

Teacher as a Mediator in Foreign Language Speaking Fluency Development: A Case Study of an Advanced-Placement Chinese TBLT Classroom

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Abstract—This action research case study will help educators conceptualize the mediator’s role by investigating how mediation is used under the guidance of Reuven Feuerstein’s Mediated Learning Experience theory to aid learners’ fluency development in an Advanced-Placement Chinese high-school Task-Based Language Teaching classroom in America. Findings from this mixed-methods action research study first suggest what types of mediation might influence fluency development after finding mediation of intentionality and mediation of feeling of competence were practiced most and much more frequently than other mediation types during the whole mediation period. Second, this study indicated that teachers can use questioning techniques to implement different mediation types in their classrooms. Furthermore, the findings suggest that two possible factors might affect mediation quality. One factor is whether teachers can modify lesson plans; the other is the influence of the teachers’ personalities on their mediation strategy choices.

Index Terms—mediation, teacher as a mediator, speaking fluency, Chinese as a second language, Task-based Language Teaching (TBLT)

I. INTRODUCTION

Placing students in a rich learning environment does not automatically develop their language fluency. To support learners in searching for and constructing knowledge successfully in a constructivist classroom, a teacher must be a mediator between students and their learning environments (Brooks & Brooks, 1999). Taking the teacher’s role as a mediator means that the teacher is more than a manager (Ellis, 2009). A mediator will be involved actively in learners’ learning process through guiding, scaffolding, negotiating, regulating learning, or deliberately mediating specific culture, knowledge, skills, or values to learners (Selepe & Moll, 2016). Task-based Language Teaching (TBLT) is a teaching approach derived from constructivist learning theory (Ellis et al., 2020). In order to implement TBLT successfully, Bygate (2015) stated that the teacher’s role in a TBLT classroom should be a mediator. Some researchers, such as Ellis (2009) and Van den Branden (2009, 2016), have investigated the teacher’s general role as a mediator in foreign language learning TBLT classrooms. Samuda (2001) explored the teacher’s role as a mediator in learners’ language form and meaning connection processes. Liang and Apedoe (2025) examined whether the teacher as a mediator in a TBLT Chinese classroom could effectively improve learners’ speaking fluency. However, none of these studies described how mediation worked specifically in developing language fluency in a TBLT classroom.

There are many different mediation models, and in meditation studies on second-language or foreign-language learning, most researchers derive their mediation strategies from Vygotsky’s mediation theory or combine Feuerstein’s mediation theory with Vygotsky’s. From a theoretical perspective, Feuerstein’s mediation theory has further explored Vygotsky’s mediation theory (Lidz, 1991; Presseisen & Kozulin, 1992). Although Vygotsky created the concept of the Zone of Proximal Development (ZPD), he did not have a chance to explore how human beings as mediators mediate learning to achieve the learning potential of ZPD during communicative situations, and the functions of human mediators in his theory are no more than carrying tools in the mediation process (Presseisen & Kozulin, 1992). Feuerstein (Feuerstein, 1990; Feuerstein et al., 1978, 2010, 2012) studied mediation by focusing on the human being as a mediator. Furthermore, he proposed that the role of the human mediator is the creation of cognitive prerequisites of learning for learners (Kozulin, 2004). Liang and Apedoe’s (2025) study found that in a classroom wherein the teacher used Feuerstein’s mediated learning experience (MLE) theory to guide their practice, the learners’ speaking fluency performance improved. In this study, we use action research to describe how a teacher acts as a mediator in a foreign-language classroom to develop learner’s speaking fluency.

II. THEORETICAL FRAMEWORK AND LITERATURE REVIEW

A. Feuerstein's Mediated Learning Experience Theory

The concept of mediation was developed by Lev Vygotsky (1896-1934) and Reuven Feuerstein (1921-2014) separately as alternative theoretical approaches that depart from Jean Piaget's four stages of child cognitive development theory (Kozulin & Presseisen, 1995). Based on Jean Piaget's (Piaget & Cook, 1952) mediation model, cognitive change is transitioning from one developmental stage to the next. Each stage is age-specific, determined by a child's maturation and direct interactions with the environment (Rubtsov, 2020). Vygotsky explored sociocultural mediation in the learning processes (Kozulin & Presseisen, 1995). From his perspective, children explore their environment using symbolic tools (signs, linguistic, and mathematical systems) that exist in a given culture (Vygotsky, 1978). Feuerstein (Feuerstein, 1990; Feuerstein et al., 1978, 2010, 2012) studied mediation by focusing on the human being as a mediator. In his theory, humans act as mediators between the environment and the child, allowing the child to have a mediated learning experience (MLE) (Feuerstein, 1990). Feuerstein believed that MLE is a decisive factor in children's cognitive development.

Feuerstein developed specific mediation criteria for having mediated learning experiences happen. He identified two groups of MLE criteria (Feuerstein et al., 2010). The first group (MLE1-MLE3) includes three essential and fundamental criteria. The second group (MLE4-MLE12) includes nine conditional parameters that direct modifiability according to cultural and interpersonal differences. They are explained below.

