

The Impact of CLIL Approach to Enhancing University Students' Speaking and Creative Thinking Skills

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ABSTRACT

In addition to being proficient in verbal communication, students must also acquire 21st-century competencies, which encompass creative thinking abilities. Content and Integrated Language Learning (CLIL) is a communication methodology that can be employed to concurrently enhance students' language proficiency and foster their creative cognition. This study investigates the influence of the Content and Language Integrated Learning (CLIL) strategy on the speaking and creative thinking abilities of students at IAIN Palopo, located in South Sulawesi, Indonesia. This study employed a quantitative methodology with a quasi-experimental design, encompassing 51 first-semester students enrolled in Indonesian language classes. The collection of data involved the utilisation of speaking tests, speaking assessment rubrics, and creative thinking skills examinations. Following data collection, the researchers conducted a quantitative analysis using SPSS 25.00. They employed the one-way MANOVA and one-way MANCOVA tests for this purpose. The results showed that the CLIL approach had a significant effect on improving students' speaking and creative thinking skills. These results indicate that the CLIL approach can be used as a choice for teachers to develop students' speaking and creative thinking skills.

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1. INTRODUCTION

One of the determining factors for the success of learning is using the correct method. Content and Language Integrated Learning (CLIL) is a recommended method for developing language skills in current language teaching. This method is widely recommended by experts and educators in response to rapidly growing global challenges (Coyle et al., 2010). CLIL is a particular learning method for second and first languages by integrating aspects of language and content in a balanced way (Abaunza et al., 2020; Leal, 2016; McDougald, 2015; McDougald & Pissarello, 2020).

Referring to various literature, CLIL has been the most popular method in the last few decades, widely used in various disciplines (not only for language learning). This method is effective and

efficient because it places the target language as the medium (Salekhova & Yakaeva, 2017). This method is increasingly in demand by teachers and researchers because CLIL is related to the development of various other skills like others, including basic interpersonal communication skills and cognitive academic language proficiency (Coyle et al., 2010).

This method is increasingly in demand by teachers and researchers because CLIL is related to the development of various other skills like others, including basic interpersonal communication skills and cognitive academic language proficiency (Diéguez & Martínez-Adrián, 2017; Zarobe, 2013). The CLIL method has several advantages, including increasing learning opportunities through the target language (Goris et al., 2019). This method also generates intercultural awareness among students in preparing them to become global players in the future (Pengnate, 2013). The CLIL method also provides non-linguistic benefits by increasing learning motivation and good self-confidence (Yang, 2018). On the other hand, the CLIL method also provides students with more significant opportunities to practice the language while increasing learning motivation (Torres-Rincon & Cuesta-Medina, 2019).

Moreover, proficiency in oral communication is crucial for both professional success and personal interactions. Language acquisition necessitates the mastery of four essential abilities by students: listening, speaking, reading, and writing. Out of the four skills, the ability to communicate is widely regarded as the primary indicator of language proficiency. According to Hughes (2002), the spoken form of a language is regarded as the primary form, whereas the written form is considered a more restricted version.

Speaking is a communication skill used as one of the ultimate goals of learning a foreign language and first language (Al-Hosni, 2014; Ariyanti, 2016; Juniardi et al., 2020). Speaking is inevitably the most basic language skill in language learning and teaching (Mirahmadi & Alavi, 2016). In addition, Brown and Lee (1994) stated that speaking is an interactive process for constructing meaning which involves receiving, processing, and producing information related to the context of an utterance.

Students in tertiary institutions still need to improve their speaking skills, especially in presentation activities in class (Sayed, 2005). This condition occurs not only in Indonesia but also in almost all countries in the world. In America, public speaking is a type of fear from children to adults (Brewer, 2001). Contradictory results were also put forward by researchers who found empirical evidence that students who are brilliant at completing written exams in English can sometimes not express themselves orally (Sarwar et al., 2014). This condition cannot be separated from the existence of factors that influence student performance in speaking, such as motivation, self-confidence, anxiety, planning, study time allocation, amount of support, predetermined standard performance, listening ability, and feedback during learning to speak (Tuan & Mai, 2015).

