Building a Conceptual Model for Performing an Academic Oral Presentation: Cognitive Apprenticeship

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Abstract

The purpose of this qualitative study is to investigate how student engagement in cognitive apprenticeship through the pair work activity helps build a conceptual model for performing an academic oral presentation. The participants were university students who were learning English as a foreign language (EFL) in Japan. During the pair work activity, the students practiced their presentations with three different partners, including giving advice and providing feedback. After the pair work activity, the students answered the post-activity questionnaire concerning the four elements of cognitive apprenticeship: modeling, articulation, reflection, and exploration (Collins & Kapur, 2014; Dennen, 2004; Dennen & Burner, 2008). The written responses were coded and analyzed thematically. The findings of the study reveal that these four aspects of cognitive apprenticeship are critically related to building a conceptual model for performing an academic oral presentation: (a) the students could observe and build a conceptual model of the thinking processes necessary for making an oral presentation, (b) they could articulate their ideas about why one oral presentation is "good," but another is "poor," (c) the students could compare their own problem-solving processes with those of other students, and (d) they could pose their own problems and try to find how to solve them. This study offers new insights into designing and implementing an activity, guiding students to perform an academic oral presentation with appropriate scaffolding in the EFL classroom.

Keywords: an academic oral presentation; cognitive apprenticeship; pair work activity; EFL classroom; zone of proximal development

Introduction

The purpose of this qualitative study is to investigate how student engagement in cognitive apprenticeship through the pair work activity helps build a conceptual model for performing an academic oral presentation in the EFL classroom. In a globalized world, we need to have English learners equipped with more developed comprehensive communication skills. As Javadi (2020) suggests, "English use has become indispensable in one's life and thus having a proficient basis of the English language is now unavoidable for everybody" (p.10-11). However, as Oman's situation shows, "despite the government's aim to enhance the students' language skills, the use of English is still insufficient due to its limited functions" (Dumanig & David, 2019, p.1). More specifically, learners of English today need to improve oral presentation skills to express their own ideas or opinions in public.
However, very few university students have had the opportunities to enhance their academic oral presentation skills before university education in Japan. It is necessary for university students to experience an academic oral presentation on current issues and social topics. The question is how to design and implement an activity, guiding students to perform an academic oral presentation in the EFL classroom.

In schools, a new form of apprenticeship called the cognitive apprenticeship method (Brown, Collins, & Duguid, 1989; Collins & Brown, 1988; Collins & Kapur, 2014; Dennen, 2004; Dennen & Burner, 2008) has been introduced to teach the cognitive skills necessary for performing classroom tasks. Cognitive apprenticeship is defined as learning through guided experience on cognitive and metacognitive skills and processes (Collins et al. 1989). The researcher designed a pair work activity in which students were allowed to experience cognitive apprenticeship. More specifically, during the pair work activity, the students practiced their presentations with three different partners, including giving advice and providing feedback. After the activity, the students answered the post-activity questionnaire concerning the four elements of cognitive apprenticeship: modeling, articulation, reflection, and exploration. The written responses were coded and analyzed thematically. This study focuses on how student engagement in cognitive apprenticeship through the pair work activity helps build a conceptual model for performing an academic oral presentation in the EFL classroom.

**Literature Review**

Sociocultural theory (SCT) gives educators and practitioners significant implications in designing and implementing an activity (Cole, 1996; Donato, 1994; Kowal & Swain, 1994; Lantolf, 2000; Lantolf & Appel, 1994; Lantolf & Thorne, 2006; Rogoff, 1990, 1995; Van Lier, 1996; Van der Veer & Valsiner, 1991; Wells, 1999; Wertch, 1985, 1991). An essential construct of SCT is the zone of proximal development (ZPD) (Vygotsky, 1978, 1987). The ZPD explains how learning takes place, emphasizing potential development (Lantolf & Appel, 1994; Lantolf & Thorne, 2006; Lave & Wenger, 1991; Ohta, 2001). Vygotsky's concept of the ZPD embodies his view that an individual learner needs to receive assistance appropriate to his or her potential level. The question is how the concept of the ZPD can be best utilized in the EFL classroom, which usually consists of more than 30 students in Japan. It is essential to explore how a group of learners can together "create a powerful ZPD" (Wells & Claxton, 2002, p.9). To answer this question, the concept of cognitive apprenticeship (Collins & Kapur, 2014; Collins & Brown, 1988; Collins et al., 1989; Dennen, 2004; Dennen & Burner, 2008; Wenger, 2011) gives us significant implications.