MLE 1: Mediation of Intentionality

A mediator could intentionally change the stimuli to make them more salient, powerful, imposing, understandable, and important to the learner by adjusting the rate of stimuli flow or modifying the mediation methods to meet the learners' needs and keep them ready to learn (Feuerstein et al., 2010). This mediation includes communication with learners about the purpose of the task and attempts to maintain learners' involvement in the task (Lidz, 1991).

MLE 2: Mediation of Meaning

This mediation moves the content from a neutral position to a valuable or important position (Lidz, 1991) by giving meaning to an activity, a choice, or a preference (Feuerstein et al., 2010).

MLE 3: Mediation of Transcendence

This promotes the connection between the task and learners' related but not currently present experiences (Lidz, 1991). This experience may refer to what they have had or will complete at another time (Feuerstein et al., 2010, 2012).

MLE 4: Mediation of a Feeling of Competence

To help learners feel competent in learning, a mediator can manipulate the task to increase learners' probability of mastery, praise learners to boost their feeling of competence (Lidz, 1991), or provide mediation tools to help learners cope with tasks (Feuerstein et al., 2010).

MLE 5: Mediation of Regulation and Control of Behavior

This mediation engages learners in regulating their behavior (Feuerstein et al., 2010), like developing self-regulation behavior, suspending a response until they have checked out the situation they are exposed to, or reacting quickly and timely.

MLE 6: Mediation of Sharing Behavior

Mediating sharing behavior mediates learners' willingness and skills to connect to their peers (Feuerstein et al., 2010).

MLE 7: Mediation of Individualization and Psychological Differentiation

Mediators encourage learners to think and express themselves as they are but not impose others' aspects of experience on the learner (Feuerstein et al., 2010).

MLE 8: Mediation of Goal-seeking, Goal-setting, Planning, and Goal-achieving

This mediation aims to develop learners' ability to set goals or invest in plans to achieve goals (Feuerstein et al., 2010).

MLE 9: Mediation of the Search for Challenge, Novelty, and Complexity

This type of mediation is employed to develop learners' ability to meet the world's challenges, novelty, and complexity (Feuerstein et al., 2010).

MLE 10: Mediation of the Awareness of Being a Modifiable Entity

This mediation is applied to communicate to learners that they have profited from their experience positively and that they have improved and changed (Lidz, 1991).

MLE 11: Mediation of Optimistic Alternative

This is to mediate learners to find a promising alternative or to mediate the expectation for positive outcomes (Feuerstein et al., 2010).

MLE 12: Mediation of a Sense of Belonging

This mediation helps and supports learners in developing a feeling of belonging or connecting to a community (Feuerstein et al., 2010).

Feuerstein's mediation theory is a branch of motivational psychology that investigates the motivation encouraged by the mediator (Brown, 2002). The function of most types of mediation in MLE is to motivate learners in their learning. A need can become a motive if directed at an object (Allen, 2010). While mediating learners' engagement with stimuli, connecting to their experiences, or understanding why they are learning, meditation can affect learners' learning attitude, interests, and linguistic self-confidence and help them see the practical value of language learning. Mediating optimistic alternatives and a sense of competence also can encourage learning by helping learners build confidence. Learners'

attitudes, cultural interests, linguistic self-confidence, and perceived practical value of language proficiency are components of second-language learning motivation (Dörnyei et al., 2006). Motivation is one associated factor for second-language fluency development (Segalowitz, 2010).

MLE also creates cognitive prerequisites for learning by moderating the influence of unfavorable environmental factors like cultural differences and the learner's emotional balance (Feuerstein et al., 2010). A speaker's cognitive state could also be reflected in one's speaking fluency (Segalowitz, 2010).

Mayer (2004) emphasized that constructivist learning can be conducted by focusing on techniques that guide students' cognitive processing with a specified educational goal. Through analyzing MLE theory, it can be concluded that mediation under the MLE framework could be a technique that guides learners' cognitive processing to achieve learners' goal of fluency development. What cognitive processes could be involved in developing second language (L2) learners' fluency? This question is answered in Segalowitz's (2010) L2 fluency theory.

B. Segalowitz's Second-Language Fluency Theory

Segalowitz (2010) interprets fluency from a cognitive science perspective. In his theory, cognitive fluency consists of learners' ability to control the cognitive systems underlying speech production. If learners' cognitive-perceptual system is sharpened, their cognitive operations will become faster and more efficient, resulting in more fluent speech output: utterance fluency (Segalowitz, 2010). At the same time, learners' learning motivation will engage them in more language usage, reinforcing cognitive-perceptual processing to enhance cognitive fluency (Segalowitz, 2010). This enhancement will also be evident in learners' speech output: utterance fluency. Segalowitz (2010) also pointed out that the main cognitive processes underlying oral performance are automaticity and attention to language. Automaticity means learners can perform the language without being limited by short-term memory capacity. Instead, they can perform the language fast and effortlessly. Attention to language means learners can redirect their focus to choose the appropriate language to form their speaking (Segalowitz, 2010).

Based on Segalowitz's fluency theory, if MLE can help learners develop motivation and speaking fluency cognitive function processing such as automaticity and attention to language, it can promote their fluency performance.