Furthermore, as crucial are the aptitude for innovative thinking. These talents are crucial in contemporary society, particularly in the age of the fourth industrial revolution and society 5.0. According to Kim & Song (2012) and Badran (2007), these skills are crucial in multiple domains of life, including business, arts, science, technology, development, and innovation. Multiple sources assert that creativity arises and evolves to enhance contemporary human existence (Fazylova & Rusol, 2016; Hargreaves, 2003).

From various kinds of literature, creative thinking skills emerge and develop, starting from the issue of a decline in human creativity, which has been identified since the 1990s (Kim, 2011; Kimbell, 2000; Newton & Newton, 2010). One of the triggering factors for this decline in skills is the notion that creativity is a topic that is not open in scientific research (Treffinger, 2009). Recent studies refuted this assumption in its development, which states that creative ideas emerge from the human brain (Ritter & Mostert, 2017). Recent studies refuted this assumption in its development, which states that creative ideas emerge from the human brain (Sawyer, 2011). On the other hand, Scoot et al. (2004) claim that creative thinking is highly dependent on cognitive processes such as (a) working memory, (b) the ability to create new mental categories, and (3) mentally manipulating objects. In other words, creative thinking skills are very close to normative cognitive functions rather than individual innate talents that can develop through training (Chen et al., 2019).

Several previous studies have explored the impact of the CLIL method on language learning. Four previous studies have investigated the effect of the CLIL method on students' speaking skills at the elementary school level (Aladini & Jalambo, 2021; Delliou & Zafiri, 2016; Kovacikova, 2019; Puerto & Lacabex, 2016). Several of these studies provide evidence that the CLIL method does not only have a significant effect on improving language skills but also on other basic skills. In other words, the CLIL method can promote various 21st-century skills to learners so that there is a significant increase.

From some of the previous relevant studies, studies have yet to specifically investigate the effect of the CLIL method on speaking and creative thinking skills. In connection with the process of achieving effective and efficient learning objectives, it is necessary to use one method to achieve more than one type of skill. For this reason, researchers are interested in conducting research that focuses on these two skills in learning Indonesian in tertiary institutions. The problem in this study is how the CLIL method influences students' speaking and creative thinking skills compared to conventional methods.

2. METHODS

2.1 *Research Design & Participants*

This study uses a quantitative approach with a quasi-experimental design which aims to explore the effect of the CLIL model on two dependent variables, namely students' speaking skills and students' creative thinking skills. This design is generally used to determine differences in students' speaking skills and creative thinking skills between study groups that apply the CLIL model and conventional models in learning Indonesian (sub-discussion of speaking).

The study employed a quasi-experimental research design, specifically a non-equivalent form (pre-test and post-test) control group design, as suggested by Fraenkel & Wallen (2007). Both groups in this study underwent an initial assessment, which was followed by a final evaluation at the conclusion of the learning session (final meeting). The final assessment was conducted subsequent to administering the CLIL model to the experimental group and the conventional model to the control group.

Participants were undergraduates from the Education Management Study Programme at the State Islamic Institute (IAIN) Palopo in South Sulawesi, Indonesia, namely from the Faculty of Tarbiyah and Teaching. From among five preexisting classes, two were chosen at random to participate in the study. There were a total of 51 students in the two groups; 25 were part of the experimental group, and 26 were part of the control group. These individuals were all enrolled in Indonesian language classes during the first semester.

2.2 *Data Collections*

2.2.1 *Speaking Test*

The researcher designed the speaking test used in this study by adopting the speaking test developed by Ahmed (2018). This test is used in the initial session before (pre-test) and after treatment (post-test) by asking students to describe the pictures, photos, or videos provided verbally. Each participant/student is welcome to speak for approximately 10-15 minutes, and it is recorded using the help of a Handycam or Video Recorder. This researcher's selection of photos/videos aims to obtain data on speaking skills in helping students speak as a form of output-based assignment (Ellis, 2009; Willis & Willis, 2007).