The cognitive apprenticeship method gives learners "the opportunity to observe, engage in, and invent or discover expert strategies in context" (Collins & Kapur, 2014, p.113). The methods include six types of instructional strategies: (a) modeling, (b) coaching, (c) scaffolding, (d) articulation, (e) reflection, and (f) exploration. Modeling refers to demonstrating the thinking process, coaching means facilitating while learners perform a task, and scaffolding refers to supporting learners' cognitive activities as needed. These three, (a)(b) and (c), are the core of traditional apprenticeship (Rogoff, 1990, 1995). The next two are as follows: (d) articulation means encouraging learners to verbalize their knowledge and thinking, and (e) reflection means encouraging learners to compare their performance with others. These are significant in helping learners focus their observations of expert problem solving and gain conscious access to their own problem-solving strategies (Collins & Kapur, 2014). Finally, the
last strategy (f) exploration encourages learners to pose and solve their own problems. The aim of Cognitive Apprenticeship Methods is to encourage learner autonomy, which would help learners to define and formulate the problem which should be solved.

Minematsu (2020) investigated how the university students engaged in cognitive apprenticeship during pair work activity to improve their oral presentations in an EFL classroom. She qualitatively analyzed advice, feedback, and comments on the students' advice-response sheets during three-time pair practices. This study revealed that students engaged in cognitive apprenticeship by playing two roles, as an advisor and advisee: (a) exploration, articulation, and scaffolding as an advisor, and (b) exploration and articulation as an advisee. Based on Minematsu (2020) findings, the current study focused on how student engagement in cognitive apprenticeship through pair work activity helps build a conceptual model for performing an academic oral presentation in the EFL classroom. The present study employed a qualitative method with the following research question:

How does student engagement in cognitive apprenticeship through the pair work activity help build a conceptual model for performing an academic oral presentation in the EFL classroom?

**Methods**

**Participants**

The participants of the current study were freshmen who were learning English as a foreign language (EFL) at a university in Japan. They were conveniently selected from the researcher's classes. A total of 90 students from three different classes participated in the study. They major in comparative cultural studies. Since they were EFL learners, they had limited English input and output outside the classroom. Students were at an intermediate level in terms of reading skills but had little confidence in speaking. Furthermore, most of the students have rarely had the experience of making an oral presentation in English prior to university education.

**Pair Work Activity**

During the pair work activity, the students were required to (a) deliver their presentations with three different partners and (b) observe three different partners' presentations and give some advice and feedback. During the pair work activity, the students played two different roles, as an advisee (presenter) and as an advisor (observer). The presentation topic is 'the news I'm most interested in,' which includes a summary of the news, the reason they are interested in the story, and opinions about the story.

**Instrument**

After the pair work activity, the post-activity open-ended questionnaire designed by the researcher based on a literature review (Collins & Kapur, 2014) was conducted. It was divided into four major parts: (a) modeling, (b) articulation, (c) reflection, and (d) exploration corresponding to Q1, 2, 3, and 4 in the questionnaire:

Q1. What did you learn from your partners' oral presentations?
Q2. What do you think distinguishes a "good" oral presentation from a "poor" oral presentation? Explain why you think so.
Q3. Compare your presentation with your partners' presentations. What would you like to include in your own presentations?
Q4. In order to make your presentation better, what should be done? Write what problems you have and how you should solve the problems.

Question one (Q1) aimed to explore what students learned by observing three different oral presentations delivered by their partners through a pair work activity. Question two (Q2) aims to explore whether students articulate their ideas about why one oral presentation is "good," but another is "poor" (articulation). Question three (Q3) aims to explore how the students engaged in reflection. This question focused on how the students compared their own problem-solving processes with those of other students. Question four (Q4) explores how the students engaged in the exploration, focusing on how the students were guided to a mode of problem-solving. In other words, the question was how the students posed and tried to solve their own problems.

Procedure

The written responses were coded and analyzed thematically. This study used the code matrix (Kuckartz, 2014). Researchers can always access the text in the matrix without losing sight of the context. The qualitative analysis included grouping and coding the responses from each question, Q1, Q2, Q3, and Q4. The researcher qualitatively coded the descriptive data of 77 students who had answered all the questions in the questionnaire. To verify the data coded in the code matrix, the inter-coder agreement between the researcher and an expert on second language learning was calculated. For each question, the inter-coder agreement was over 92%. Since the basis of the evaluative criterion was 85% to 90% (Saldaña, 2014), four kinds of consistency of the qualitative coding were verified.