C. Teacher-as-Mediator Studies in TBLT Classrooms

There are a few studies that explored the teacher as a mediator who mediates learning in a TBLT classroom. Van den Branden (2016) explored the teacher's role as a mediator in different TBLT stages based on research and pedagogical literature. He concluded that the teacher is a content selector in the pre-task stage. In the during-task stage, the teacher is the learners' interactional partner, a motivator, organizer, conversational partner and supporter, and interlocutor. In the post-task stage, the teacher is the evaluator, feedback provider, and learning supporter. However, as a content selector, how should a teacher select the content? As a learning motivator or organizer, how should a teacher motivate or organize learning? Van den Branden (2016) did not answer these questions.

Some researchers have more precise answers about how to conduct mediation in TBLT classrooms. Ellis (2009) compared an unsuccessful "target-orientated" TBLT program in Hong Kong elementary schools with a successful TBLT program in a Thai university and concluded there are some principles that may help implement TBLT successfully: the tasks must be tailored to students' language proficiency level; teachers need to know clearly what a task is; both teachers and students need to know the purpose of performing the tasks; and teachers who implement tasks need to be involved in task material development. Van den Branden (2009) found that teachers mediate learners' learning by modifying task scenarios and negotiating task objectives and modality of task implementation with learners. Ellis (2018) specified that the types of interactions that most successfully mediate learning are the ones that can scaffold learners to perform new functions. However, these studies did not focus on mediating fluency development and were not empirical studies. Liang and Apedoe's (2025) study addressed this gap by investigating whether mediation guided by MLE could improve speaking fluency in an Advanced-Placement (AP) Chinese TBLT classroom. However, their study did not describe what that mediation looked like or the types of mediation used to improve students' fluency. Currently, there is no other research describing how mediation works to improve fluency in a TBLT classroom.

III. METHOD AND DESIGN

The goal of this study is to describe in detail the types of mediation used and provide examples of what mediation sounds like when used in a language classroom. The research questions are: (1) What are the types, and frequency of mediation used by the teacher-researcher in the AP Chinese second- or foreign-language TBLT classroom? and (2) How does the teacher-researcher use the various mediation types, and what factors, if any, influence how mediation is used in the AP Chinese second- or foreign-language TBLT classroom?

A. Research Design

The findings presented in this paper are drawn from a larger action research study that collected both quantitative and qualitative data. In this study, the teacher-researcher (first author) conducted 10 action research cycles, documenting and interactively refining each cycle of her implementation of mediation in the classroom. Each action research cycle included

four stages: plan, act, observe, and reflect, based on Kemmis and McTaggart's (1988) four-moment action research model. Each phase is described in more detail below.

Plan. The teacher collected data about learners through a brief survey. The survey asked students about their learning background, including their age, grade, gender, family language information, and years of Chinese learning. The teacher also reflected on her own capability and teaching experience to build self-awareness of being a mediator. Then, the teacher selected and designed customized tasks under the guidance of MLE theory and Segalowitz's (2010) L2 fluency theory.

Act. The teacher implemented mediation in class.

Observe. The teacher observed the students' reactions to mediation and recorded the mediator-mEDIATEE (teacher-student) interaction on an audio recorder.

Reflect. The mediator documented her observation and reflection in a log and modified the plan for the next mediation cycle if needed.

B. *Setting and Participants*

This research study was conducted in an AP Chinese second- or foreign-language TBLT classroom in a San Francisco Bay Area public high school. The fourth-year Chinese class was open to all students, and students could enroll without a placement test.

A total of 25 students (72% female, 28% male; 84% Asian, 16% non-Asian) participated in the study. Tenth graders were 56%, twelfth graders were 32%, and eleventh graders were 11%. Students' primary home languages included English (36%), a Chinese dialect other than Mandarin Chinese (48%), Mandarin Chinese sole (4%), and Mandarin Chinese along with other languages (12%).

The teacher-researcher conducted mediation in the class for one project unit in late January of the 2022 Spring semester. The teacher-researcher is a senior teacher who has taught Chinese as a second or foreign language for different proficiency-level learners in K-12 schools in California for 14 years.

C. *The Intervention*

(a). *TBLT Project Unit and Tasks*

The culminating task for this unit was for students to create an interactive game to share with their classmates during an in-class Chinese New Year Game Fair. Students worked in small groups, and each group self-selected and designed a game that engaged players (their classmates) in verbal responses or interactions about the Chinese New Year celebration. The goal of this project unit was for students to be able to describe how Chinese people celebrate the Chinese New Year by incorporating appropriate cultural and language knowledge through carrying out the project and participating in the Chinese New Year Game Fair.

(b). *Mediation*

During the in-class teacher mediation, the teacher-mediator implemented three universal mediations (mediation of intention, mediation of meaning, and mediation of transcendence) and situated mediations based on the situation that happened while teaching. The situated mediations included: mediation of a feeling of competence; mediation of regulation and control of behavior; mediation of sharing behavior; mediation of individuation and psychological differentiation; mediation of goal-seeking, goal-setting, planning, and goal-achieving; mediation of the search for the challenge, novelty, and complexity; mediation of the awareness of being a modifiable entity; mediation of optimistic alternative; and mediation of a sense of belonging.

D. *Instrumentation*

(a). *In-Class Mediation Audio Recordings*

The teacher used a portable digital audio recorder to record her verbal interactions with learners during class sessions.

