



The Effect of Peer-Mediated Dynamic Assessment and Self-Regulatory Strategy on the Development of Thai Students' English Listening Comprehension Ability

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Abstract

In this study, the English listening ability of Thai university students' is developed by an instructional process referred to as PM DA-SRS, which integrates self-regulatory strategy instruction (SRS) into training students to be peer mediators (PM) under the application of dynamic assessment (DA). In order to investigate the effects of PM DA-SRS instructional process on the students' English listening development, 29 participants who were enrolled in the course EN2230 Listening and Speaking were trained to be peer mediators who provided mediation in the form of hints, prompts, or constant feedback to students who failed to understand the listening texts. The study, which is a part of an ongoing research, took the form of one group pretest-posttest experimental design. The findings revealed that the students' scores of the listening posttest were significantly higher than the scores of the listening pretest ($t(28) = -12.29$, $p < 0.05$). Possible reasons for findings and suggestions on future research on unexplored areas are outlined and presented. The results of this study can be served as a guideline concerning the process of training students to be peer mediators. Moreover, the results can also provide teachers of English and researchers some pedagogical implications and recommendations for conducting further investigations on related issues in the classroom context.

Keywords: *Dynamic assessment, English listening comprehension ability, Peer mediator training, Self-regulatory strategy, Listening strategy instruction*

1. Introduction

Listening is considered the most widely used skill in daily life and is necessary for English language learners especially in the classroom context (Rost, 2002) since it provides a foundation for all aspects of language and cognitive development in the process of communication (Malkawi, 2010). However, teaching listening has not gained attention as it deserves while most listening classes seem to be a test of listening rather than teaching (Oxford, 2011). When considering the instruction of listening comprehension in the Thai educational system, listening tends to be taught as a passive skill with a focus on the product rather than the process (Ratanaprak, 2015). Ratanaprak claims that there is no teaching of how to listen. Similarly, Sriprom (2011) agrees that the process of listening has not received much attention in the classroom. The most common practice for teaching listening at the Thai university level starts with letting students listen to a listening text before completing a set of comprehension questions and the class ends with the teacher revealing correct responses to students (Simasangyaporn, 2016). As a result, Thai university students' English listening ability seems to be weak while numerous studies point out that Thai students have difficulties with their English listening (Cubalit, 2016; Pengsitong, 2000; Ratanaprak, 2015; Sriprom, 2011). Most common listening difficulties among Thai university students relate to unfamiliar vocabulary, speakers' speech rates, speakers' accents, a lack of background knowledge about the topic they hear, and a lack of concentration (Banditvilai, 2018).

1.1 Dynamic Assessment (DA)

The pedagogical applications of dynamic assessment based on Vygotsky's sociocultural theory (SCT) has become one recent approach for teaching listening comprehension (Sara, Saeed, & Hossein, 2015). DA refers to the combination of assessment and instruction into one single activity, which helps to activate the learners' cognitive and meta-cognitive processes (Ableeva & Lantolf, 2011). One major principle of DA is a teacher as an expert providing mediation which can be in the form of hints, prompts, or constant feedback to a learner as a novice in order to help correct learners' errors. Haywood and Lidz (2007) points out that mediation is important for human development and is needed for cognitive development. According to Vygotsky (1978), one learner's level of performance can definitely be



developed through mediation, provided by a more capable peer. Generally, the person who provides mediation is called a mediator.

Two major approaches of DA refer to interventionist and interactionist (Lantolf & Poehner, 2004). The interventionist approach relates to the provision of mediation in the form of hints, mediating prompts, or constant feedback, which is a pre-scripted and hierarchically arrangement from the most implicit to the most explicit in sequence. During the DA procedure, the mediator strictly follows the scale of providing mediation in order to help students reach the correct response. Poehner (2008) outlines that the “mediators are not free to respond to learners’ needs as these become apparent during the procedure but must instead follow a highly scripted approach to mediation” (p.44-45). On the other hand, a spontaneous interaction can be found in the interactionist approach where the mediator is likely to have more freedom in mediation since the prompts are not prepared in advance. Based on this perspective, it can be concluded that one major difference between the interventionist and interactionist approaches in DA is from the provision of mediation.