2.2.2 *Academic Speaking Assessment Rubric*

The researcher used a speaking assessment rubric to determine the level of achievement of students in learning to speak. The scoring rubric used is a rubric which consists of six aspects of speaking skill assessment consisting of (a) intonation, (b) the accuracy of word choice, (c) grammatical accuracy, (d) interaction, (e) use of communication strategies, and (f) cohesion and coherence (Benalcazar-Bermeo & Ortega-Auquilla, 2019; Delliou & Zafiri, 2016). This scoring rubric uses the Likert Scale model by providing five assessment options from 1 as the lowest to 5 as the highest. The reliability

score of this instrument is 0.83, obtained through Cronbach's Alpha. That is, the instrument is feasible to use in collecting data.

2.2.3 Creative Thinking Rubric

Another instrument used in this study is the creative thinking rubric developed from creative thinking skills by Abedi (2002). This rubric was developed based on the structure of Torrance's test of creative thinking. This creativity test has four components: fluency, flexibility, originality, and elaboration, with 1 being the lowest score and 3 being the highest score. The reliability test results to measure the instrument's reliability before showed a score of 0.85, meaning the instrument can be used.

2.2.4 Procedure

This research was conducted in the first semester of the 2022/2023 academic year for students taking Indonesian language courses in the academic speaking sub-discussion. The CLIL method was used in the experimental class as a treatment during the learning process, while the conventional method was applied to the control group. The teaching procedure in the experimental group consisted of (a) an introduction phase about the importance of speaking skills, (b) presenting examples of speaking videos from Youtube or other media, (c) students identifying aspects of content and language, (d) discussing student findings about speech has been aired, (e) drafting speeches together, (f) speaking in front of the class, and (g) discussing student performances. For the control group, the learning stages consisted of (a) showing PPT about academic speaking, (b) showing examples of speeches, (c) asking students to draft speeches, and (d) students speaking in front of the class.

2.3 Data Analysis

Statistical inferential tests such as a paired sample t-test and one-way ANCOVA were administered to the data once its normality and homogeneity were determined. To find the mean of two variables, statisticians use the paired sample t-test. A statistical tool for determining statistical differences between two measures, two conditions, or two points in time, this test is also known as the dependent sample t-test (Kim et al., 2018; Zimmerman, 1997). After the data collected was declared regular and homogeneous, the researchers analyzed the data by running a paired sample t-test and one-way ANCOVA, also known as a statistical inferential test. Paired sample t-test is a test run to determine the average value of two variables. This test is also known as the dependent sample t-test, a statistical tool for determining statistical differences between two measurements, two conditions, or two-time points. Furthermore, one-way MANOVA and MANCOVA are the simplest variance analysis types (ANCOVA). This test analyses data divided into several groups based on 1 factor (Ostertagova & Ostertag, 2013). This test is similar to the paired sample t-test. One-way MANCOVA measures two or more groups, while the t-test only measures one group (Green & Salkind, 2010; Saw, 2014).

3. FINDINGS

As described in the methods section, the researcher carried out one-way MANOVA and MANCOVA to answer the problem formulation in this study. First, the researcher ran a one-way MANOVA test to test for differences between the two groups in the pre-test session. The test results are presented in Tables 1 and 2.

Table 1. Descriptive statistics (Explore the amount of difference in the mean in the pretest sessions of the two groups)

	Groups	Mean	Std. Deviation	N
Speaking skill (Pre-test)	Ex	16.48	3.111	25
	Co	14.27	1.909	26
Creative thinking (Pre-test)	Ex	5.24	1.165	25
	Co	5.38	.983	26

Table 2. Tests of between-subjects (Effects exploring the differences between the two independent variables from the two groups in the pretest session)

Dependent variable	Type III sum of squares	df	Mean square	F	Sig.
Speaking skill (Pre-test)	22.470 ^a	1	22.470	3.339	.074
Creative Thinking Skill (Pre-test)	1.583 ^b	1	1.583	1.372	.247

Table 1 shows that the pre-test scores of the two groups tend to be identical. This means there is no significant difference between the experimental group using the CLIL method and the control group using the conventional method. The table also states that the two groups' speaking and creative thinking skills are similar. Furthermore, Table 2 provides information that there is no difference between the two groups in the pre-test session, both in speaking skill and creative thinking skill variables. The table also indicates that the interaction effect between the independent variables and the covariates is insignificant. Thus, table 2 also proves that the assumption requirements for the one-way MANOVA test have been fulfilled.