Findings

Modeling: Learning through Observation

Question 1 in the open-ended questionnaire is as follows:

Q1. What did you learn from your partners' oral presentations?

This question aimed to explore what students learned by observing three different oral presentations delivered by their partners through a pair work activity. In the current study, the focus is on how students build a conceptual model for performing an academic oral presentation in two areas: content and speaking skills or delivery. As for content, Table 1 shows the abridged comments from the post-activity questionnaire Q1.
Table 1

| Elements               | Comments                                                                 |
|------------------------|---------------------------------------------------------------------------|
| Vocabulary             | • Use vocabulary understandable to the audience                           |
|                        | • Rephrase difficult words to make them easier                             |
| Style                  | • Change written style to spoken style                                     |
| Draft                  | • Write drafts more understandable to the audience                         |
| Message                | • Make message to the point and send a clear message                      |
| Opinion                | • Understand the importance of forming a clear opinion                     |
| English expressions    | • Understand that many types of English expressions can be used           |
| Interpretation of the  | • Understand that if you interpret the news differently, the message     |
| news                   | will differ.                                                              |

The students realized that an effort to make the presentation understandable to the audience is very important. This fact is best expressed by the following comment:

*I noticed that explaining the news with the use of vocabulary that is more understandable to the classmates is critical. I realized that the presentations which were easy for me to understand were the ones (made by speakers who) had the skills of word rephrasing. Even though the difficult vocabulary was included in the draft, if you try to explain it with the use of easier vocabulary, you can make it more understandable to everyone.* (Vocabulary, S10).

When the students acted as advisors, they became aware of the importance of rephrasing from written text style to spoken style in improving comprehensibility. The student emphasized the importance of being understandable to everyone, taking into consideration the needs of the audience, who were students learning English as a foreign language.

Another view expressed by most participants concerns the difference between written and spoken language. This view is best expressed by the following:

*The vocabulary or sentences which I thought understandable to the audience were found to actually be difficult for them to understand just by listening. Therefore, you should write the draft taking this into consideration.* (Style, S25).

During pair work practices, advisors pointed out the difficulty in understanding the content, and presenters became aware of the need to make further efforts in drafting something more audience-friendly. There are two types of learning: (a) learning from negative aspects and (b) learning from positive aspects. As for type (a):

*The presenters themselves understand the newspaper articles almost fully, and learned the vocabulary by looking up the words in the dictionary beforehand. On the other hand, the audience could not understand them by just listening to the sounds of the difficult words. Therefore, when you write the draft, you have to take that difference into consideration and explain the difficult words using easier ones.* (Learning from negative aspects, S 32).
Both giving and receiving comments on negative aspects seem to have contributed to learning. Students realized what was lacking in their own presentation by having it pointed out by their partners.

Moreover, they also realized what was necessary to make their own drafts better through comparison. As for type (b):

*Compared with three different partners' presentations, I realized that the content of my presentation includes redundant parts and too much information, which could make my presentation boring. So I'd like to revise my draft, making the message clearer.* (Leaning from the positive aspects, S18).

By observing others' presentations, the students learn what is important for performing an academic oral presentation from both the content's negative and positive aspects.

As for speaking skills, Table 2 shows the abridged comments from the post-activity questionnaire Q1.

### Table 2

| Elements                  | Comments                                                                                                                                 |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Loud voice                | A clear, a loud voice is a must when sending a message to the audience.                                                                  |
| Intonation                | Emphasize the important words or keywords with intonation                                                                               |
| Speed                     | Deliver the presentation more slowly                                                                                                    |
| Information processing speed | Information processing speed for the listeners is different from the speakers'                                                             |
| Eye contact               | Send the message clearly with more eye contact                                                                                           |
| Preparation time and quality | There is a relationship between preparation time and quality                                                                            |
| Confidence                | In order to have more confidence in the presentation, deepen understanding of the news                                                  |

First, the students realized that volume and facial expression are essential in getting the audience's attention. This is best described by the following comment:

*If the voice is not loud enough for the audience to hear, I feel that the presentation is boring.* (Loud voice, S46)

When positioning themselves as listeners, they realized that a clear, loud voice is a must.

