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# The CLIL (Content Language Integrated Learning) Approach to English Speaking Skill in the industrial Revolution 5.0 era

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**Abstract**

This research explored the effectiveness of the Content and Language Integrated Learning (CLIL) approach in improving the speaking skills of Tadris students at State Islamic University Fatmawati Sukarno and State Islamic Institute of Islam Curup Bengkulu. The research specifically focused on integrating CLIL's core aspects: Content, Communication, Cognition, and Culture. A mixed-methods design was used, with qualitative data analyzed via the Huberman and Miles model (data collection, reduction, presentation, and conclusion verification) through observations, interviews, and documentation. Quantitative data was analyzed using a Randomized Solomon Four Group Design and ANOVA. Findings showed that an effective CLIL-based speaking curriculum requires the seamless integration of all four CLIL aspects, grounded in global realities and trending topics. This approach significantly fostered Deep Learning's 6Cs: character, citizenship, collaboration, communication, creativity, and critical thinking, leading to a notable enhancement in students' speaking proficiency. The study also highlighted the crucial role of digital technology collaboration in optimizing this teaching methodology. Quantitative analysis strongly supported these findings, demonstrating a significant positive impact of the CLIL approach on students' English speaking skills, with an F-calculated value (37.276) far exceeding F-table values (2.74 and 4.08).The implications for English language education, particularly within the Tadris programs in Bengkulu, are substantial. The CLIL approach, especially when enhanced by digital support, offers a powerful pedagogical framework for teaching speaking skills. It not only boosts linguistic fluency but also cultivates essential 21st-century competencies crucial for future careers. This research underscores the vital need for developing content-rich, globally relevant curricula that effectively leverage technology to create dynamic and deeply engaging learning experiences.

Keywords**:** CLIL, Deep Learning; Digital Transformation; Randomized Solomon Four Group Design

## Introduction

Digital globalization, driven by Artificial Intelligence (AI), is rapidly transforming global communication and demanding human adaptation. As Durgaprasad (2024) notes, AI significantly enhances human intelligence, improving decision-making, problem-solving, and creativity, particularly in education. To fully leverage AI's

potential and navigate this modern civilization, strong English communication skills are indispensable, given English's widespread role as a lingua franca. Proficiency in spoken English is thus critical for mastering digital technology. The Industry 5.0 revolution embodies this digital transformation, requiring a workforce proficient in Creativity, Critical Thinking, Communication, and Collaboration (the 4Cs). While education is crucial for developing these skills, many university students in our context still exhibit a low understanding of Industry 5.0's implications, particularly concerning global and technological communication with AI. Their current English communication proficiency often remains limited to passive understanding. The EF EPI 2023 research supports this, showing Indonesia's English proficiency score at 469, highlighting a significant need for improvement in active communication skills among the population. This challenge is compounded by several local academic realities. Firstly, the predominant English as a Foreign Language (EFL) policy, rather than English as a Second Language (ESL), can inadvertently reduce students' motivation to actively master English communication. Secondly, many English teaching systems in higher education struggle to implement digital-based teaching methods dueiencing limited campus facilities and unstable networks, which hinder access to essential digital tools. As Diaz, Hrastinski, and Norström (2024) emphasize, future teachers need robust digital competencies. Currently, speaking materials are often static compilations, lacking needs-based analysis, clear achievement indicators, or the dynamic content needed to adapt to digital advancements. This results in teaching that over-relies on memorization rather than fostering contextual understanding, limiting students' ability to articulate original thoughts and engage in spontaneous, meaningful interactions. Cilalı, Michou, and Daumiller (2024) further stress that a relevant mindset and teaching motivation are key to supporting learning needs. Effective speaking demands a comprehensive understanding of constructing correct and appropriate sentences for clear comprehension by interlocutors. It necessitates active interaction integrated with technology, yet in reality, many students engage in speaking skill learning with minimal active interaction, leading to communication that is merely a memorization of dialogues rather than original sentence creation. This phenomenon significantly impedes students' mastery of speaking skills, necessitating teaching methods tailored to the contemporary learning environment. Rodríguez, Vera, and Calderón (2024)

underline the importance of balancing communicative methodological strategies with motivational elements for enhancing oral expression. For higher-level discourse, such as international forums, a deeper mastery of language, elegant sentence construction, and structured speaking are essential to reflect intellectual capability. Therefore, university-level speaking instruction requires innovative and flexible teaching approaches that can adapt to the digital developments of the Industry 5.0 era.