Numerous studies (Ableeva, 2010; Alavi, Kaivanpanah, & Shabani, 2012; Sara et al., 2015) have shown that DA with teacher as a mediator can help to promote students’ listening comprehension ability. Focusing on a one-to-one interaction between teacher and learner, Ableeva (2010) applied the implementation of DA to develop L2 listening comprehension of university learners of French. Ableeva detected ten types of mediation she had with a group of learners. Three stages in her experiment include a non-dynamic pre-test, a mediation process stage, and a dynamic re-test. After completing their pre-test, the students were offered non-standardized mediation that included leading questions, hints and prompts. The results showed that when the learners were engaged in mediational dialogue, they showed their responsiveness to assistance, offered explicitly or implicitly, and were able understand listening texts better. Ableeva concluded at the end of her study that “it should be emphasized that the problem areas were revealed only on the basis of participants’ performance throughout the DA stage, during which a flexible mediator-learner interaction was involved” (p.73).

1.2 DA and Student as a Peer Mediator (PM)

As previously mentioned, DA deals with an interaction of one teacher and one learner. In order to reflect the student-centered learning approach to which several educators in Thailand have paid attention to (Syamananda, 2017), a group of students in this study were assigned to be peer mediators in replacement of teachers following a Group-DA format. Browsing through literature, a large amount of research has confirmed that it is possible for students to take the role of peer mediators who assisted their peers during small group work to develop skills in writing (De Guerrero & Villamil, 2000), speaking (Ohta, 2005), and reading (Klingner & Vaughn, 2000). One study involving peer-peer interaction to develop listening skills belongs to Garcia and Asencion (2001) who investigated 39 Spanish students at an American university. Both the comparison group and the experimental group took notes while listening to a lecture. After the lecture, the comparison group did not interact while the participants in the experimental group shared their notes for five minutes in small groups. Garcia and Asencion (2001) discovered that participants in the experimental group (n=18) scored significantly higher on the listening comprehension post-test. Since participants in the experimental group provided scaffolding for each other and through interaction with their peers, Garcia and Asencion concluded that interaction could help to improve listening comprehension.

1.3 Self-Regulatory Strategies (SRS)

In this study, all students serve for two roles; the first role as a PM while the second role as an active participant. As a PM, students need to learn how to prepare themselves to become effective peer mediators. Responsibilities of a PM include providing mediating prompts to those who cannot reach a correct response, previewing class materials to make outline of important concepts, checking if all group members understand the listening text, and evaluating the effectiveness of the provision of mediating prompts. As an active participant, students need to learn how to manage their listening process. Responsibilities of a participant include selecting appropriate listening strategies to be used before listening,



organizing ideas and thoughts for a better understanding, checking their understanding to keep track of listening progress, and evaluating the effectiveness of listening strategies used as compared to the listening purposes.

In order to prepare students to become effective peer mediators who can manage their listening process, such important skills as self-regulatory strategies need to be incorporated in the framework. Zimmerman (2000) states that those who are highly regulated can be compatible to various situations and are able to find an appropriate solution while approaching a task in a purposeful manner. This study employs Oxford's (2011) S²R Model for self-regulatory strategies as the theoretical framework. S²R Model focuses on four metacognitive strategies of planning, organizing, monitoring, and evaluating. Oxford (2011) points out that a metacognitive approach which involves the awareness and regulation of thinking gives learners a deeper understanding of themselves as someone who is learning another language. When students are trained with these strategies, they are expected to be able to regulate many aspects of their learning: their internal mental states, beliefs, observable behaviors, and the learning environment (Oxford, 2011). As a result, students can become effective peer mediators in the context of classroom settings while at the same time can manage their own listening process.