Second, they realized that presenters should keep in mind that intonation is also an important factor. Many of them express the following view:

*The content of the news was complicated, so you should emphasize the important parts with intonation. You have to pay attention to the volume of your voice and intonation; otherwise, the message will not be conveyed to the audience.* (Intonation, S 65).
Third, the students realized that the appropriate speed is critical:

*Whether or not I can understand the presentation depends on the pace. During pair work activities, three partners delivered the presentation at a rapid speed, so I found that speaking at an appropriate speed may be more difficult than we expected. I also learned that if you deliver the presentation slowly as well as loudly, you can make it understandable to the audience even though it contains rather difficult expressions (Speed, S 53).*

In spite of the difficulty of the content, the students noticed that effective speaking skills could help them send their messages clearly to the audience. Moreover, they noticed the difference between the speaker's appropriate speed versus that perceived by the listeners. A common statement by the students was:

...*even though the speaker thinks he/she speaks slowly, I have realized that the pace is faster than the appropriate speed for the listener to comprehend.* (Speed, S28).

The student realized that the speaker's recognition of the appropriate speed is different from the speed, comprehensible to the listeners. Putting students in the listeners' position creates awareness of the proper speed in delivering an academic oral presentation. The claim of the following student reflected this view: "The speed at which my partners delivered their presentations has taught me the appropriate speed for making presentations understandable" (S41). This suggests that the students were made aware that information processing occurs more slowly. In other words, the listeners need much more time to process information, so the speaker should deliver the oral presentation slowly.

By putting themselves in the listener's position, the students noticed cognitive differences between speakers and listeners, which led them to realize the importance of appropriate pace. Finally, the students learned that eye contact is challenging but critical:

*I found that one of the partners made an effort to send the message to the listener, but having eye contact is difficult, especially for Japanese. All the more, we have to make further efforts to look up and send the message clearly without looking at the draft* (Eye contact, S36).

**Motivation and Investment**

It was also revealed that observing oral presentations three times motivated the students to make their own presentation better, and they felt the necessity for 'investment' (Wenger, 1998). The majority of the students made statements similar to this: "The contents and speaking skills of my partners have influenced not only me but also stimulated me. They propelled me to make further efforts in improving my presentation" (S 62).

Another view expressed by most participants is that the presentation's quality is related to the amount of time spent in preparation. This is best illustrated in the comments, "... others' presentations have better quality than mine. They might have spent much more time for preparation, which has made a difference in its quality. I realized that I need much more elaborate preparation" (S21), or"...the more time and energy you spend on preparation, the better the quality of your presentation will be" (S57).
Furthermore, the students noticed a relationship between 'investment' (Wenger, 1998) and confidence. The claim of the following student reflected the view of most of the participants:

*You have to deepen your understanding of the news. The presenters who had made efforts to send the message clearly seemed to have more confidence in their own presentations. The more you deepen your understanding, the more confidence you can have concerning the topic. You should make the content not superficial but more meaningful by adding more reasoning and your own opinion (S48).*

Deepening understanding of the news is worth investing in because it can strengthen the speaker's confidence in the content. This shows that metacognitive awareness can be enhanced by observing three different partners' presentations. They also learned what is important in delivering an academic oral presentation by observing unsuccessful ones. The students realized that if a presenter lacks a positive attitude or willingness to communicate, the message will not be conveyed to the listeners. A common statement made by the students was, "…what you are going to talk about is important, but above all, willingness to convey the news and your own comments or opinions is critical' (S71).

In summary, by observing successful presentations and unsuccessful ones, the students began to build a conceptual model to make a better oral presentation in the EFL classroom. The use of vocabulary understandable to the audience, awareness of differences between the written language and the spoken language, eye contact, and appropriate speed and volume are all important parts of this model. Finally, they gained awareness of the necessity of investment in improving the quality of the presentation and deepening understanding of the news. Furthermore, by observing the others' presentations, especially the stronger ones, the students were motivated to make their own presentations better.

**Articulation**

Question 2 in the open-ended questionnaire is as follows:

Q2. What do you think distinguishes a "good" oral presentation from a "poor" oral presentation? Explain why you think so.