(b). *Teacher Observation and Reflection Log*

Observation field notes were documented in the teacher observation and reflection log after each class session. The content included self-observation of the teacher's mediation, comments, questions from the observation, self-evaluation, or considerations for further mediation action.

(c). *Students Pre- and Post-Mediation Recording Artifacts*

As part of the larger study, we collected recordings of students' oral presentations before and after the mediation. The presentation topic was adapted from the College Board 2019 AP Chinese exam cultural presentation topic (College Board, 2021). The same oral presentation task was given before and after the mediation. Students self-recorded their presentations in the class and uploaded their digital recordings to the online Google Classroom. This data was analyzed in greater detail in Liang and Apedoe (2025); however, we draw upon some students' data here in this paper.

(d). *Mediated Learning Experience (MLE) Teacher Self-Rating Chart*

The mediator self-checked her mediation implementation using an MLE teacher self-rating chart. The chart was adapted from the MLE rating scales developed by Lidz (1991) and Hasson (2018) for mediational behaviors. The chart

listed the 12 types of mediation based on Feuerstein's MLE theory. It provided space for documenting mediational behaviors used in class and the frequency of the various mediation types.

E. Procedures

Before the mediation intervention, the teacher-mediator collected students' learning background survey and conducted students' pre-mediation oral presentation recordings. The mediation intervention included 10 cycles, each taking approximately one lesson period to complete. Teacher-student interaction in class was audio recorded. Teacher's thoughts, ideas, observations, and reflections that came up after teaching were recorded in the teachers' observation and reflection log. The teacher also completed the MLE self-rating chart after each lesson. After the whole mediation intervention, students completed the post-mediation oral presentation recordings.

F. Data Analysis

The qualitative data were analyzed using a simplified Miles et al.'s (2014) qualitative data analysis model. First, the teacher-researcher transcribed audio recordings. Second, the teacher-researcher read all the data to understand the collected data. The mediation interaction recording transcriptions and the teacher's observation and reflection log were organized as conversation episodes or statements, and coded into an MLE teacher self-rating chart. The data collected from each intervention cycle was coded on a separate MLE teacher self-rating chart. If mediation was identified in one episode of conversation or statement, it was counted as mediation that happened once. Then, the teacher-researcher counted the frequency of mediation under each MLE category. After all the intervention cycles were coded separately, the teacher-researcher looked for a recurring pattern and generated pattern codes. A second coder was used to establish interrater reliability. The teacher-researcher prepared a set of coding rules and trained the second coder using these rules to analyze 20% of the data ("training data"). Then, the second coder and the teacher-researcher independently coded another 10% of the data ("test data"). They had 77% agreement on the test data. They discussed and came to an agreement on the codes where they differed. Based on the updated coding rules, the teacher-researcher recoded the remaining data.

IV. FINDINGS

A. Types and Frequency of Mediation Used

The study found evidence of the use of all types of mediation proposed by Feuerstein's MLE theory, except for MLE 10: Mediation of the awareness of being a modifiable entity.

Example of MLE 1: Mediation of Intentionality

Three typical examples of the mediation of intentionality were identified in this research. One was that the mediator shared her reasons for the planned tasks with the students to help them recognize a particular object of focus so that stimuli became more salient and powerful. For example, on day 5, before the class started to watch some short videos about the Chinese New Year celebration, the mediator shared her intention for having the class do this task:

“这里我也给你们找了一些视频。网上有很多关于春节的信息，但这些视频我觉得比较好，是比较短，然后呢，它说了最重要的东西，然后呢，你也可以看一看这个视频，你有印象。很多同学我们没有过过传统的中国新年，所以你看看，到底这个新年，比如说庙会怎么样啊，汤圆怎么样啊，到底人怎么做，你可以有个印象。”[“I found some videos for you. There is a lot of information about the Chinese New Year, but these videos I think are relatively good. They are short, and they talk about the most important thing. Also, after you watch these videos, you will have an impression (of the Chinese New Year). Many of you have not had the experience of celebrating the Chinese New Year traditionally. Therefore (through watching these videos), you will see how the (Chinese) New Year is celebrated, like what the temple fair is like, what the Tangyuan is like, you can have an impression.”]

During this meditation, the mediator clarified to students why she chose these videos to help them access information about the Chinese New Year.

The second typical example was that the mediator purposely designed or planned in-class interactive tasks that could maintain the students' involvement. One example was that she created a project that involved students in designing and participating in a Chinese New Year game fair. The third typical example identified was that the mediator raised her voice, slowed down, or used gestures purposely to raise students' attention or to hold students' interest. The mediator shaping their way of talking to learners or their way of presenting information is another way to convey the mediator's intentionality (Feuerstein et al., 2010).

Example of MLE 2: Mediation of Meaning

The typical mediation of meaning in this research was having students notice the importance or meaning of the content. It is because learners might not find meaning in things they do and imposing on the learner a meaning also forces a search for meaning (Feuerstein et al., 2010). One example is on day 1, the mediator asked students a series of questions to guide students to think about the significance of the unit topic, the Chinese New Year Celebration, before they started to explore the unit topic.