With an ultimate goal to develop Thai students' English listening comprehension ability, three major components of PM, DA, and SRS are integrated to be an instructional process called PM DA-SRS, which gives attention to the use of process-oriented approach with a focus on students taking the peer mediator role. Therefore, the research question put forward by this study is "What is the effect of PM DA-SRS instructional process on the development of Thai students' English listening comprehension ability?"

2. Objective

The research objective of the study is "to investigate the effect of PM DA-SRS instructional process on the development of Thai students' English listening comprehension ability."

The research hypothesis is "there will be a significant difference on Thai students' English listening comprehension ability through the application of PM DA-SRS instructional process."

3. Materials and Methods

3.1 Research Design

Taking the form of one group pretest-posttest experimental design, this study followed the interventionist DA approach where treatment referred to as PM DA-SRS instructional process was conducted in between the pretest and the posttest.

3.2 Population and Sample

29 Thai students who were third-year undergraduate students majoring in business-English at Faculty of Arts, Assumption University. All students needed to enroll in the course EN2230 Listening and Speaking, a major required course. Their level of English proficiency was considered at an intermediate level, which was equivalent to IELTS score of six or TOEFL score of 500 at the minimum.

3.3 Research Procedure

All 29 students followed the PM DA-SRS instructional process which consisted of three modules; SRS and listening strategy instruction, peer mediator training, and the application of PM DA-SRS respectively (Permpoonsap & Swatevacharkul, 2018).

Table 1 shows the schedule of PM DA-SRS instructional process, which approximately lasted for seven weeks.

**Table 1** Schedule of PM DA-SRS instructional process

Week	Session (3 hours)
1	SRS and listening strategy instruction
2	Peer mediator training
3	PM DA-SRS session I
4	PM DA-SRS session II
5	PM DA-SRS session III
6	PM DA-SRS session IV
7	PM DA-SRS session V

3.3.1 Module I: SRS and Listening Strategy Instruction

This module consists of an explicit instruction of self-regulatory strategies (SRS) and listening strategies, which were introduced to students during the first week. Based on Oxford's (2011) S²R Model, the instruction of self-regulatory strategies includes planning, organizing, monitoring, and evaluating. Adapted from Vandergrift and Goh (2012), the instruction of listening strategies includes activating knowledge, conceptualizing broadly (listening for main ideas), focusing attentively, double-checking, predicting, elaborating, inferencing, summarizing, and note-taking. In order for students to understand all strategies clearly and be able to apply them in their actual learning, this study followed the Cognitive Academic Language Learning Approach (CALLA) as a guideline to teach strategies to students.

The CALLA developed by Chamot (2009) consists of five phases as follows:

1. Preparation. The teacher identifies what learning strategies students have already known and how students apply these strategies.
2. Presentation. All names and definitions of the strategies are explicitly explained to students and then the teacher demonstrates how to use each strategy. The teacher needs to ensure that students understand all strategies so that they can practice the strategies in the next phase.
3. Practice. This is considered a learner-centered phase where the teacher acts as a facilitator giving opportunity for students to practice new strategies in many different contexts.
4. Evaluation. Students have to evaluate their performance, which can be conducted individually or cooperatively.
5. Expansion. Students have an opportunity to transfer the learned strategies to new tasks. In the meantime, the teacher should ensure that students keep practicing the use of these strategies.

3.3.2 Module II: Peer Mediator Training

This module consists of an overview of DA and mediator demonstration with mediator practice. Firstly, an overview of theoretical background of DA namely Vygotskian cognitive psychology was presented to students in the form of a lecture to make sure that all students understood the key concept of PM DA-SRS instructional process. After that, the teacher/researcher demonstrated how to act as a peer mediator to the students following the interventionist approach where mediating prompts were prepared in advance by the teacher/researcher. Together with the demonstration, a list of five mediating prompts adapted from Ableeva's (2010) typology of mediation used to help students with listening difficulties was introduced to students. Since students took the role of peer mediator instead of the teacher, some mediating prompts were adjusted to be comprehensible for students.