This section focuses on whether students could distinguish a "good" oral presentation from a "poor" oral presentation after the pair work activity. Abridged comments from the post-activity questionnaire Q2 are shown in Table 3.
Table 3

Abridged comments from the post-activity questionnaire Q2

|                          | A "good" oral presentation                        | A "poor" oral presentation                        |
|--------------------------|--------------------------------------------------|--------------------------------------------------|
| **Audience**             | Be aware of the audience                         | Ignore the audience                               |
| **[Content]**            |                                                  |                                                  |
| **[Draft]**              |                                                  |                                                  |
| **Thesis statement**     | Clear thesis statement                           | Ambiguous thesis statement                        |
| **Examples**             | Abundant examples                                | Few examples                                     |
| **Vocabulary**           | Use of easy vocabulary                           | Use of difficult vocabulary                       |
| **Grammar**             | Use of simple grammatical structure of sentences | Use of complicated grammatical structure of sentences |
| **[Understanding of the news]** | Have confidence in understanding of the news | Little confidence in understanding of the news |
| **[Speaking skills]**    |                                                  |                                                  |
| **Willingness to send the message** | Full of willingness or eagerness to send the message | Lack of willingness Monotonous way of speaking Just reading the draft without any emotions |
| **Emphasis**             | Emphasis on the important parts such as your own opinion | No emphasis on the important parts |
| **Appeal to human senses** | Appeal to human senses (e.g.) sight, sound and emotion | Little appeal to human senses (e.g.) sight, sound and emotion |
| **Pace/speed**           | Pay attention to the audience                    | Not paying attention to the audience              |
|                          | Look at the audience's response                   | Deliver the speech at the speaker's pace          |

The data from the questionnaire showed that most of the students realized that what distinguishes a good presentation from a poor one is whether the presenters can make it audience-friendly or not in terms of writing and speaking skills. They became aware of the importance of reconsidering their drafts and delivery style from the audience's perspective before making a presentation in front of the class. They understood that if they ignore the audience, their presentations will be considered poor since the message will not be received.

**Content.** Most of the students noticed that whether a presenter tries to make himself or herself understood by the audience or not is critical. A common statement by the students was, "…in order to make the presentation as understandable to the audience as possible; the presenter needs to make an effort to write the draft understandably and think about how to appeal to the audience" (S16). The students also noticed that they themselves should deepen their
understanding of the news well to have more confidence in the content. They were aware of the relationship between this confidence and sending the message clearly to the audience.

Besides, the students noticed this attitude makes their presentation more understandable. This is best illustrated in the following comment:

*In order to make a good presentation, you have to have a full grasp of the news since it will give you confidence in the content. Having confidence in your own understanding of the news will make you more actively involved in sending the message clearly to the audience. I think this will lead to understandability and easy comprehension for the audience* (S22).

The students realized that "a good presentation has a clear thesis statement, using simplified words and simple grammar so that even a difficult theme could be considered as not so difficult" (S7).

**Speaking skills.** The result shows that the students gained awareness of the importance of speaking skills even though they just engaged in pair work. This suggests that the students were able to presuppose how their oral presentation should be performed as if they were in the audience. More specifically, peer interaction made the students aware of the importance of willingness in sending the message to the audience. The claim of the following student reflected the view of most of the participants:

*If you just read in a monotonous voice, nothing will come to my mind. Such a monotonous way of reading even prevents me from understanding the content itself. The degree to which the listener can understand the presentation depends on the presenter's willingness to send the message* (S42).

Furthermore, the students became aware of what efforts are necessary to make the presentation better, demonstrating some strategies. For example, the students pointed out the necessity of emphasizing the important parts of the content, such as the presenter's own opinion. They made remarks similar to the following,

*I think a good oral presentation is one in which you can appeal to the audience through your own opinion explicitly. Just reading in a monotonous voice cannot convey the important part of the news or your own opinion. You have to emphasize which part is the most important and which part is your own opinion* (S8).

The students realized that the presenter should distinguish between the summary of the news, the most important points, and the presenter's opinion.

Moreover, the students pointed out that one example of a poor presentation is ignoring the audience. Most of the students understood that the presenter should be careful in choosing which vocabulary they use and how they deliver their speech since the audience consists of EFL learners. The majority of them made statements to one made by this student:

*A poor presentation is one in which the presenter speaks too fast using difficult vocabulary and sentence structure. On the other hand, a good presentation is one which consists of short sentences using comprehensible expression. Furthermore, deliver the
speech by looking at how the audience reacts and respond to it. What matters most is whether the presenter makes efforts to send the message clearly or not (S38).