From the table, it can be concluded that in the initial conditions before treatment, the student's abilities in both groups (experimental and control) are the same. This means that students in both groups have the same speaking ability and creative thinking skills. The effectiveness of the two methods used (CLIL and conventional) is necessary to carry out learning treatments after knowing the average pretest score.

Table 3. Descriptive statistics (Explore the amount of unadjusted mean differences between the two groups before controlling for the pre-test or covariates in the post-test session)

	Group	Mean	Std. Deviation	N
Speaking skill (post-test)	Ex	24.56	1.685	25
	Co	17.73	2.662	26
Creative thinking skill (post-test)	Ex	10.32	1.215	25
	Co	5.96	.871	26

Subsequently, the researchers conducted a one-way MANCOVA analysis to demonstrate the efficacy of the Content and Language Integrated Learning (CLIL) approach on the experimental group, while employing the conventional method on the control group. Put simply, the one-way MANCOVA test investigates the influence of the two techniques while taking into account the pretest as a covariate. Table 3 demonstrates that the experimental group had higher post-test mean scores in speaking and creative thinking skills compared to the control group. This suggests that the utilisation of the CLIL approach has a more profound effect on the development of speaking and creative thinking abilities.

Table 4. Multivariate test Wilk's Lambda

Effect	Value	F	Hypothesis df	Error df	Sig.
CLIL Method and conventional	.133	1.569E2 ^a	2.000	48.000	.000

Table 4 shows Wilk's Lambda multivariate test to determine the effect of CLIL and conventional methods on the combination of speaking skills and creative thinking skills. Table 4 also provides information that classes using the CLIL method and classes using conventional strategies significantly improve the two skills that are the focus of this research, namely speaking skills and students' creative thinking skills.

Table 5. Tests of between-subjects effects (Explore the differences between the two independent variables in the two groups in the post-test session)

Dependent variable	Type III sum of squares	df	Mean square	F	Sig.
Speaking skill (Post-test)	507.255 ^a	1	507.255	99.367	.000
Creative thinking skill (post-test)	243.368 ^b	1	243.368	219.836	.000

Table 6. Descriptive statistics (Explore the amount of adjusted mean differences in the two groups after controlling for the pre-test in the post-test session)

Dependent Variable	Group	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Speaking Skill post	Ex	24.56	.337	23.86	25.26
	Co	17.64	.535	16.66	18.81
Creative Thinking Skill	Ex	10.32	.243	9.82	10.82
	Co	5.96	.171	5.61	6.31

Table 6 is still related to the one-way MANOVA test, which shows the results of testing the effects between aspects. This test examines the differences between and the effect of classes with the CLIL. Furthermore, conventional methods on the post-test scores in both aspects after controlling for the pre-test scores. The table indicates that classes using the CLIL method significantly impact post test scores from both aspects, namely, students' speaking skills and students' creative thinking skills.

Table 7. Tests of between-subjects effects

Dependent variable	Type III sum of squares	df	Mean square	F	Sig.
Intonation (Post-test)	20.781 ^a	1	20.781	39.398	.000
Diction (Post-test)	18.259 ^b	1	18.259	48.398	.000
Grammar (Post-test)	20.631 ^c	1	20.631	56.545	.000
Interaction (Post-test)	14.824 ^d	1	14.824	36.461	.000
Communication strategy (Post-test)	13.785 ^e	1	13.785	45.152	.000
Cohesion & Coherent (Post-test)	12.824 ^f	1	12.824	35.528	.000
Fluency (Post-test)	14.237 ^g	1	14.237	47.828	.000
Flexibility (Post-test)	20.185 ^h	1	20.185	85.993	.000
Orisinality (Post-test)	18.874 ⁱ	1	18.874	76.394	.000
Elaboration (Post-test)	8.699 ^j	1	8.699	35.155	.000

Table 7 shows the measurement results for the adjusted mean differences between the two groups (experimental and control classes) after controlling the pre-test. Based on the table, the adjusted average for speaking and creative thinking skills in the experimental group is more effective than the control group.