Table 2 contains five mediating prompts from the most implicit to the most explicit ones.

**Table 2** Mediating prompts used in this study

Level of explicitness	Mediating prompts
Prompt 1	Accepting response <i>Mediator</i> "Yes, Very good, Ok, That's it". Rejecting response (Repeat the incorrect answer by asking a question) <i>Mediator</i> "Did the speaker say that? Are you sure?"
Prompt 2	Replaying the listening text (Replaying the segment focusing to a specific detail) <i>Mediator</i> "Let's listen to this part again".
Prompt 3	Giving key words to the correct answer <i>Mediator</i> "Here are some key words I am going to give to you".
Prompt 4	Translation <i>Mediator</i> "What's the meaning of... in English?"
Prompt 5	Providing explicit explanation with correct response <i>Mediator</i> "The correct answer is...."

For the mediator practice, 29 students were divided into six groups. Five groups consisted of five members while one group with four members. In terms of group arrangement, the researcher arranged the scores of listening pretests of all students from the highest to the lowest. Students were grouped systematically, in which student number one was in the same group with student number six, eleven and so forth. Six students with the highest scores of each group were assigned to be peer mediators for the mediator practice and for the first PM DA-SRS session scheduled in week 3 (see Table 1). In the same way, the other six students receiving the second highest scores from each group were peer mediators on the second PM DA-SRS session. The process ended up with the fifth students performing their peer mediating roles on the last PM DA-SRS session. Since there were five PM DA-SRS sessions from weeks 3 to 7, every student took the peer mediator role once and served as an active participant for the rest of four sessions.

After the group arrangement, a list of mediating prompts together with audio transcript and answer keys for comprehension questions in the listening worksheet prepared by the teacher/researcher was given to six students with the highest scores of each group. Following Poehner's (2009) Concurrent group-DA, those acting as a peer mediator started to call one of their members in the group to give an answer. If the member failed to answer correctly, the peer mediator offered the first prompt as a feedback and called upon a different member in the group to reformulate the answer. The peer mediator used prompts starting from the most implicit to the explicit ones until the correct answer was reached (see details in section 3.3.3.).

3.3.3 Module III: The Application of PM DA-SRS

During the last module which started from weeks 3 to 7, peer mediators of each group took the following steps.

1. Listening worksheets were distributed to all students.
2. All students listened to the selected listening text for the first time and attempted to answer comprehension questions in their listening worksheets individually. (Assessing the student's listening ability)
3. The peer mediators of each group started calling one of their members to answer the first comprehension question in the listening worksheet. When the first student gave an incorrect answer, the peer mediators provided the first mediating prompt and called another member to reformulate the answer. In case the second member still could not answer correctly, the second mediating prompt was provided while the third student was called to give the correct answer (offering mediating prompts).

4. The process continued until all answers were revealed.

Figure 1 displays the PM DA-SRS instructional process.

