee (2014) reported two case studies where students engaged in a series of multimodal English writing tasks, including an online literature circle, five first-person narratives with images, and digital storytelling. The results of the qualitative data analysis revealed that the multimodal learning practices enhanced the two students' motivation and confidence, whereas in the past they had been discouraged by conventional language learning instructions.

In the field of teaching reading, Shepard (2013) investigated a number of approaches currently used to teach reading by a group of English teachers in a Hong Kong primary school. A questionnaire was developed to determine which teaching approach, multimodal or traditional, was being employed more frequently in the classroom, and which was considered by teachers to be more effective for developing

literacy in primary school students. The findings illustrated a clear preference among the teachers for multimodal approaches in reading lessons and a decrease in traditional activities.

From the above discussion, many scholars claim that a multimodal approach can benefit students' learning in many ways. However, the studies of whether a multimodal approach enhances EFL students' reading ability have not been found yet. Thus, the aim of this study was to research that issue.

## Methodology

1. Research design

This study was a pretest-posttest experimental research design investigating the effect of multimodal approach on EFL students' English reading ability. This study combined quantitative and qualitative data collection. The quantitative data consisted of students' pretest and posttest scores from English reading ability test and scores obtained from a questionnaire. The qualitative data included an open-ended part of the questionnaire and the semi-structured interview of the experimental group.

2. Participants

The participants consisted of 30 third-year students majoring in science at a university in Thailand. They were selected via purposive sampling. Participants were chosen based on English instructors' assessment that the participants did not like English reading. In addition, participants completed

questionnaires on English reading. The results showed that their attitudes toward English reading were at an average level (M = 2.77). Therefore, they were ideal candidates to study the effect of a multimodal approach. Although the participants were chosen purposively, they were randomly divided into two groups: an experimental group and a control group.

3. Instruments

Lesson plans, an English reading ability test, a questionnaire, and an interview were used in this study. Lesson plans to teach reading using a multimodal approach were created. In this study, the method for teaching reading proposed by Graves, Juel and Graves (2004) was employed as a framework for designing the lesson plans. That is, the method of teaching was divided into three phases: pre-reading, during-reading and post-reading. In the first phase, pre-reading, the instructor introduced students to the topic of reading by using movies, songs, or advertisements related to the reading passages and then discussed the topic with students. The instructor also provided necessary background and taught new vocabulary words using PowerPoint slides with pictures. In the second phase, while-reading, students read assigned passages and completed comprehension exercises such as answering true or false questions or filling in blanks on a diagram. Then, the instructor explained the passages by using PowerPoint slides with

different colors, diagrams, and pictures. In this phase, the instructor also provided students with reading strategies using PowerPoint slides. In the third phase, post-reading, students did activities in many modes such as writing an e-mail to one of their classmates and creating visual art materials related to the passage read in class.

Lesson plans to teach reading using a traditional method were also created. The traditional method refers to the method of teaching where instructors use only one mode, printed texts, to present information. The teaching process was similar to the lesson plans for teaching reading using multimodal techniques. That is, the process of teaching is divided into three phrase-- pre-reading, during-reading and post-reading; however, the students were instructed primarily using one mode, print. But even so, the researcher verified that the lesson plans used in this study were effective teaching approaches designed to improve the English reading ability of both groups. The teaching process of both group were shown in Figure 1.

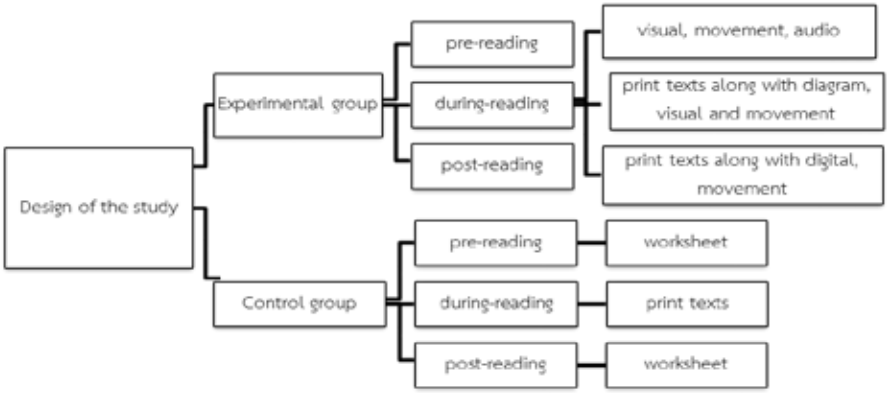


**Figure 1.** The Experimental design

An English reading ability test was developed to compare the reading ability of students in the experimental group to that of the control group before and after the experiment. Reading ability refers to the ability to understand what one reads. Tasks included identifying topics, identifying main ideas, scanning, identifying references, guessing meaning from context, and finding the author's purposes. In addition, a questionnaire to study students' attitudes toward the teaching method was prepared for students in the experimental group. It included 15 items, both positive and negative statements, and was divided into three parts: opinions, feelings, and inclination to action.