Table 8. Pairwise comparisons (Exploring the exact differences in the two groups after controlling for the pre-test in the post-test session)

Dependent Variable	(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval for Difference	
						Lower	Upper
Speaking skill	Ex	Co	6.829	.627	.000	5.570	8.089
	Co	Ex	-6.829	.627	.000	-8.089	-5.570
Creative Thinking Skill	Ex	Co	4.358	.295	.000	3.765	4.952
	Co	Ex	-4.358	.295	.000	-4.952	-3.765

Table 8 shows a paired comparison test by juxtaposing the two groups after controlling for the pre-test. Based on the results of the table, the CLIL method applied to the experimental class has a positive impact. It is more effective in improving students' speaking and creative thinking skills. These results also indicate that the experimental class with the CLIL method has a long-term impact on both skills in this study. In contrast, using conventional methods in the control class has a much lower impact than the CLIL method.

Next, the researcher ran a one-way MANCOVA test to calculate various aspects. It aims to examine the impact of CLIL and conventional methods on speaking skills (intonation, word choice, grammar, interaction, communication strategies, and cohesion & coherence) and students' creative thinking skills (fluency, flexibility, originality, and elaboration). Table 9 shows that there is a slight difference between the pre-test means of the two groups. That is, the average score of speaking skills in the two groups is similar to the student's creative thinking skills in each aspect.

Table 9. Descriptive Statistics (Exploring the amount of mean difference in the two independent variables in the pre-test between pre-test sessions)

	Groups	Mean	N	Std. Deviation	Std. Error Mean
Intonation	Ex	2.80	25	.816	.163
	Co	2.38	26	.571	.112
Choice of words/diction	Ex	2.64	25	.638	.128
	Co	2.15	26	.613	.120
Grammar	Ex	2.68	25	.627	.125
	Co	2.15	26	.464	.091
Interaction	Ex	2.76	25	.663	.133
	Co	2.38	26	.496	.097
Communication strategy	Ex	2.80	25	.764	.153
	Co	2.50	26	.510	.100
Cohesion & coherence	Ex	2.80	25	.645	.129
	Co	2.69	26	.618	.121
Fluency	Ex	1.28	25	.458	.092
	Co	1.19	26	.402	.079
Flexibility	Ex	1.28	25	.458	.092
	Co	1.38	26	.496	.097
Originality	Ex	1.28	25	.458	.092
	Co	1.31	26	.471	.092
Elaboration	Ex	1.44	25	.583	.117
	Co	1.62	26	.571	.112

Furthermore, Table 10 shows the results of the one-way MANOVA test, which tests the effect between aspects of speaking and creative thinking skills. The table indicates no significant difference between the two groups (experimental and control) in the pre-test session on the six indicators of

speaking skills and four indicators of creative thinking skills. In other words, this one-way MANOVA test was conducted to control for the pre-test as a covariate.

Table 10. Tests of between-subjects effects (Exploring the differences in the learners' pre-test on ten aspects of speaking skills and creative thinking)

Dependent variable	Type III sum of squares	df	Mean square	F	Sig.
Intonation	2.199 ^a	1	2.199	4.461	.040
Diction	3.012 ^b	1	3.012	7.710	.008
Grammar	3.528 ^c	1	3.528	11.662	.001
Interaction	1.796 ^d	1	1.796	5.265	.026
Communication strategy	1.147 ^e	1	1.147	2.742	.104
Cohesion & coherence	.148 ^f	1	.148	.371	.545
Fluency	.098 ^a	1	.098	.529	.470
Flexibility	.139 ^b	1	.139	.611	.438
Originality	.010 ^c	1	.010	.045	.832
Elaboration	.392	1	.392	1.178	.283