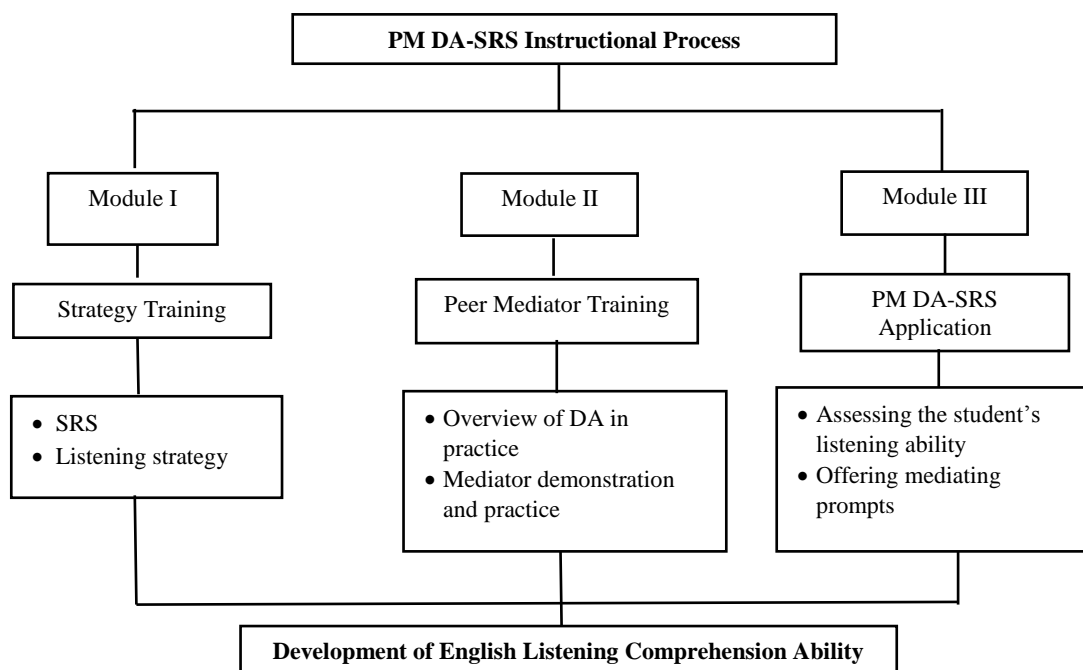


Figure 1 The PM DA-SRS instructional process

The researcher served as a facilitator who assisted, observed, monitored, and assessed the students' performance. It should be noted here that a list of mediating prompts prepared by the teacher/researcher in the form of handouts together with audio file, audio transcript with answer keys for comprehension questions in the listening worksheet were provided to the peer mediators of each group three days before each session started.

3.4 Instrument

This study used the listening module of IELTS as an English listening pretest and posttest for the data collection. The test time was approximately 30 minutes.

3.5 Data Collection

The listening pretest was administered by the researcher during the first week of the EN2230 course before the PM DA-SRS instructional process started. The posttest was administered to all students at the end of the process.

3.6 Data Analysis

In order to answer the research question and test the hypothesis, the Dependent Samples t-test was calculated to investigate the effect of PM DA-SRS instructional process on the development of Thai students' English listening comprehension ability.

4. Results and Discussion

In order to investigate the effects of the PM DA-SRS instructional process on the development of Thai students' English listening comprehension ability, the dependent samples t-test was calculated to test the hypothesis. It was determined that, on average the students' scores of the listening posttest were significantly higher than the scores of the listening pretest ($t(28) = -12.29, p < 0.05$) (Table 3). Therefore, the hypothesis is accepted.

**Table 3** Statistical test of mean of the listening test

Listening Test	N	Mean	SD	Assessment	Mean Gain	t	df	Sig. (Two-tailed)
Pre-Test	29	24.89	4.80	Competent User	6.59	-12.29	28	0.00
Post-Test	29	31.48	3.80	Good User				

To compare, the students' mean score of the listening pre-test was 24.89 (SD = 4.80), which was considered a '*competent user*' according to the IELTS listening module band scores. For the listening post-test, the students' mean score increased to 31.48 (SD = 3.80), which was considered a '*good user*'.

In addition, the effect size (ES) which was measured by Cohen's *d* is 2.28 (Cohen, 1988). Cohen's *d* values and the interpretation for the magnitude of the effect are specified as follows:

$d = 0.2-0.4$	small
$d = 0.5-0.7$	medium
$d = \text{or } >0.8$	large

Therefore, it can be inferred that the magnitude of the effect of the PM DA-SRS on students' English listening comprehension ability is large.