Example of MLE 3: Mediation of Transcendence

A typical example identified in this research was that the mediator connected the present class content to what students are familiar with, and helped students to generalize one situation so that they could use it at another time. For example, on day 2, the mediator had students compare the similarities and differences between celebrating the new year among Chinese and Americans. Through this comparison, students could connect the latest content about the Chinese New Year celebration to the new year celebration tradition they were familiar with and generalize the new year celebration norms.

Example of MLE 4: Mediation of a Feeling of Competence

Two typical examples were identified in this study: (a) using verbal praise and encouragement to let students know that they have done an excellent job, and (b) assisting students in improving their skills or solving problems in their own way.

Example of MLE 5: Mediation of Regulation and Control of Behavior

A typical example in this study was that the mediator guided students to consider whether they had the necessary tools or information before starting to work on their tasks.

This guided discussion aimed to help learners to think about what they needed before they started their action. Therefore, learners can give themselves time to think and to check whether they have enough information before they react (Feuerstein et al., 2010). This mediation helped them regulate their actions.

Example of MLE 6: Mediation of Sharing Behavior

In this study, the mediator created the need and opportunities for learners to develop their skills to share and support each other in their learning. For example, the group project to design a game fair allowed students to share what they knew with their peers and support each other while they prepared the project together. During the game fair, students had further opportunities to share their games with the whole class while they played their peers' games.

Example of MLE 7: Mediation of Individualization and Psychological Differentiation

A typical example was that learners were given opportunities to work on the tasks based on their preferences and express themselves in their own way. For example, the unit project was designed in a way that students could decide what games they wanted to design for the game fair, and the class would support them in developing their ideas and completing their projects based on their preferences.

Example of MLE 8: Mediation of Goal-seeking, Goal-setting, Planning, and Goal-achieving

A typical example identified in this research was that the mediator provided students the opportunity to plan out their work and deepened students' plans through questioning during class discussions.

Example of MLE 9: Mediation of the Search for Challenge, Novelty, and Complexity

In this research, the mediator encouraged students to participate during class discussions or game playing when they did not want to volunteer because they were worried that they would not do well. Another example is the mediator challenged students and prepared them for possible complicated situations they might not have anticipated. For example, on day 7, students were working on their game-fair project with their peers. The mediator talked to Luna, who had just finished preparing her pictorial game. Her game required two participants where one participant would draw while the other participant would guess what the drawing was. Through asking questions, the mediator challenged Luna and tried to prepare Luna to be ready for possible complicated situations that she might not have anticipated.

Example of MLE 10: Mediation of the Awareness of Being a Modifiable Entity

An example of this mediation type was not identified in the research.

Example of MLE 11: Mediation of Optimistic Alternative

A typical example identified in this research was that the mediator encouraged learners to view their work positively. For example, on day 2, when the student June complained that she did not write her calligraphy well enough because “我的‘福’写得也太胖了 [I wrote the character ‘Fu’ too fatty]”, the mediator told her that her writing style made the character represent “有福气 [good fortune].” In Chinese culture, fat and full means good fortune, so she hoped her comment would make the student feel better about her calligraphy writing.

Example of MLE 12: Mediation of a Sense of Belonging

In this research, a typical example was that the mediator organized students to learn in the community and had learners participate in community-building activities. For example, on day 8, the game-fair day, students were organized to go to each other's game booth to play games designed and conducted by their peers. Through their participation and interaction with each other, their sense of community was strengthened.

B. How Mediation is Used and Factors That Influence Its Use

Theme 1: The Questioning Technique Can Be Used Across Multiple Mediation Categories

The questioning technique was commonly used in mediation (Hill & Sabet, 2009; Feuerstein, 2015). This study used the technique of asking questions in all of the mediation types employed except for MLE 11 (Mediation of optimistic alternative) (See Table 1).

Theme 2: Modifying Lesson Plans to Meet Mediation Needs

During the 10-day mediation period, the teacher mediator modified the original lesson plans multiple times after she identified issues that arose in the class. She modified the lesson plan promptly during class time. For example, during Day 1, she spent more time than she expected in the Kahoot game activity because from students' responses to the Kahoot

questions, she decided she should give students feedback immediately. Therefore, this game activity took longer than she had planned and she cut the end-of-class students' reflection task during the Day 1 lesson.

The mediator also modified the next day's lesson plan based on the day's or the previous day's teaching reflection. For example, after she found out from students' pre-mediation recording that the customs the students knew about the Chinese New Year celebration were based on their life experiences in America, she modified the lesson plans to increase authentic inputs such as playing Chinese New Year celebration video clips in class during day 2 and day 10. Also, she had students who had experience living in China share their Chinese New Year celebration experiences with the class on day 9 rather than having students interview random peers, which she originally planned on day 4.