A semi-structured interview was employed to investigate students' attitudes toward the teaching method and to assure the accurate results from the questionnaire. The interview method was chosen because

questions could be prepared ahead of time, it allowed participants the freedom to express their views in their own terms, and it could provide reliable comparable qualitative data. In this study, 15 open-ended questions in line with the questionnaire were prepared by the researcher.

4. Validity and reliability

Three specialists in teaching English reviewed the instruments, which included lesson plans, an English reading ability test, and a questionnaire to study students' attitudes toward the teaching method, to determine their validity. To determine the reliability, all research instruments were tested with 30 students who were not the participants in this study. The instruments were analyzed using the reliability coefficient Cronbach's alpha. The reliability of the English reading ability test and the questionnaire to study students' attitudes toward the teaching method was 0.73 and 0.769 respectively. Since Cronbach's alpha value was higher than 0.7, the research instruments of this study were strong enough to evaluate students' reading ability and attitudes toward the teaching method.

5. Data collection procedures

In the second week of the second semester in 2014 academic year, the participants took the pretest. Soon after the pretest, they were taught by the different methods for eight weeks. Students in the experimental group were taught using the multimodal approach while

students in the control group were taught using the traditional method. After the instruction, the students in both groups did the posttest. After that, students in the experimental group answered questionnaires to study their attitudes toward the teaching method. The researcher asked students in the experimental group to volunteer for the interview; the interview was conducted after students' completing the questionnaires.

6. Data analysis

The data from the pretest and posttest were analyzed by comparison of mean scores, standard deviations, and using the t-test analysis. Independent t-test analysis was used to determine whether there were any differences between the reading ability of students in the experimental group and that of the control group. The data from the questionnaire were scored as follows: for the positive statements, Strongly Agree =5, Agree = 4, Neutral = 3, Disagree = 2, Strongly Disagree = 1; for the negative statements, to measure the level of students' attitudes in the same way as the positive statements, the scores were reversed--Strongly agree = 1, Agree = 2, Neutral = 3 Disagree = 4, Strongly Disagree = 5. The level of students' attitudes was determined by using the following criteria: 0-.99 = Highly Negative, 1.00-1.99 = Negative, 2.00-2.99 = Average, 3.00-3.99 = Positive, 4.00-4.99 = Very positive. The data from the interview were analyzed by content analysis.

## Results

1. Reading ability

The mean scores of reading ability test of both groups are presented in Figure2.

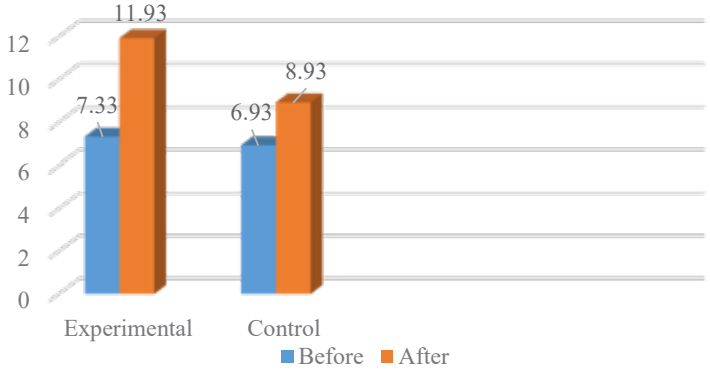


**Figure 2**. The mean scores of each group

As shown in Figure 2, before the experiment the mean score of the experimental group was 7.33, and the mean score of the control group was 6.93. After the experiment, the mean score of the experimental group was 11.93, and the mean score of the control group was 8.93. To compare the reading ability score after instruction of the experimental group to that of the control group, an independent t-test analysis was used. The results of this analysis are presented in Table 1.

