

*Investigating the Impact on Learner Interest With the Incorporation of Active Learning Activities in a Tertiary CLIL Context*

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**Abstract**

This interactive presentation will discuss the benefits and time-saving nature of the inclusion of Active learning(AL) techniques emphasizing the positive effect on learner interest (LI) in Japanese tertiary Content and Language Integrated Learning (CLIL) oriented classes. This presentation will offer a brief background into the concept of AL as a methodology for instruction as well as a brief explanation of the LI theoretical framework, highlighting Hidi and Renninger's (2006) 4-phase model of interest development and its application to the current study. Additionally, results from exit interviews as well as student evaluations of course content will be presented revealing that students claimed to be more engaged and interested in the content of the course as a direct result of the Active learning activities. Of note with regard to findings was that although some students voiced favor for the safety of a traditional passive activities such as reading and writing, the majority of the students reported that upon participating in the active learning activities they felt more confidence dealing with content. Useful, transferable Active Learning techniques that may be easily applied to other classes will be discussed. This research although preliminary adds optimism that active learning methodology maybe successfully integrated into tertiary classes with LI, English study as well as student satisfaction with class content affectively increased.

Keywords: Active Learning (AL), Learner interest (LI), Content and Language Integrated Learning (CLIL), Tertiary Education

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## **Introduction**

There is an ever growing amount of evidence to suggest that utilizing “active learning” in lecture classes encourages students to actively engage in course material more effectively than traditional “passive” lectures appear to (Smith et.al., 2011). The benefits of active learning have been studied extensively in a wide-variety of disciplines including the natural sciences, social sciences and humanities but the reality is that traditional passive lecture classes continue with students more often than not commenting they are dissatisfied with the content vis-à-vis the delivery method (Deslauriers et.al,2019). This presentation began with an overview of Hidi and Renninger’s (2006) 4-phase model of interest development followed by a discussion of the benefits of Active Learning(AL) as a methodology for instruction in lecture classes. A description of the context for this teaching intervention, specifically a Japanese tertiary Content and Language Integrated Learning (CLIL) oriented Lecture classes was discussed. Examples of transferable AL techniques were elaborated upon with an emphasis on “activating” the lecture class under investigation as well as the benefits and time-saving nature of the inclusion of AL techniques. This paper will detail preliminary results from exit interviews as well as student course evaluations upon completion of the course which emphasized the positive effect on learner interest, engagement, and English study.

## **Interest**

Consulting a dictionary a common definition of interest found is “a feeling that you have when you want to know or learn more about somebody/something” (Oxford University Press,n.d.). Learner Interest as a body of research defines the concept of “interest” more comprehensibly as a psychological state, as well as a predisposition to reengage particular disciplinary content over time with a complex interplay between affective and cognitive components that drive motivation (Hidi,2016). Interest may be considered a Motivational variable important role in supporting learning and developing knowledge and expertise(Silvia, 2008). Learner interest and engagement is an aspect of educational practice that has been described as both significant as well as complex there is a need for better detail about how “students behave, feel, and think” (Fredricks, et al., 2004).

Researchers, Hidi and Renninger (2006) have proposed a four phase theory of interest development with the phases sequential but are dependent on the context, level of inherent challenge, reward and support (Figure 1). The first two phases, Situational interest are of particular interest to educators it is highly changeable. Situational interest has been defined as an immediate affective response to certain conditions and/or stimuli in the learning environment that focuses one’s attention on the task, which may or may not last over time and is highly changeable therefore Situational interest may or may not lead to well-developed individual interest (Hidi & Renninger, 2006). With regard to language learning; Situational interest is closely linked to the classroom environments, content, themes, personal relevance as well as linking prior knowledge and novelty as many of these factors are controllable in classroom activities.

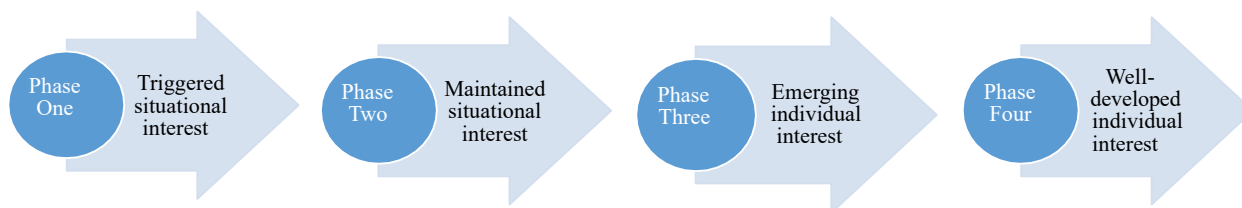


Figure 1 *Four-Phase Theory of Interest Development*

## Active Learning

People remember: 10% of what they read, 20% of what they hear, 50% of what they see and hear, 70% of what they say and 90% of what they do (Dale, 1969). Active Learning (AL) is a concept that is often proposed as a means to increase learner interest and engagement. Active learning defined as a set of specific instructional methods that promote greater student involvement and responsibility for learning than traditional instructional approaches provide. Researchers Bonwell and Eison (1991) comment that AL should meet the following conditions:

- Students are involved in more than listening.
- Less emphasis is placed on transmitting information and more on developing students' skills.
- Students are involved in higher order thinking (i.e. analysis, synthesis, evaluation).
- Students are engaged in activities (e.g. reading, discussing, writing).
- Greater emphasis is placed on students' exploration of their own attitudes and values.