Furthermore, most of the students claim that the presenter should be responsible for making their own presentations understandable to the audience. They made remarks similar to the following:

*The purpose of the oral presentation is to let the audience hear your voice and understand your idea or opinion. Therefore, it is natural and important that the speaker make efforts to realize it (S4).*

The students became aware of the responsibility of the presenter in terms of improving speaking skills. They also noticed other factors of a good presentation: the importance of appealing to human senses such as sight and sound. A common statement by the students was:

*Appealing to the five senses may be difficult, but a good presenter tries to appeal to the senses as much as possible, conveying the content of the presentation to the heart of the audience. (S51).*

The students noticed that extra efforts are necessary to convey the content and its meaning. The same draft could leave a different impression depending on how it is delivered. Several speaking skills are related to eagerness in sending the message.

**Stating Reasons.** Most students could state the reasons why the presentation was good or not. They came to realize that whether the audience can understand their speech or not is the most important factor when making an oral presentation. Furthermore, they noticed that the specific audience, in this case, had some specific characteristics: (a) English is a foreign language for the audience members; (b) the audience does not necessarily have background knowledge of the news, and (c) the audience has to understand the content of the presentation by just listening, not reading. Most of the students could state why one is a good oral presentation, and the other is not good, taking into consideration these characteristics peculiar to the EFL classroom.

**Reflection**

Question 3 in the open-ended questionnaire is as follows:

Q3 Compare your presentation with your partners' presentations. What would you like to include in your own presentation?

As for question three (Q3), the aim was to explore how the students engaged in reflection. This question focused on how the students compared "their own problem-solving processes with those of an expert, another student, and ultimately, an internal cognitive model of expertise" (Collins & Kapur, 2014, p. 114). Abridged comments from the post-activity questionnaire Q3 are shown in Table 4.
Table 4

Abridged comments from the post-activity questionnaire Q3

|                                | What I'd like to include in my own presentation |
|--------------------------------|-----------------------------------------------|
| Content                        |                                               |
| Vocabulary                     | -Difficult vocabulary should be explained      |
|                                | -Difficult vocabulary should be rephrased.    |
| Sentence structure             | -Sentence structure should not be complicated. |
| 5W1H                           | -5W1H should be clarified.                    |
| Discourse markers              | -Discourse markers should be used effectively |
|                                | (e.g.) at first, next…….                     |
| Opinion                        | -Opinion should be clarified.                 |
|                                | -Opinion should be backed up with detailed information |
| Background knowledge           | -The background knowledge should be deepened. |
| Interest the audience          | -The content should interest the audience.    |
|                                | -Include attention getters by asking questions to the audience. |
|                                | -Ask the audience' opinions to be more interactive with the audience. |
| Speaking skills                |                                               |
| Delivery                       | -Use of appropriate speed, clear articulation, intonation, and gesture |
|                                | -Use of pause and stress in order to emphasize important parts |
|                                | -Try to talk to the audience instead of just reading the draft |
| Eye contact                    | -Remember important key words so that you don't have to memorize the presentation perfectly |
| Emotion                        | -Express with emotion/ Facial expression       |
| Visual aids                    | -Use visual aids (pictures and images)         |

The students compared their own problem-solving processes with those of other students as shown in Table 4. This shows that the students were aware of what was lacking in their own presentation, and they came to realize what should be included in their own presentations by comparing their own with their three different partners'. The findings from the qualitative data also suggest that the students started to formulate an internal cognitive model of expertise through pair work activity as shown in Table 4. Furthermore, the qualitative data also show that the students could suggest using presentation strategies to make their presentation interesting, entertaining, or more interactive at this stage.

**Exploration**

Question 4 in the open-ended questionnaire is as follows:

Q4 In order to make your presentation better, what should be done? Write what problems you have and how you should solve the problems.

The students explored problems in three aspects: the content, speaking skills and affective domain. First, as for content, the main problems pointed out by most of the students can be categorized into two types: deficiencies in the draft itself and the lack of effort to make the draft more understandable to the audience. First, as for the deficiency of the draft itself, the problems pointed out by the students for their own draft are as follows: lack of detailed explanation of the news, lack of opinion, the ambiguity of the content, necessity of revising the
draft, lack in understanding the news article, superficial opinion about the news, and being illogical.