**Table 1.** Comparison of the reading ability scores of the experimental group to the control group

| Time | Group | N | Mean | S.D. | t | *d* |
|---|---|---|---|---|---|---|
| Before the | Experiment | 15 | 7.33 | 2.38 | .56 | .20 |
| experiment | Control | 15 | 6.93 | 1.44 | | |
| After the | Experiment | 15 | 11.93 | 3.10 | 2.74* | 1.0 |
| experiment | Control | 15 | 8.93 | 2.89 | | |

* <.05

Table 1 reveals that before the experiment, there was no statistically significant difference between the mean score of students in the experimental group (M = 7.33, S.D. = 2.38) and that of the control group (M = 6.93, S.D. = 1.44). The effect size (*d* = .20) indicated a small effect. This suggests that before the experiment, students in the experimental group had reading ability at the same level as students in the control group. However, after the experiment, the test was found to be statistically significant ($p \leq .05$). The effect size for this analysis (*d* = 1.0) was found to exceed Cohen's (1988) convention for a large effect (*d* = 0.8). This effect size value suggested a high practical significance. It revealed a big difference between the mean score of the students in the experimental group and that of the control group. These results indicated that the reading ability of the students in the

experimental group (M = 11.93, S.D. = 3.10) was significantly higher than that of the control group (M = 8.93, S.D. = 2.89).

2. Attitudes toward the teaching method

To study students' attitudes toward the teaching method after the instruction of the experimental group, the data were collected and merged from the questionnaire and semi-structured interview. The results are displayed in Table 2.

**Table 3.** Attitudes of the experimental group toward the teaching method

| Item | statement | Mean | S.D. | level |
|---|---|---|---|---|
| 1. | Activities in class are very interesting for me. | 4.80 | .41 | Highly positive |
| 2. | Activities in class help me understand English texts better. | 4.13 | .52 | Highly positive |
| 3. | I am enthusiastic to come to class. | 4.53 | .52 | Highly positive |
| 4. | Passages assigned to read in class are very interesting. | 3.67 | .72 | Positive |
| 5. | I feel uncomfortable with class activities. | 4.47* | .52 | Highly positive |
| 6. | I have more chances to participate in class activities. | 4.60 | .63 | Highly positive |

| Item | statement | Mean | S.D. | level |
|---|---|---|---|---|
| 7. | I think activities in class are effective in developing my reading skill. | 4.07 | .59 | Highly positive |
| 8. | I have a lot of fun from activities in class. | 4.60 | .83 | Highly positive |
| 9. | After attending this class, I can read English better. | 3.67 | .82 | Positive |
| 10. | I think activities in class are too difficult for me. | 4.13* | .74 | Highly positive |
| 11. | I think activities in class are boring for me. | 4.33* | .49 | Highly positive |
| 12. | The materials the instructor used in class such as video, audio, or PowerPoint slides are effective to help me to understand the lessons. | 4.47 | .52 | Highly positive |
| 13. | After attending this class, I found that reading English is not difficult. | 3.87 | .92 | Positive |
| 14. | I can apply what I learn to my | 4.33 | .62 | Highly |

| Item | statement | Mean | S.D. | level |
|---|---|---|---|---|
| | daily life. | | | positive |
| 15. | If I were an English teacher, I would not use these activities in my classroom. | 4.47* | .83 | Highly positive |
| | Average | 4.28 | .32 | Highly positive |

***** Negative statements

Table 2 reveals that students had highly positive attitudes toward teaching reading using a multimodal approach (M = 4.28). Students favored the method of teaching and enjoyed class activities. The statements of the highest agreement were: “Activities in class are very interesting for me” (M= 4.80). “I have more chances to participate in class activities,” (M= 4.60) and “I have a lot of fun from activities in class” (M= 4.60). The results from the interviewing students in the experimental group supported these results from the questionnaire. All eight interviewed students (100%) said that classroom activities were interesting, and they enjoyed them. For example, one student said that the materials used in class, especially video, made him interested in the reading passage. One student said that she really liked the instruction because she did not feel bored with the class. All students reported

liking the activity that involved posting their writing on Facebook. They said that this activity was the most interesting, and that they were enthusiastic to come to class to find out which group was the winner. This means that the students enjoyed exciting activities that involved an element of competition. All students said that they had fun when they worked in groups and played games. Seven students (87.5%) responded that they liked watching videos the most.

In addition, students thought that the teaching method helped them develop reading ability. As shown in table 2, the statements "The materials the instructor used in class such as video, audio, or PowerPoint slides are effective to help me to understand the lessons" (M= 4.47), and "If I were an English teacher, I would not use these activities in my classroom" (M= 4.47)* were rated at a highly positive level. Similarly, all interviewees responded that the activities in class helped them understand the assigned passage better. For instance, one student stated, "The PowerPoint slides with highlighting helps me to understand the main point of the passage." Another student commented that she liked the instructor's use of songs to teach vocabulary because she could understand and remember the words better. Another student commented, "Watching video helped me to understand texts better. After watching the video about the pollination, I could understand the text about bees." One student said

that her understanding was enhanced when the instructor explained pronoun references by using PowerPoint slides. That student also found she was able to successfully complete the exercises.