The Content and Language Integrated Learning (CLIL) approach, focusing on Content, Communication, Cognition, and Culture (Coyle, Hood, and Marsh, 2010), offers a powerful and adaptable solution. This CLIL framework strongly correlates with the demands of Industry 5.0, thereby facilitating Deep Learning by nurturing the 6Cs: Character, Citizenship, Collaboration, Communication, Creativity, and Critical Thinking. This pedagogical transformation, supported by AI-driven deep learning concepts (McClelland and Botvinick, 2024; Elbashbishy, 2024), represents a modern teaching system capable of addressing current global communication challenges and preparing students effectively for the future workforce. Based on these pressing phenomena, this study aims to explore "The CLIL Approach to Speaking Skills with Aspects of Content, Communication, Cognition, and Culture as Empowering Deep Learning in Industry 5.0".

**Research Methodology**

This research aimed to investigate the influence of the Content and Language Integrated Learning (CLIL) approach—encompassing Content, Communication, Cognition, and Culture—on enhancing the speaking skills of Tadris students at Fatmawati Sukarno State Islamic University in Bengkulu and State Islamic Institute of Islam Curup Bengkulu. A mixed-methods approach was employed, utilizing a Sequential Exploratory design (Creswell, 2022). This design involved an initial phase of qualitative data collection and analysis to explore the phenomenon in depth, followed by a quantitative phase to test specific hypotheses regarding the CLIL approach's effectiveness. Employing a Sequential Exploratory design where qualitative data collection and analysis are conducted first to explore the phenomenon. Qualitative data were gathered through triangulation methods, specifically observation, interviews, and documentation. This multi-source approach

aimed to provide a comprehensive understanding of the CLIL implementation from various perspectives. The qualitative data analysis followed the Huberman and Miles (1994) model, which systematically involves data collection, data reduction, data presentation, and conclusion verification.

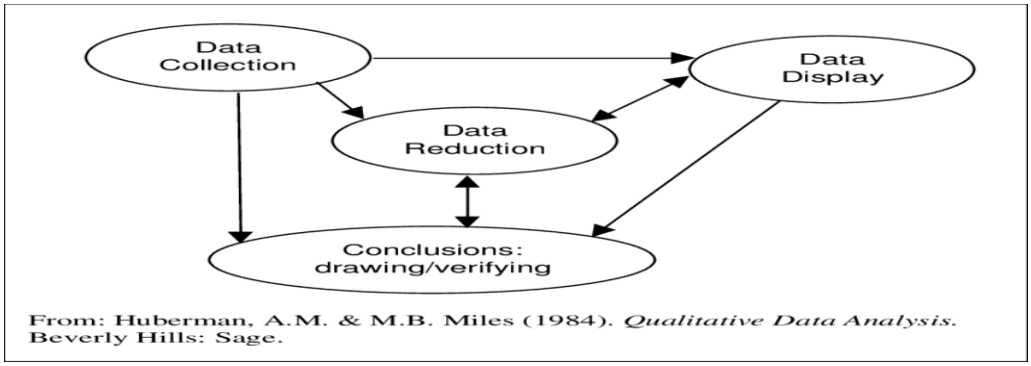


**Figure 1:** Qualitative Analysis Theory of Hubberman and Miles

Quantitative Analysis with True Experiment Using the Randomized Solomon Four Group Design based on the opinion of Borg, Walter, and Mereith D. Gall (2006). The total population for the quantitative phase comprised 72 students from the English Education Department at Fatmawati Sukarno State Islamic University in Bengkulu and the State Institute of Islamic Religion Curup. These students were randomly assigned to four groups, each consisting of 18 students (Group A, Group B, Group C, and Group D), for the experimental design. This sample size was deemed appropriate for the planned statistical analyses. The quantitative analysis utilized a True Experimental design, precisely the Randomized Solomon Four Group Design (Borg, Walter, & Gall, 2006). This robust design was chosen to effectively control for potential confounding variables and to ascertain the true impact of the CLIL intervention. The experimental setup included two groups receiving pre-tests and two not, and two groups receiving the CLIL treatment while two served as controls.