The following solutions related to content were provided: read the news article again; deepen understanding of the news article further; do more research; make the thesis statement or opinion clearer; use short and simple sentences; make the draft easier for the audience to understand by using the easier vocabulary, and add explanations and using diagrams or pictures, and visual aids such as PowerPoint.

In response to Q4 in the post-activity questionnaire, the students mentioned:

| "My draft is monotonous because of the repeated use of the same expressions, so I need to use the different words to make the draft more interesting" (S5). |
| "My draft is not suitable for oral presentation, so I need to revise it from written expressions to spoken expressions so that my classmates will understand more easily by just listening to my presentation" (S12). |

As for the lack of effort in making the draft more understandable to the audience, the following points were noted: use of difficult vocabulary, complicated story, and monotony due to repetition.

In response to Q4 in the post-activity questionnaire, the students commented:

| "My draft shows some kind of distance between the news and myself because I might have seen the news from an outsider's perspective. So I need to interpret the news from an insider's point of view" (S45). |
| "My draft has a complicated news story, so I need to do something more, for example, using short and simple sentences, adding more explanation, use diagrams or pictures. Moreover, I should explain it in my own words so that the message I want to convey would be sent to the audience" (S73). |

Second, as for speaking skills, most of the students stated the following problems regarding their own presentations: lack of eye contact, low voice, high speed, and lack of fluency. To solve those problems, all the students pointed out solutions. The students are aware of the importance of efforts to have more eye contact. In response to Q4 in the post-activity questionnaire, the students mentioned:

| "In order to have more eye contact, I need to practice more by looking at the mirror. In addition, I need to speak while making eye contact in daily life" (S34). |
| "My voice is very low because I don't have confidence not only in English but also in understanding of the news itself. So I need to deepen the content of the news and practice many times at home" (S67). |
| "I tend to speak too fast, neglecting the audience. So I will try to send the message in an audience-oriented way" (S2). |
| "My presentation lacks in fluency because I use difficult vocabulary, so it would be better for me to use easier words. Moreover, I need to practice repeatedly until I can say more fluently" (S58). |

Through the pair work activity, the students realized that whether the message was sent to the audience clearly or not is critical in making an oral presentation.

Finally, as for the affective domain, the students could figure out what problems they would have when making oral presentations in front of the class and find solutions. To overcome anxiety, they could show some strategies to not get into a panic in front of the class, including mental control, more practice at home, use of visual aids, and emphasis on keywords. In response to Q4 in the post-activity questionnaire, the students commented:
"I tend to become nervous when I have to say something in English in front of the class. So I will say to myself 'calm down' before the presentation" (S11).

"I don't have confidence in my speaking English, so I have to practice more until overcoming anxiety" (S68).

"I will use visual aids which include the main keywords so as not to get into a panic when I cannot recall what I am going to say" (S27).

"I cannot memorize everything in my draft, so I will emphasize the most important parts, not worrying about skipping the details" (S75).

**Discussion**

**Modeling: Learning through observation.**

The findings demonstrated that the students began to build a conceptual model of the processes necessary for making an academic oral presentation by observing successful presentations and unsuccessful ones. By observing three different partners' presentations, the students became aware of what is necessary and important in delivering an academic oral presentation. The pair work activity allowed the students to experience 'peer modeling' (King, 1999). Modeling is supposed to involve "an expert performing a task so that the students can observe and build a conceptual model of the processes that are required to accomplish it" (Collins & Kapur, 2014, p.113).

However, the current study shows that the students began to build a conceptual model for making an oral presentation without intervention by an expert. This means that the students engaged in the activity without instructor direction by observing and following the strategies used by others working on similar tasks (King, 1999). Furthermore, by observing the others' presentations, especially the better ones, they were motivated to improve their own presentations.

**Articulation**

The question was whether students could articulate their ideas about why one oral presentation is "good," but another is "poor" (articulation). Articulation, one of the strategies of cognitive apprenticeship, encourages learners to verbalize their knowledge and thinking (Collins & Kapur, 2014) and the results of reflection (Dennen & Burner, 2008). Articulation is significantly helpful in learning because "it makes possible reflection or metacognition—thinking about the process of learning and thinking about knowledge" (Sawyer, 2014, p. 10). The findings of the present study reveal that the pair work activity allowed the students "to state their knowledge explicitly, reasoning, or problem-solving processes in a domain" (Collins & Kapur, 2014, p. 114). This finding suggests that the activity itself, rather than the teacher, can facilitate the student engagement in articulation. According to the original cognitive apprenticeship model, "teachers can encourage students to articulate their thoughts as they carry out their problem solving" (Collins & Kapur, 2014, p. 114).