TABLE 1
EXAMPLES OF QUESTIONS USED IN MEDIATION

Mediation types	Examples of questioning techniques used	Purpose of the mediation
MLE 1: Mediation of Intentionality	(During Day 1) 我们做这个活动呢，一个是要给大家看一看你做的东西，分享我们的想法或者故事，对不对？还有一个原因呢是这样，你跟别人说一说，其实呢，让你们记得更牢。是不是？ [One reason we are doing this activity is to show everyone the decoration you made and to share our ideas and stories, right? The other reason is that if you tell others your ideas and stories, you will remember them better. Isn't it?]	Share reasons for the planned tasks and task design with the students to help learners to recognize a particular object of focus.
MLE 2: Mediation of Meaning	(During Day 1) 你觉得我们为什么要过节.....有时候过节，是为了纪念一个人，对不对？那中国的春节是为了什么？过春节是为了什么？ [Why do you think we celebrate a holiday/festival? ... Sometimes, we celebrate a holiday to commemorate a person, right? Then, what is the Chinese New Year for? Why do (Chinese people) celebrate the Chinese New Year?]	Guide students to think about the significance of the unit topic, "Chinese New Year Celebration."
MLE 3: Mediation of transcendence	(During Day 1) 我们为什么过节？我们为什么要庆祝一个节日？每个文化里都有节日，是不是？ [Why do we celebrate the holidays/festivals? Why do we celebrate a holiday/festival? Every culture has its own holidays/festivals. Is it right?]	Have students connect the new concept to a familiar one.
MLE 4: Mediation of feeling of competence	(During Day 4) Charlotte: 从前有个怪物，叫年，年就吃小动物和人，有一天，有个地方就不要把鬼逃走，所以他们就放炮.....fireworks，也有很多红色的东西，所以它就逃走，他们就很安全了..... [Once upon a time, there was a monster named Nian. Nian ate small animals and people. One day, there was a place that did not want the ghost to run away, so they lit fireworks, and many red things. So, it (the monster) ran away, they (people) would be safe...] Teacher: 然后呢？[Then?] Charlotte: 人们就放.....就每个新年就放这个红色的炮。[People then lit red pao every new year.] Teacher: 鞭炮 Bianpao [fireworks] Charlotte: 鞭炮 Bianpao [fireworks] Teacher: 然后呢 [Then?] Charlotte: Teacher: 每一年都做，然后就成为了什么？[If (people) do it every year, what will it become?] Charlotte: 一个节。 [A festival/holiday.]	Provide support to help the student complete a task successfully to boost the student's sense of competence.
MLE 5: Mediation of regulation and control of behavior	(During Day 2) 下边请你跟你的伴说一下，为了准备这个 project，你们需要准备什么？你需要知道什么？在你开始做之前？ [Please tell your class partner, to prepare for this project, what do you need to prepare? What do you need to know before you start the project?]	Help learners to think about what they need before they start their action.
MLE 6: Mediation of sharing of experience/ thought	(During Day 3) Teacher: 我们做这个活动呢，一个是要给大家看一看你做的东西，分享我们的想法或者故事，对不对？还有一个原因呢是这样，你跟别人说一说，其实呢，让你们记得更牢。是不是？ [We do this activity to show everyone what you have done and share our thoughts or stories, right? The other reason is that if you tell (your story to) other people, it will help you remember it better. Isn't it?]	Create a need and possibility for learners to share and support each other.

MLE 7: Mediation of psychological differentiation	(During Day 2) Teacher: 我们要装饰我们的教室, 准备庆祝春节。你想做什么? [We're going to decorate our classroom and prepare to celebrate the Chinese New Year. What do you want to do?]	Create opportunities for learners to express themselves in their own way.
MLE 8: Mediation of goal seeking, setting, planning, and achieving	(During Day 2) Teacher: 那今天我们一起来看看, 要了解中国人的习俗, 你怎么了解? 从哪里可以了解到? [Teacher: Today we'll find together. If you want to collect information to understand Chinese people's (Chinese New Year celebration) customs, how can you? From where?]	Deepen students' plans through questioning.
MLE 9: Mediation of the search for challenge, novelty, and complexity	(During Day 9) Teacher: 大家还有什么问题没有? 没有了? 继续问, 继续问, 这很难得的机会, 因为呢, 你不仅可以了解文化知识, 也是一个我们很好的学习怎么样跟人用中文交流, 对不对? [Do you have any other questions? No? Keep asking, keep asking. It's a rare opportunity because not only can you learn cultural knowledge, but you can also learn how to communicate with people in Chinese, right?]	Encourage students' participation and search for challenges.
MLE 12: Mediation of belonging	(During Day 9) Teacher: 我们班有多少同学过春节了? [How many of you have celebrated the Chinese New Year?] (see students raised hands) 好, 今天是这样, 你呢还是先跟你的伴儿分享一下你的长周末怎么样。 [Great. Today, you will first share with your partner what your long weekend was like.]	Encourage students to connect with each other in order to build a sense of community.

Theme 3: Teacher's Personality Affects Mediation Strategy Choice

Through her teaching reflections, the teacher-mediator was aware that her introverted personality affected her mediation strategy choice, especially for MLE 6: mediation of sharing behavior. To mediate the sharing of experience, a mediator can communicate to the student an experience or thought the mediator had (Lidz, 1991). However, on her Day 1 teaching reflection, the mediator already realized this problem. She asked herself in the observation and reflection log "Would it make a difference if I shared my personal experience with students to mediate sharing?" She reminded herself to be aware of her behavior. In the subsequent days, she deliberately shared her personal experience of the Chinese New Year celebration. When she was sharing her experience, she noticed some students were more attentive. During the 10-day mediation intervention period, however, she noticed she still missed many opportunities to share personal experiences. One key reason, she reflected, was that she is introverted and private, and she often feels uncomfortable sharing her personal experiences with students. The mediator's personality affected what meditation strategies the mediator chose to implement in the classroom.