Table 1 summarized from Mello and Less (2013) offers an illustration of the differences between traditional lectures and lectures that incorporate AL. The benefits of AL for the students include increased attention and engagement, promotion of critical thinking skills as well as deepen students understanding. The reflective nature of AL aids the instructor in investigating the authenticity or relevance of course material to the students as this will promote LI and assist in assessing student understanding (Hidi, 2006).

<ul style="list-style-type: none"> <li>• Instructor talks &amp; students listen with minimal interruptions.</li> <li>• Student concentration can be observed dropping after 10-15 minutes</li> <li>• Instructor's questions are largely rhetorical</li> <li>• Students' responses to an instructor's questions are made by students raising their hands</li> <li>• Student-to-student talk is discouraged</li> <li>• Students listen and take notes independently</li> <li>• Student comprehension during the lecture is not monitored explicitly</li> <li>• Opportunities to correct misunderstandings are not provided</li> </ul>	<ul style="list-style-type: none"> <li>• Instructor talks with periodic pauses for structured activities</li> <li>• As student concentration begins to wane, a short structured in-class activity is assigned</li> <li>• Instructor's questions require responses</li> <li>• Students' responses to an instructor's questions are commonly checked and monitored</li> <li>• Student-to-student talk is encouraged</li> <li>• Students often work with partners or in groups</li> <li>• Student comprehension during the lecture is assessed directly</li> <li>• Opportunities to correct misunderstandings are periodically</li> </ul>
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routinely during the lecture • Student absenteeism often is quite high	provided within the lecture • High rates of attendance often are reported
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Table 1: Traditional versus Interactive Lectures

## Background to the Study

The researcher's university was experiencing significant student dissatisfaction with lecture classes. Pre pandemic course Evaluation questionnaires found that students found the lectures boring and many commented that they spent "more time on their phone than listening to the professor." This is problematic as many of the lecture classes students are required courses therefore the content would be deemed necessary not only for graduation but conceivably for students' future careers. As commented previously AL techniques have been found beneficial and easily implemented in many different streams of education therefore it seemed logical to investigate AL as way to increase LI as well as promote English study in the current lecture class.

The current research was conducted in a small private university in Tokyo during the 2022 Spring term. The sample utilized was a third year soft CLIL language driven lecture class on the language curriculum consisting of 91 female, 34 male Japanese students (n=125). The course taught in-person by the instructor allowing easy access for observation, interviews and the students enrolled the class had an average TOEIC score between 500-600.

The methodology employed was an Intrinsic Case Study (Stake,1995) with mixed methods (Creswell and Creswell,2018), utilizing data from the form of Classroom observation course Evaluations (self -reporting questionnaire) and purposeful sampling interviews (Patton, 2002) with exit interviews(n=6) . The reasoning for this mixed methods approach was specifically the necessity to follow-up the questionnaires with qualitative data as merely self-reporting may be viewed as subjective.

## Active Learning Intervention

The general categories of AL learning strategies are Collaborative learning and cooperative learning. These strategies shift learning from a solitary to group activities in small groups to complete a specific instructor-assigned task or goal, promoting a relatively high level of student interaction and engagement (Cusea, 1992). There are a multitude of AL activities that are easily implemented into lectures classes (see Yamauchi, 2018 for an extensive list).

In each of the 15 lectures given in the 2022 Spring term the following three AL techniques were utilized for the purposes of this study: The Pause Procedure (Rowe, 1980), Think-Pair-Share (Millis et.al, 1995) and Jigsaw Learning (Johnson and Johnson, 2009).

The Pause Procedure (Rowe, 1980) is most arguably the easiest implemented AL technique available to an instructor promotes greater student engagement with minimal modification to one's traditional lecture presentations. The instructor pause for two minutes every 12-15 minutes during the lecture. During the pauses, students work in pairs to discuss and rework their notes without instructor-student interaction. This technique allows for the instructor assess student understanding and promote peer learning.

The Think-Pair-Share activity (Millis et.al, 1995) During this activity The instructor asks a question and students reflect on information that provided initially through a reading assignment, a short lecture, a videotape, etc. The students think about the question and refer to their notes write a response. The activity may stop there or if time permits students may work in pairs and share their responses with another pairs, classmates. This allows students to privately formulate their thoughts before sharing them with others, increasing their English speaking time, fostering higher-order thinking skills as well as reflecting on personal relevance promoting situational interest (Hidi,2016).