Besides the findings of the pretest and posttest scores, a further analysis of each listening context was also conducted in order to obtain more information. The listening test was assessed in according to three listening contexts; daily life listening, business listening, and academic listening (listening to lecture). Comparisons between the pre-test scores and post-test scores are displayed in Table 4.

Table 4 Statistical comparison between pre-test and post-test scores

Listening contexts	Listening test	n	Mean	SD	Mean Gain	t	df	Sig. (Two-tailed)
Daily life	Pre	29	7.48	1.52	1.48	-6.02	28	0.00
	Post	29	8.96	0.98				
Business	Pre	29	6.68	1.49	1.10	-3.90	28	0.00
	Post	29	7.79	1.42				
Academic	Pre	29	10.72	2.95	4.00	-9.92	28	0.00
	Post	29	14.72	2.37				

The results in Table 4 indicate that the posttest scores were significantly increased from the pre-test scores in all listening contexts ($p=0.00$). The contexts students gained the highest scores refers to academic, followed by daily life, and business contexts respectively.

It can be concluded that the students' English listening comprehension ability significantly developed through the application of the PM DA-SRS instructional process. The results can be explained by the provision of mediating prompts.

In this study, each mediating prompt functions differently. The first function is to give students confidence that their comprehension to the listening text is correct. This can be seen in Prompt 1 (accepting or rejecting response) when the peer mediator wanted to show encouragement to the group members who responded correctly. The second function is considered as a way to encourage students to apply all learned strategies in order to help them understand the listening text better. For example, Prompt 2 (replaying the segment of the listening text) can be compared to the use of focusing attentively and double-checking strategies. When group members could not reach a correct response, the peer mediator replayed only some specific parts of the listening text to make group members realize which part they needed to focus on in order to reach a correct response. In other words, Prompt 2 was used in order to encourage students to apply the strategy of focusing attentively. For those who already understood the listening text, replaying the segment of the listening text could be served as the use of double-checking strategy, which was employed



to verify their understanding across comprehension questions in their listening worksheets during the second time of listening. In short, Prompt 2 can help to refresh the content of the text for students (Ableeva, 2010). Kozulin and Garb (2002) justified the provision of mediation that they mediated for their students which strategies required in each question and indicated how strategies could be transferred from one task to another. The last function of mediating prompt is to help students who produce an error but are unable to correct it. This can be seen in Prompt 4 (translating) when the peer mediator provided a Thai translation for group members to correct the mistake.

Through the process of providing mediating prompts, individual students could gain more confidence and at the same time were encouraged to apply all learned strategies in order to help them handle with listening difficulties. This could lead students to a better understanding in the listening texts and development in their listening skill.

The findings here corresponded to the results of previous studies (Ableeva, 2010; Alavi, et al., 2012), which reveal that the peer mediational support provided to students during the application of DA process resulted in the development of students' listening ability. In this regard, further research studies should be conducted with a more focus on training students to be peer mediators so that students would have more opportunities to refine their practice. Specifically, students should be taught how to provide mediation to their peers in a more effective way for their future learning.

5. Conclusion

This study was conducted in order to investigate the effect of PM DA-SRS instructional process on the development of Thai students' English listening comprehension ability. The findings revealed that on average the students' scores of the listening posttest were significantly higher than the scores of the listening pretest in all contexts of daily life listening, academic listening, and business listening. The development of the students' listening ability resulted from the provision of mediating prompts which encouraged students to apply appropriate strategies for a better understanding in the listening texts.

The findings of this study can have some pedagogical implications for second language learning. In terms of its applicability, DA can be incorporated into listening instruction to develop the students' listening ability since DA helps to develop the students' cognitive and metacognitive processes. Given the fact that this study focused on training students to be peer mediators in DA format, English teachers should be able to provide appropriate and professional advice as well as to motivate students to become more responsible in their learning process. Moreover, the findings can also be served as guidelines to pave the way for further research on how to develop Thai students' listening ability with a focus on peer mediation based on the application of DA.

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