Theme 4: Repetition Affects Learners' New Word Acquisition

The teacher mediator created repetition opportunities during the acquisition input and output stages. One example was helping students acquire the word “怪兽 (guai shou) [monster].” On day 3, the class discussed the Chinese New Year legend. The teacher asked: “那个怪兽叫什么名字? [What is the monster called?]" Through questioning and responding, the teacher went over the “怪兽 (monster)” story with the students, and she showed the class a PowerPoint with the pictures with 怪兽 [monster] and its written Chinese characters. Then, students retold the story with their partners. The next day, student Charlotte retold the story as follows: “从前有个怪物, 叫年, 年就吃小动物和人。有一天, 有个地方就不要把鬼逃走, 所以他们就放炮 [Long time ago, there was a monster called Nian. Nian eats small animals and people. One day, one place did not want to have the ghost run away, so they light firecrackers].”

After the previous lesson's multiple repetition tasks, students heard and said the word “怪兽 [monster]" multiple times. However, Charlotte still did not use the word 怪兽 (guai shou) [monster] to describe the monster in her retelling. She used the similar word 怪物 (guai wu, which also means monster in Chinese), and later she used the word 鬼 (ghost), the same incorrect word she used in her pre-mediation recording. After she retold the story, the teacher asked Charlotte: “那年是一个鬼吗? 鬼是什么东西? [Is Nian a 鬼 (gui)? What is a 鬼 (gui)?]" Through questioning and responding, Charlotte had another input opportunity to hear the word “怪兽 [monster].” The following day, the teacher also deliberately pointed out to the whole class the difference between 怪兽 (guai shou) [monster], 怪物 (guai wu) [monster], and 鬼 [ghost].

In the post-mediation recording, Charlotte described the story as the following: “年是一个怪兽，有一天一个村子里面的人们就要把这个鬼这个怪兽怕怕走。” [Nian is a monster. One day, people in one village wanted to scare scare away this ghost this monster.]

Charlotte finally used the word 怪兽 [monster] instead of 鬼 [ghost] to describe the monster. In the second half of the sentence, she first used 鬼 [ghost], but she self-corrected and used the word “怪兽 [monster]” correctly. From Charlotte’s acquisition process, direct or not-direct repetition opportunities provided during the intervention affected her word acquisition.

C. Types and Frequency of Mediation Used

Although the qualitative findings showed that almost all mediation types were employed in the intervention, the quantitative data showed that the frequencies of different types of mediation were different (see Table 2).

TABLE 2
FREQUENCY OF DIFFERENT MEDIATION TYPES

MLE types	Mediation occurrence frequency/day										
	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day10	Total
MLE1: Intentionality	31	14	10	17	14	3	2	2	18	13	124
MLE2: Meaning	3	2	4	3	2	1	1	1	2	2	21
MLE3: Transcendence	9	8	3	1	2	1	1	1	4	2	32
MLE4: Competence	13	23	18	16	4	13	1	2	20	30	140
MLE5: Regulation of behavior	1	1	1	0	0	2	0	0	1	1	7
MLE6: Sharing	1	3	3	7	1	1	1	1	4	4	26
MLE7: Psycho- differentiation	1	1	2	1	2	1	2	1	1	1	13
MLE8: Goal-seeking	1	6	1	0	0	1	0	0	1	0	10
MLE9: Search for challenge	0	0	0	1	0	0	1	0	1	0	3
MLE10: Modifiable entity	0	0	0	0	0	0	0	0	0	0	0
MLE11: Optimistic	0	2	0	4	0	0	0	0	0	0	6
MLE12: Sense of belonging	1	1	1	2	1	1	1	3	2	1	14

The types of mediation that did not occur every day in class were all the situational mediations, including MLE 5, MLE 8, and MLE 11. One mediation that never occurred was situational mediation: MLE 10.

The types of mediation that occurred every day at least once in class included MLE 1, MLE 2, MLE 3, MLE 4, MLE 6, MLE 7, and MLE 12. Among these mediation types, MLE1, 2, and 3 are the three essential and fundamental mediations, whereas MLE 4, 6, 7, and 12 are situational mediations. Also, mediation frequency varied in different phases of the intervention. The mediations that happened most frequently are MLE 4 and MLE 1. MLE 4 occurred 140 times, and MLE 1 occurred 124 times within the 10-day mediation period. They happened much more frequently than the other types of mediation (MLE 3, 32 times; MLE 6, 26 times; MLE 2, 21 times; MLE 12, 14 times; MLE 7, 13 times) (see Figure 1).