Table 11 displays the unadjusted average difference between the post-test scores of the two groups, without taking into account the pre-test scores. The test findings indicated that the experimental class outperformed the control group in terms of the average score on the six indicators of speaking abilities and the four indications of creative thinking. Consequently, the group that utilised conventional approaches experienced a greater gain in ten indicators related to speaking and creative thinking skills compared to the control group. Moreover, Table 12 displays the outcomes of the multivariate test conducted using Wilk's Lambda. A study was conducted to investigate the effects of an experimental course utilising collaborative tactics on the integration of oral communication and creative thinking abilities. The table demonstrates that both the experimental and control classes have a substantial influence on speaking proficiency and creative thinking abilities, even after accounting for the pre-test results.

Table 11. Descriptive statistics (exploring the amount of unadjusted mean differences in the two groups before controlling the pre-test)

	groups	Mean	N	Std. Deviation	Std. Error Mean
Intonation (Post-test)	Ex	4.20	25	.707	.141
	Co	2.92	26	.744	.146
Diction (Post-test)	Ex	4.12	25	.600	.120
	Co	2.92	26	.628	.108
Grammar (Post-test)	Ex	4.08	25	.493	.099
	Co	2.81	26	.694	.136
Interaction (Post-test)	Ex	4.04	25	.611	.122
	Co	2.96	26	.662	.130
Communication Strategy (Post-test)	Ex	4.04	25	.539	.108
	Co	3.00	26	.566	.111
Cohesion & coherence (Post-test)	Ex	4.08	25	.572	.114
	Co	3.08	26	.628	.123
Fluency (Post-test)	Ex	2.48	25	.586	.117
	Co	1.42	26	.504	.099
Flexibility (Post-test)	Ex	2.72	25	.458	.092
	Co	1.46	26	.508	.100
Originality (Post-test)	Ex	2.64	25	.490	.098
	Co	1.42	26	.504	.099

Elaboration (Post-test)	Ex	2.48	25	.510	.102
	Co	1.65	26	.485	.090

Table 12. Multivariate test

Effect	Value	F	Hypothesis df	Error df	Sig.
CLIL method and coventional	.011	2.100EB ^a	2.000	48.000	.000

Table 13 displays the outcomes of the post-test session's examination of the variations in impacts between CLIL-based and conventional class features. After controlling for the pre-test, this test investigates whether or not scores on measures of creative thinking and public speaking improve. The table shows that there were statistically significant differences in the two groups' post-test scores on both measures. Some components of effective public speaking include intonation, vocabulary, syntax, interaction, communication tactics, and cohesiveness and coherence. And imaginative reasoning (within the bounds of clarity, adaptability, novelty, and elaboration). According to the data in the table, the experimental group that used CLIL outperformed the control group that used the more traditional approach. The results of the measurements prove this to be true since the Sig. is less than 0.05. Students' ability to think creatively and articulate their ideas is thus significantly affected by the two approaches.

Table 13. Descriptive statistics (exploring the amount of adjusted mean differences in the two groups after controlling for the pre-test)

Dependent Variable	Group	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Intonation (Post-test)	Ex	4.20	.141	3.91	4.49
	Co	2.92	.146	2.62	3.22
Diction (Post-test)	Ex	4.12	.120	3.87	4.37
	Co	2.92	.123	2.67	3.18
Grammar (Post-test)	Ex	4.08	.099	3.88	4.28
	Co	2.81	.136	2.53	3.09
Interaction (Post-test)	Ex	4.04	.122	3.79	4.29
	Co	2.96	.130	2.69	3.23
Communication Strategy (Post-test)	Ex	4.04	.108	3.82	4.26
	Co	3.00	.111	2.77	3.23
Cohesion & coherence (Post-test)	Ex	4.08	.114	3.84	4.32
	Co	3.08	.123	2.82	3.33
Fluency (Post-test)	Ex	2.48	.117	2.24	2.72
	Co	1.42	.099	1.22	1.63
Flexibility (Post-test)	Ex	2.72	.092	2.53	2.91
	Co	1.46	.100	1.26	1.67
Originality (Post-test)	Ex	2.64	.098	2.44	2.84
	Co	1.42	.099	1.22	1.63
Elaboration (Post-test)	Ex	2.48	.102	2.27	2.69
	Co	1.65	.095	1.46	1.85