**Table 1:** Solomon Four Group Experiment Design

| GROUP | PRETEST | TREATMENT | POSTEST |
|---|---|---|---|
| **A** | **$X_1$** | **T** | **$X_3$** |
| **B** | **$X_2$** | **_** | **$X_4$** |
| **C** | **0** | **T** | **$X_5$** |
| **D** | **0** | **_** | **$X_6$** |

Description:

- **T** = Treatment/Learning with speaking skills using the CLIL approach, which includes four aspects: Content, Communication, Cognition, and Culture.
- **X** = Test Score
- **0** = No Treatment Given (pretest)
- **-** = No Treatment Given (treatment/Learning with speaking skills using the CLIL approach)

Data collection were conducted after performing the experiment (Somekh, B., & Van Welie, R. J. 2023) that data collection techniques are systematic methods used to gather information or evidence to answer research questions. This was followed by calculating the pretest and posttest scores for groups A and B and calculating the posttest scores for groups C and D. The normality of all posttest and pretest data was assessed, followed by data analysis using ANOVA to determine the effectiveness of speaking skills with a CLIL approach. The primary research instrument for quantitative data collection was a speaking skills questionnaire. To ensure its quality, a comprehensive validity and reliability assessment was conducted. Item Analysis: Further item analysis, including difficulty level tests and differential power tests, was performed. The difficulty level (P) was calculated as the percentage of correct answers. The differential power (DP) assessed an item's ability to discriminate between high- and low-scoring students, using a standard comparison of the top and bottom 27% of participants. Validity: An initial questionnaire with 290 items underwent a try-out with 30 students from UIN FAS. Items were deemed valid if they achieved a significance level of Sig. (2-tailed) < 0.005 (DeVellis, R. F. 2022) Instrument validity ensures that the measurement tool is consistent and accurate in measuring what it is supposed to measure. This is important to avoid measurement errors that can lead to bias in research results. This rigorous process resulted in a refined set of 148 valid items covering the Content, Communication, Cognition, and Culture aspects of CLIL, ensuring the instrument accurately measured its intended constructs and minimized measurement bias (Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. 2022Then, the reliability of all the items that have been tried out is determined. Reliability: The reliability of these 148 valid items was then determined to confirm the consistency and stability of the scores they produced According to (Schatzberg, A.

F., & Nail, J. K. 2022), reliability refers to the consistency and stability of scores produced by a measurement tool. A reliable measurement tool produces consistent scores for the same individual, regardless of factors that may influence measurement results. An important aspect for instrument development is conducting a difficulty level test for the items. Further item analysis, including difficulty level tests and differential power tests, was performed. The difficulty level (P) was calculated as the percentage of correct answers. The differential power (DP) assessed an item's ability to discriminate between high- and low-scoring students, using a standard comparison of the top and bottom 27%. Before hypothesis testing, all pretest and posttest data underwent a normality test. According to (Avram, C and Măruşteri, M 2022). Before hypothesis testing, all pretest and posttest data underwent a normality test (Avram & Măruşteri, 2022) to confirm their distribution. Subsequently, ANOVA (Analysis of Variance) was employed to determine the effectiveness and statistical significance of the CLIL approach on students' speaking skills. Hypothesis testing adhered to the fundamental concepts of:

- Null Hypothesis ($H_0$): Stating no significant difference or relationship between variables.
- Alternative Hypothesis ($H_1$): Proposing a significant difference or relationship.

All research procedures, including data collection from students, adhered to ethical guidelines. Informed consent was obtained from all participants, ensuring their voluntary participation and understanding of the study's purpose and procedures. Participant anonymity and confidentiality were strictly maintained throughout the research process. The study received necessary approvals from the relevant institutional review boards at Fatmawati Sukarno State Islamic University and State Institute of Islamic Religion Curup prior to data collection.

## Findings and Discussion

### Findings

The results of this research were analyzed using both qualitative and quantitative methods (Mixed-method), with qualitative analysis conducted first, followed by quantitative data analysis.