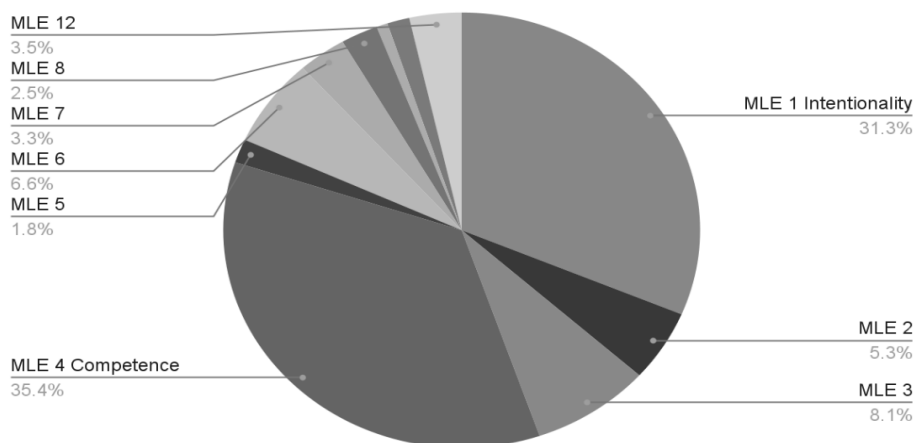


Figure 1. Different Mediation Types Frequency Comparison

V. DISCUSSION

The study results provide a picture of how to conduct mediation in an AP Chinese language TBLT classroom to improve learners' fluency development.

A. How to Use Different Mediation Types

Mediation of intentionality and the feeling of competence happened most frequently and much more frequently than other types of mediation in the study. Based on Segalowitz (2010), two main cognitive processes underlying fluency are automaticity and attention to language. The function of mediation of intentionality and mediation of feeling of competence meet the requirements of these two fluency-development cognitive-processes. Schmidt (1990) described noticing as a focal awareness and postulated that those who notice most learn most. What the mediation of intention emphasizes is making stimuli salient and noticeable to learners (Feuerstein et al., 2012). Therefore, this mediation might have increased learners' awareness of language in this study. Also, in order to boost learners' feeling of competence in language performance, the mediator in this study was observed to raise learners' awareness of language through teacher-student interaction and by creating many repetition tasks to assist learners' language automaticity development. Automaticity development relies on repetition during the language input and output stages (Ellis, 2002). Multiple researchers have observed that task repetition can help language automaticity development (Bygate, 2001; Ellis, 2002; Lynch & Maclean, 2001; Segalowitz, 2010). The findings in this study resonated with those researchers and showed that repetition affected learners' new word acquisition, which may eventually affect their word retrieval speed and stability, which are components of cognitive fluency (Segalowitz, 2010). In addition, if learners can perform a task better, it can boost their feeling of competence in their language skills, which in turn, can also improve their learning motivation (Dörnyei et al., 2006). Motivation is also a factor associated with fluency development (Segalowitz, 2010).

B. How to Use Questioning as a Mediation Technique

In this study, questioning techniques appeared in almost all the mediation types, which suggests that questioning can be an effective mediation technique in a TBLT classroom. Greenberg (2014) mentioned that one of the qualities of an effective teacher or mediator is asking but not telling. Feuerstein (2015) postulated that reciprocal questioning is the best way to turn stimuli into a source of learning because questioning can involve learners in answer-seeking and will trigger mental process mobilization. Therefore, the findings of this study supported the mediation principle brought up by Greenberg and Feuerstein. In addition, this study showed that while conducting mediation under the MLE framework, questioning can be used across different mediation categories.

C. Factors That Affect Mediator's Mediation Implementation

In the study, the mediator had to modify lesson plans multiple times to meet mediation needs. Tasks will not come to life without reframing and reinterpreting through lesson planning and teaching practice reflection and reformulation (Rolin-Ianziti, 2010). Ellis (2009) also suggests that if teachers do not have the power to modify their lesson plans, they may not meet students' needs.

The mediator's introverted personality also affected the mediation implementation in this study. Teachers' personality research shows that teachers' personalities positively correlate with teachers' teaching preferences (Mahmoudi & Zamanian, 2018). Therefore, mediators' personalities could significantly influence their mediation strategy choice.

This case study provided one example of how a teacher practiced mediation to improve learners' language fluency in one AP Chinese classroom. However, this is also a limitation. This implies that future studies can examine if the same mediation model works in the same way in other language classrooms. In addition, this research was an action research

study and is based in the teacher or mediator's perspective and observations of the mediation process. Future studies can further explore the mediation from the learners' perspectives, for example, examining learners' responses to mediation.

VI. CONCLUSIONS

This action research study investigated how to use mediation under the guidance of MLE theory to mediate language fluency development in an AP Chinese TBLT classroom. The findings of the study suggest mediation of intentionality and mediation of feeling of competence could strongly influence fluency development because these two mediation categories might contribute to prompting language noticing and developing learners' language automaticity besides promoting learners' motivation. This study also indicated that questioning could be used as a mediation technique for different mediation categories. Finally, the study highlighted two possible factors that may affect mediation implementation. One is if the mediator can modify lesson plans to meet mediation needs; the other is that the mediator's personality can affect their mediation strategy choices.

This study addressed the irreplaceable role that a teacher, as a human mediator, plays in a learner's learning process in constructing knowledge. It provides teachers with an example of how to conceptualize teaching and teacher-student interaction to improve learners' fluency development in a constructivist learning classroom and how to practice mediation to help students find meaning, direct their attention, achieve their potential, and function as independent thinkers to achieve their goals.

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