Arguably the most well-known AL intervention is The Jigsaw Technique (Johnson and Johnson, 2009). The name is derived from the jigsaw puzzle because it involves putting the parts of the assignment together to form a whole picture. During this activity the students are put into groups with each student given a piece of an assignment for example a part of a reading passage. Students must work with their group members in order to successfully complete the task, thus making students dependent on each other to succeed. (See Johnson and Johnson, 2009 for a more extensive explanation).

## **Results and Discussion**

Upon the completion of the course the students completed Course evaluations. Students individually reported a higher attendance rate. This was also confirmed by the instructor. There was a 95% attendance rate. This finding is in agreement with Deslauriers and colleagues (2019), who found higher rates of attendance in university lecture classes utilizing AL techniques. Of further interest the instructor also observed that this was the first time in five years teaching this course that no students dropping the course.

An increase in student self-confidence was also noted with a number of students expressing their opinions in English with relation to the lecture content and commenting that they felt comfortable and confident expressing their opinions in English. With regard to English study, students also commented that they felt more prepared for vocabulary quizzes. This was particularly encouraging as this course although heavily content based was part of the English Language curriculum and presented entirely in English. Specifically two students interviewed commented their vocabulary scores increased in comparison to another English lecture class that was delivered in a traditional manner. These findings are in agreement with Mello and Less (2013) who found that AL techniques increased test scores in the tertiary context across the various subjects including ESL classes. A cross-fertilization of content and language study as well as enjoyment was commented on by a student who stated: “This class was very busy but I liked it. My vocabulary quiz score increased and some of the vocabulary was in my business class so I already could remember it so I was very happy.”

In closer examination of Learner Interest with this sample, comments from students during exit interviews offered examples of triggered Situational Interest such as enjoyment, personal relevance and novelty all viewed as instrumental in the achievement of Learner interest (Hidi, 2016). During exit interviews students commented expressed enjoyment with the course as well as relevance stating that groupwork was useful for clarification of content from the lecture. With regard to novelty, one of the six students interviewed commented: “This class was very different for me even though there were many students I didn’t feel like it was a Lecture class.” It was fun working in small groups” (novelty). Furthermore personal relevance was claimed by three students stating: “A lot of the things we studied in this class were similar to my Seminar so it was useful for me.”

It should, however be commented that there was some hesitancy with at least one student who commented: “I felt pressure to work in a group. This is a lecture class so I didn’t expect to be graded on participation I was worried about my grade but in the end I really enjoyed the class...(hesitancy). This comment concurs with the literature with regard to AL implementation as it is not unusual for students who have been taught exclusively in a passive lecture format to feel a certain degree of initial anxiety while acclimatizing to this new student centered teaching delivery/methodology (Deslauriers et.al, 2019).

Some further observations by the instructor were a larger number of questions and comments by the students as interest seemed to be activated with the content of the lectures (Silvia, 2008). As group work was implemented in at least 50% of the class time it allowed the freedom for instructor to circulate through the class instead of standing in front of the students and as such able to gauge students understanding of content. An interesting observation was that higher rates of L2 (English) were used than expected. This finding is in consensus with research into students language usage in groupwork in CLIL classes where it was discovered through classroom observations that students were more apt to prepare materials in English when there were time restraints and the task was a presentation (Yamauchi, 2018).

### **Conclusion and Future Implications**

Although the benefits of active learning have been studied extensively in a wide-variety of disciplines including the natural sciences, social sciences and humanities but in traditional passive lecture classes continue to be the norm with students’ dissatisfaction and lack of interest often cited by students as reasons for poor course performance. This presentation discussed the implementation of Active Learning (AL) techniques in a soft CLIL lecture class to ascertain how Learner Interest was affected by this intervention. Hidi and Renninger’s (2006) 4-phase model of interest development was utilized to determine the degree to which Learner Interest (LI) was affected.

A description of the context for this teaching intervention, specifically a Japanese tertiary Content and Language Integrated Learning (CLIL) oriented Lecture classes was discussed and examples of transferable AL techniques were elaborated upon with an emphasis on “activating” this lecture class benefits and time-saving nature of the inclusion of AL techniques. Preliminary results illustrated that there was a positive effect on LI in this CLIL context lecture class. The factors associated with triggered situational interest specifically novelty, enjoyment and relevance were reported. Other than some hesitancy with the student-centered approach all students commented that they enjoyed the class and reported higher than the norm attendance rates.

A major drawback for this research was that the intervention was only one term of 15 classes therefore future implications would be to look at this group longitudinally to determine if AL techniques would promote more sustainable Individual Interest. Another finding of particular interest to language teachers and future research was that student vocabulary score increased as did L2 (English) usage in group work. This research although preliminary adds optimism that active learning techniques are a valuable tool that may be successfully integrated into tertiary lecture classes leading to increased triggered situational interest as well as higher student satisfaction.

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