However, the current study demonstrated that the pair work activity could encourage the students to engage in articulation as they gave advice and feedback. This is because the pair work activity required the students to play the monitor role in a pair work activity to articulate their advice and feedback to other students. During the practices, they had to offer advice, evaluate and respond to the advice, and write down how to solve the problems. Through the practices, the students externalized and articulated their developing knowledge. When this
happens, they learn more effectively (Bransford, Brown, & Cocking, 2000). When the students articulate their unformed and still developing understanding and keep articulating them throughout the process of learning, the best learning takes place (Sawyer, 2014).

**Reflection**

The question was whether students could compare "their own problem-solving processes with those of an expert, another student, and ultimately, an internal cognitive model of expertise" (Collins & Kapur, 2014, p.114). The findings suggest that the students could compare their way of problem-solving process with those of other students. As for reflection, the students observed just three different oral presentations. They needed more opportunity to observe and compare their own presentations and others to get an internal cognitive model of expertise. It can be said that they began to build not all but some parts of an internal cognitive model of expertise through the pair work activity. As Table 4 shows, the internal cognitive model features seem to reflect what the students articulated in terms of a good oral presentation. However, as Collins and Kapur (2014) claim, students must evaluate how they did with respect to the criteria that determine good performance.

**Exploration**

The findings of the current study demonstrate that the pair work activity guided the students to a mode of solving their own problems. Playing roles of both advisor and advisee enhanced the students' metacognitive awareness, which led to exploration. By engaging in exploration, the students could set sub-goals for their own as well as general goals. The findings suggest that the pair work activity itself, rather than the teacher's intervention, encouraged students to set sub-goals that are necessary for their own, as suggested in table 4.

**Scaffolding and the ZPD**

Scaffolding is the help tailored to learner's needs for achieving their goals of the moment (Bruner, 1985; Lantolf, 2000; Ohta, 2001; Sawyer, 2014). The findings of this study show that the pair work activity provided the students with the appropriate scaffolding functioning in their own ZPD. Practicing three times deepened reflection and exploration. After the pair work activity, the students had to reflect on what they had learned, which led them to think independently in making a conceptual model of a "good" presentation. This is a kind of support that promotes better learning as learners actively construct knowledge about how to accomplish their immediate goal (Sawyer, 2014).

This study reveals that scaffolding could be created through the activity, which was designed to have students engage in cognitive apprenticeships, such as modeling, articulation, exploration, and reflection. In other words, the learning environment contributed to the use of scaffolding in students' active construction of knowledge. In other words, student engagement in cognitive apprenticeship through the pair work activity facilitated the construction of a conceptual model for performing an academic oral presentation in the EFL classroom.

**Implications for Teaching**

When educators and practitioners design and implement activities in the EFL classroom, it should be mentioned that collaboration alone does not make learning happen. As the findings
of the current study show, the intentional design of cognitive apprenticeship through modeling, articulation, exploration, reflection, and scaffolding is critical.

Conclusion

The current study reveals that the creation of the cognitive apprenticeship learning environment contributes to guiding students to build a conceptual model of performing an academic oral presentation in the EFL classroom. More specifically, student engagement in cognitive apprenticeship facilitated the construction of a conceptual model for performing an academic oral presentation through the pair work activity. This suggests that the intentional design of cognitive apprenticeship is critical to make learning happen. This study offers new insights into designing and developing an activity that can guide students in performing an academic oral presentation in the EFL classroom.

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**Appendix A: Post-Activity Questionnaire**

**Please answer the following questions.**

Q1. You observed your partners' oral presentations. What did you learn from their oral presentations?

Q2. What do you think distinguishes a "good" oral presentation from a "poor" oral presentation? Explain why you think so.

Q3. Compare your presentation with your partners' presentations. What would you like to include in your own presentations?

Q4. In order to make your presentation better, what should be done? Write what problems you have and how you should solve the problems.

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**Declaration of Possible Conflict of Interest**

The author declares that there is no conflict of interest.