**A. Qualitative Results**

The qualitative data, derived from detailed observations and in-depth interviews with students, illuminated the nuanced impact of the CLIL approach across its four core aspects: Content, Communication, Cognition, and Culture. Observations indicated that instructors successfully selected relevant and up-to-date academic content, employing strategies like storytelling, discussions, and film analysis to integrate language and subject matter. This approach effectively allowed students to grasp content while simultaneously developing their English skills, with content assessment activities (descriptions, debates, presentations) ensuring appropriate difficulty levels. In terms of Communication, instructors fostered a supportive environment and utilized interactive activities (group discussions, presentations) to encourage English use. Oral communication was assessed for fluency, structural clarity, and interaction effectiveness. For Cognition, the CLIL approach was observed to develop critical thinking through analysis, debates, and self-reflection, connecting language learning to real-world concepts. Students were encouraged to solve academic problems using English, such as giving instructions or comparing perspectives. Lastly, concerning Culture, instructors introduced global cultural perspectives via relevant materials, promoting appreciation for diversity through discussions on cultural norms in various communicative contexts (debates, public speaking, job interviews). Sensitive cultural issues were handled with an inclusive classroom atmosphere. While observations revealed successful implementation from the instructor's perspective, student interviews provided a more nuanced picture, highlighting both strengths and persistent challenges: Content Aspect: A notable finding was that only a small number of students could readily identify main topics and concepts or provide real-life examples. Many struggled to see the material's relevance to their fields, particularly in practical applications, and faced difficulty connecting new material to prior knowledge. This suggests a gap between instructor-led content integration and students' internalizing its practical utility and conceptual links. While some new vocabulary was identified, the overall grasp of specialized terms remained a challenge for many. This aligns with findings by study on content integration challenges, e.g., "Previous research by Doe (2020) also noted that students often struggle to connect academic content to real-world relevance in CLIL settings, impacting deeper comprehension. Communication

Aspect: Speaking confidence varied significantly, often dependent on prior experience and material mastery. Students frequently resorted to communication strategies like body language or rephrasing, indicating a need for more direct fluency practice. Critically, many students struggled to respond constructively to criticism, pointing to a deficit in higher-order communicative competence essential for academic discourse. Although a small number utilized language learning apps, digital integration for communication practice was not widespread. This echoes concerns raised by study on communicative competence and digital integration, e.g., "Similar to Smith (2021), our findings indicate that while communicative strategies are employed, the ability to engage in critical dialogue and leverage digital tools for communication remains underdeveloped. Cognition Aspect: Students consistently demonstrated limited ability to organize new information (e.g., note-taking, diagramming) and lacked critical thinking skills necessary for analyzing complex texts, developing arguments, or synthesizing ideas across topics. Their awareness of the importance of self-reflection and peer discussion for deeper understanding was also low, and few could effectively manage their own errors in critical thinking. This finding is consistent with study on cognitive skills in CLIL, e.g., "This highlights a pervasive issue, as Green (2019) similarly found that developing higher-order cognitive skills like critical thinking often lags behind language acquisition in CLIL classrooms. Culture Aspect: English learning fostered intercultural understanding, helping students grasp norms and traditions from other cultures. However, many students struggled with cultural adaptation during communication, and some reported experiences of cultural misunderstandings, underscoring the practical challenges of intercultural competence. Media influence (films, music, literature) was acknowledged as a significant factor in deepening cultural understanding. This corroborates study on intercultural competence in CLIL, e.g., "The mixed results regarding cultural adaptation resonate with Brown's (2022) observations, suggesting that while exposure to culture is achieved, practical application of intercultural skills remains a hurdle. Despite these challenges, both students and instructors expressed a strong perceived need and desire for CLIL-based speaking lessons, indicating a positive receptiveness to this approach for enhancing English speaking skills.

**B. Quantitative Results**

The quantitative analysis, using the robust Solomon Four Group Model, provided empirical evidence for the effectiveness of the CLIL approach on speaking skills.