Students also thought that they could apply what they learned to their daily lives. The mean score of the statement "I can apply what I learn to my daily life" was 4.33. The results from the interview also supported this finding. One student found that she was able to successfully complete the exercises by herself. Another student said that, after learning about identifying the main idea and being tasked with reading a passage on the Internet, she could find the main idea of the passage chosen by her group.

However, all students commented that the passages assigned to read in class were too difficult. One student said that the passages were too long. Another student said that the assigned passages contained vocabulary that was too challenging; specifically cited was the passage about the tools.

## Discussion and implications

In this study, the multimodal approach was found to be more effective than the traditional method of teaching reading. The reading ability of the students in the experimental group was significantly higher than that of the control group. Also, the results showed that multimodal techniques had a large effect on the reading ability of students in the

experimental group. In addition, students in the experimental group had highly positive attitudes toward the teaching method.

These results can be explained by the fact that the researcher designed the classroom activities using many modes. The instructor presented information in multiple modes such as printed materials, pictures, audio, music, video, and advertisement. In addition, students had the opportunity to do activities in many modes such as poster presentations, writing on Facebook, or games. This method of teaching created a multimodal student-centered environment in the classroom, and these multiple representations of information provided new advantages for students to learn. Learning was closely related to experiencing life, as, in life, we employ all of our senses and not just one.

The method of teaching designed in this study incorporated students' multiple modalities and the available classroom materials including printed texts, audio, visual graphics, gesture, or multimedia software. In line with the thinking of Shah and Freedman (2003), multimodal learning environments in this study used different modes to represent content knowledge. These different presentation modes appealed to students' different sensory modalities and further facilitated learning. Additionally, like the ideas put forth by Chen and Fu (2003), materials in this study were presented in a variety of modes, and this led

students to perceive them easier to learn, thus leading to improved learning performance. The information the instructor provided to students in this study was attractive and motivating because it was presented in many modes. This engaged students in the experimental group in learning, and, as a result, they outperformed students in the control group.

The results were in line with many studies that indicate a multimodal approach has a positive impact on students. For example, Yoong (1999) applied a multimodal approach to mathematical knowledge to deepen student understanding and flexibility in thinking. The results showed that students subsequently performed well on tests. Similarly, Lee (2014) engaged students in a series of multimodal English writing tasks and found that such multimodal learning practices enhanced students' motivation and confidence.

As previously mentioned, students in the experimental group responded that their favorite activity involved posting their works on Facebook. This indicates that the students enjoy activities that make use of the Internet. The reason is that the Internet creates a channel for students to obtain a large amount of human experience and enables them to enter the global community. In this way, students not only can extend their personal views, thoughts, and experiences but also can

learn to live in the real world. They become the creators, not just the receivers of knowledge (Lee, 2000).

The findings of this study illuminate best practices for teaching reading in an EFL classroom. As Kress (2003) noted, "[t]he world of communication is not standing still. The communicational world of children now in school is both utterly unremarkable to them and yet it looks entirely different to that which the school still imagines and for which it still, hesitantly and ever more insecurely, attempts to prepare them. All of us already inhabit that new world." (p. 16), and for teachers, this has profound implications for literacy instruction in a digital age. If the world of communication is not standing still, why would our pedagogical practices? This study provides instructional frameworks for developing and integrating an effective multimodal approach in an English reading classroom. While technology is progressing, instructors should employ technology to create activities to engage students in lessons, and this will lead to students' achievement.

Despite all the advantages of a multimodal approach, teachers are still the most significant factor when it comes to inspiring students' reading habits. However, using multimodal techniques in classrooms also poses some challenges for instructors. First, it may take much more time than before to plan the lessons. In addition, more knowledge of

technology will be needed for instructors. This study also suggests that cooperative learning is an effective strategy. Most of the activities in this study involved working in groups, or cooperative learning. This strategy helped students feel comfortable, and they were not scared in the class.

In conclusion, this study confirms the benefit of employing a multimodal approach in an English reading class. It promotes teaching and learning experiences that are multimodal in nature to acquire literacy skills necessary for today's world without being restricted to one mode of design.

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