Table 14 details the effect sizes of the two groups, the experimental with the CLIL method and the control group with the conventional method. The measurement results showed significant differences between the post-test (experimental and control groups) on six aspects of speaking skills and four aspects of creative thinking skills by eliminating covariate effects (pretest). Thus, we can conclude that the experimental group (CLIL method) is more effective than the control group (conventional method). In other words, the CLIL method in the experimental class is a more effective

and efficient learning process in developing students' speaking and creative thinking skills compared to the control class.

Table 14. Pairwise comparisons (Exploring the exact differences on the post-tests of both groups after controlling for the pre-test)

Dependent Variable	(I) CLIL	(J) CLIL	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intonation (Post-test)	Ex	Co	1.277*	.203	.000	.868	1.686
	Co	Ex	-1.277*	.203	.000	-1.686	-.868
Diction (Post-test)	Ex	Co	1.197*	.172	.000	.851	1.543
	Co	Ex	-1.197*	.172	.000	-1.543	-.851
Grammar (Post-test)	Ex	Co	1.272*	.169	.000	.932	1.612
	Co	Ex	-1.272*	.169	.000	-1.612	-.932
Interaction (Post-test)	Ex	Co	1.078*	.179	.000	.720	1.437
	Co	Ex	-1.078*	.179	.000	-1.437	-.720
Communication Strategy (Post-test)	Ex	Co	1.040*	.155	.000	.729	1.351
	Co	Ex	-1.040*	.155	.000	-1.351	-.729
Cohesion & coherence (Post-test)	Ex	Co	1.003*	.168	.000	.665	1.341
	Co	Ex	-1.003*	.168	.000	-1.341	-.665
Fluency (Post-test)	Ex	Co	1.057*	.153	.000	.750	1.364
	Co	Ex	-1.057*	.153	.000	-1.364	-.750
Flexibility (Post-test)	Ex	Co	1.258*	.136	.000	.986	1.531
	Co	Ex	-1.258*	.136	.000	-1.531	-.986
Originality (Post-test)	Ex	Co	1.217*	.139	.000	.937	1.497
	Co	Ex	-1.217*	.139	.000	-1.497	-.937
Elaboration (Post-test)	Ex	Co	.826*	.139	.000	.546	1.106
	Co	Ex	-.826*	.139	.000	-1.106	-.546

Discussion

Speaking skills and creative thinking are two types of skills that need attention from teachers, especially at the tertiary level. Both are considered 21st-century skills that college graduates must master. For that reason, teachers must be able to design lessons to promote these two skills. The results of this study indicate that the CLIL method positively impacts improving students' speaking and creative thinking skills.

Several prior research has shown that the CLIL technique does, in fact, improve students' speaking abilities. According to research by Delliou and Zafiri (2016), students' speaking abilities could be improved with the CLIL approach. Despite utilising a classroom action study approach, the findings demonstrate that CLIL has a beneficial effect on the improvement of students' speaking abilities. Pronunciation, intonation, word choice, grammar, fluency, communication tactics, coherence, and cohesiveness were some of the aspects of speaking that were examined. However, there was evidence that students had good opinions about the CLIL technique, its assignments, materials, and learning strategies, according to the study.

Elena Kovacicova (2019) stated similar findings that the CLIL method impacted students' skills at the elementary school level in Latvia, Slovakia, and Lithuania. This study adopts a mix-method approach by combining observation techniques and questionnaires. The results showed that the CLIL method positively affected the success of students' speaking development. The data from the questionnaire also shows that students' attitudes towards learning with the CLIL method are very

positive. The students also liked various learning activities like discussions, dialogues, presentations, and speaking projects.