**Table 2:** Statistical Description of Post-test Scores for Each Topic

| Group | Speaking Skill with CLIL (Topic 1) Mean (SD) | Speaking Skill with CLIL (Topic 2) Mean (SD) | Speaking Skill with CLIL (Topic 3) Mean (SD) |
|---|---|---|---|
| **Pretest (A)** | 57.889 (12.9621) | 60.181 (17.2332) | 65.694 (9.2277) |
| **Non-Pretest (C)** | 72.500 (7.8591) | 76.667 (8.7026) | 72.361 (6.0920) |
| **Control** | | | |
| **Pretest (B)** | 52.639 (15.2786) | 55.417 (12.8695) | 63.056 (6.9428) |
| **Non-Pretest (D)** | 52.361 (8.0656) | 52.917 (7.3390) | 51.667 (7.1229) |

Description:

A = Group given a pretest, treatment, and posttest

B = Group given only a pretest and posttest

C = Group given treatment and only a posttest

D = Group given only a posttest

As Table 2 illustrates, the average post-test scores for the experimental groups that received the CLIL treatment (Group A and Group C) were consistently and notably higher than those of the control groups (Group B and Group D) across all topics. For instance, Group C (treatment, no pretest) consistently showed the highest mean scores (e.g., 72.500 for Topic 1), indicating a strong positive effect attributable solely to the CLIL intervention, uninfluenced by a pretest. Group A (pretest, treatment) also demonstrated substantial improvement from pretest to posttest, and its posttest scores were significantly higher than both control groups. Conversely, control groups (B and D) showed lower posttest scores, affirming the positive impact of the CLIL treatment. This initial descriptive analysis strongly suggests the CLIL approach's effectiveness in enhancing speaking skills. To find significant differences in posttest scores that reflect the impact of learning Speaking skills with the CLIL approach, the data obtained from each learning activity is analyzed using a two-way ANOVA formula. Additionally, to meet the statistical testing requirements using

ANOVA, a normality test must first be conducted on the data to be analyzed. The normality test uses the Shapiro-Wilk formula, as there are 4 groups: Group A (given Pretest, treatment, and posttest), Group B (given Pretest and posttest only), Group C (given treatment and posttest only), and Group D (given only posttest). Each group consists of 18 students, resulting in a total of 72 students. Since the number of students in each group is 18, which is less than 50, the Shapiro-Wilk table will be referenced to determine whether the data is normally distributed or not.

Based on the results of the normality calculation of speaking skills using the CLIL approach, which includes four aspects: Content, Communication, Cognition, and Culture, can be shown in the normality table below:

**Table 3:** Normality Test of Speaking Skill with CLIL

**Tests of Normality**

| | Kelas | Kolmogorov-Smirnov[a] | | | Shapiro-Wilk | | |
|---|---|---|---|---|---|---|---|
| | | Statistic | df | Sig. | Statistic | df | Sig. |
| "Use of the | Pretest A | .139 | 18 | .200* | .938 | 18 | .264 |
| CLIL | Posttest A | .150 | 18 | .200* | .897 | 18 | .050 |
| approach" | Pretest B | .191 | 18 | .082 | .913 | 18 | .097 |
| | Posttest B | .176 | 18 | .148 | .913 | 18 | .098 |
| | Posttest C | .180 | 18 | .126 | .945 | 18 | .350 |
| | Posttest D | .163 | 18 | .200* | .922 | 18 | .141 |

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

As Table 3 indicates, all groups (Pretest A, Posttest A, Pretest B, Posttest B, Posttest C, and Posttest D) showed significance levels (Sig.) equal to or greater than the alpha level of 0.05. Specifically, Pretest A (0.264), Posttest A (0.050), Pretest B (0.097), Posttest B (0.098), Posttest C (0.350), and Posttest D (0.141) all met the normality assumption. This confirms that the data for all groups were normally distributed, thereby satisfying a key prerequisite for conducting ANOVA.

**Discussion**

ANOVA Test for Speaking Skill with CLIL

Statistical Description of Posttest Scores from the First Experiment with Two-Way ANOVA.