Benalcazar-Bermeo & Ortega-Auquilla (2019) also performed research using a mix-methods approach design. Examining how the CLIL approach influences the public speaking abilities of sixteen- and seventeen-year-old high school students is the primary goal of this research. Findings from this study show that CLIL has a greater impact on students' oral production than more conventional approaches to language acquisition. Consistent with the results of Puerto & Lacabex (2017) in Spain, the students also voiced their belief that the CLIL technique was a good tool to supplement classroom learning. In comparison to students who did utilise English through storytelling tasks, those who were treated with the CLIL technique had 30% more exposure to utilising English as the medium of instruction.

Besides having an impact on students' speaking skills, the CLIL method also has a significant influence on improving other skills, namely creative thinking skills. This study provides evidence that the CLIL method can promote creative thinking skills in four main areas, namely: (1) fluency, (2) flexibility, (3) originality, and (4) elaboration. Findings state that the CLIL method affects higher-order thinking skills (Naylor, 2016). The increase in thinking skills occurs because students use the target language to carry out learning tasks, which are expressed verbally in front of the class.

This finding is, of course, related to several previous studies which claimed that thinking skill activities are closely related to learning activities in the CLIL method (Chansri & Wasanasomsithi, 2016; Namsaeng, 2022). CLIL is also an inseparable part of the four primary skills known as the 4Cs (content, communication, cognition, and culture) (British Council, 2020). The CLIL method relates to the activity of combining the four primary language skills, namely reading, listening, writing, and speaking. For this reason, British Council (2020) emphasizes that the CLIL method must focus on language learning on the four language skills, humanistic, communication, and lexical approach, rather than relying solely on a grammatical approach.

Another study also describes findings that the CLIL method impacts creative skills (creative and critical thinking) (Cruz, 2021). This study also claims that the CLIL method has great potential to develop collaboration and cultural awareness skills. This is based on several stages in the CLIL method, which support students' creative thinking activities. Three phases in the CLIL method can encourage the development of student's creative thinking skills: the input, process, and output phases. In input, the teacher provides text containing content and culture that students must identify in the process phase. Furthermore, giving assignments in the output phase trains students to be proficient in speaking through verbal communication (British Council, 2020; Diezmas, 2016).

With these findings, teachers can choose the CLIL method as an alternative to teaching speaking and creative thinking skills. This is based on the fact that the CLIL method has teaching stages that positively impact achieving goals. One of them is the stage of collaboration and discussion. Collaborative activities can encourage students to express their ideas and abilities in achieving learning goals (Helaluddin et al., 2023). In addition, the interaction between students and joint decision-making is an important aspect of collaborative activities that support student activity in class (Hosseini et al., 2020; Pham, 2021). In addition, collaborative activities in teaching speaking have great potential to get ideas and ideas in drafting speaking better because it involves several students (Babiker, 2018; Salih & Abdelameer, 2022). Not much different from these findings, several researchers also stated that collaborative activities in the form of providing feedback on the assignments of their colleagues could support student performance in speaking (Adickalam & Yunus, 2022; Murad et al., 2021; Pham & Nguyen, 2020).

4. CONCLUSION

Proficiency in speaking is a crucial aspect of language acquisition that students must excel in. Furthermore, the possession of creative thinking skills is crucial in assessing the future performance of students. The objective of this study is to investigate the influence of the Content and Language

Integrated Learning (CLIL) approach on the proficiency of students in oral communication and their ability to think creatively. The findings demonstrated that the CLIL approach exhibited superior performance compared to the conventional method in both skills. The study's findings suggest that the CLIL method can effectively promote the enhancement of students' speaking and creative thinking abilities. Overall, this study is constrained by a constraint, specifically the restricted number of people included. In subsequent studies, it is possible to expand the research by including a larger number of participants or individuals with varied backgrounds. The author suggests that future studies employ a mixed-method approach, which combines quantitative and qualitative research methods, in order to enhance the comprehensiveness of the findings. Additionally, additional research can explore various other areas that require advancement and are as significant, including critical thinking abilities, higher-order thinking skills (HOTS), collaboration skills, and more.

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