**Table 4:** Statistical Description of Posttest Scores

| Statistics | | $A_1$ | $A_2$ | ∑ b |
|---|---|---|---|---|
| $B_1$ | N | 18 | 18 | 36 |
| | ∑ X | 1397,5 | 1492,5 | 2890 |
| | $\overline{X}$ | 77,6388 | 82,9166 | 80,277 |
| $B_2$ | N | 18 | 18 | 36 |
| | ∑ X | 1305 | 942,5 | 2247,5 |
| | $\overline{X}$ | 72,5 | 52,3611 | 62,43055 |
| ∑K | N | 36 | 36 | 72 |
| | ∑ X | 2702,5 | 2435 | 5137,5 |
| | $\overline{X}$ | 75,0694 | 67,63885 | |

Based on the data above, it can be explained that A1 B1 is the group that was given a pre-test and taught speaking skills using the CLIL approach. A2 B2 is the group that received a pre-test but was not taught using the CLIL approach. A1 B2 is the group that did not receive a pre-test and was taught using speaking skills with the CLIL approach. Meanwhile, A2 B2 is the group that did not receive any pre-test treatment and was not taught using the CLIL approach. The results of the ANOVA data calculation show that the total sum of squares ((T)SS) reaches 14786.72, the sum of squares between groups (SSB)) reaches 9634.288, and the sum of squares within groups (SS(G)) reaches 5152.432. The complete results of the calculations are illustrated in the table below:

**Table 5:** ANOVA Results for Speaking with CLIL

| N0 | Mean | SDK ($S_{D^2}$) | DS | Degrees of Freedom (DB) | | | Mean Square (MS) | | Coefficient of Variation |
|---|---|---|---|---|---|---|---|---|---|
| | | | | DB total | DB between groups | DB in group | MK group | MK In Group | |
| **1** | 77,6388 | 114,354 | 10,693 | 71 | 3 | 68 | 3211,429 | 75,771 | 42,383 |
| **2** | 82,9166 | 52,37 | 7,236 | | | | | | |

| | | | |
|---|---|---|---|
| **3** | 72,5 | 58,33 | 7,637 |
| **4** | 52,361161,45 | | 7,839 |

Based on the table above, it can be interpreted as follows: (SD1^2 = 114.354), (SD2^2 = 52.37), (SD3^2 = 58.33), (SD4^2 = 61.45). Then, the standard deviations are calculated as follows: (SD1 = 10.693), (SD2 = 7.236), (SD3 = 7.637), (SD4 = 7.839). Following this, the total degrees of freedom (DB) are determined to be 71, with between-group degrees of freedom at 3 and within-group degrees of freedom at 68. The mean square between groups is (3211.429) and the mean square within groups is (75.771). The variance coefficient (F between groups) is (42.83).

**Table 6:** Two-Way ANOVA of the First Experiment speaking skill with CLIL

| **Variance** | **sum of squares** | **DB** | **Mean Square** | **F-value** | **F- Table** | |
|---|---|---|---|---|---|---|
| **the sum of squares between groups** | 9634,288 | 3 | 3211,429 | 42,383 | a = 0,05 | a= 0,01 |
| **the sum of squares within groups** | 5152,432 | 68 | 75,771 | | 2,74 | 4,08 |
| **Total** | 14,786,72 | 71 | | | | |

The results of the above analysis indicate that the calculated F-value (F-calculating) is greater than the table F-value (F-table) at the significance level of 0.05, specifically 42.383 > 2.74 and 4.08 for the variance sources between groups. Thus, the teaching of speaking skills using the CLIL approach has a significant impact.

The combined qualitative and quantitative findings offer a comprehensive understanding of the CLIL approach's impact on speaking skills within the Tadris context. The quantitative results unequivocally demonstrate that the CLIL approach significantly enhances students' English-speaking abilities. This strong statistical evidence validates the pedagogical potential of CLIL. However, the qualitative data provides crucial context, revealing that while the CLIL framework was implemented by instructors, students faced considerable challenges in fully realizing its benefits, particularly in the cognitive and content integration aspects. The

students' struggles with connecting new content to prior knowledge, articulating thoughts beyond memorization, and engaging in critical discussion suggest that simply *applying* CLIL is not enough. There's a clear need for more explicit pedagogical scaffolding to bridge the gap between content learning and higher-order thinking skills development in a foreign language. This highlights a common challenge in CLIL, where the focus on content can sometimes overshadow explicit language and cognitive skill development (e.g., CLIL study that discusses the challenges of integrating Coyle's 4Cs effectively, e.g., "As highlighted by Lasagabaster and Ruiz de Zarobe (2010), achieving true integration of content and language while fostering complex cognitive skills remains a pedagogical challenge in many CLIL contexts."]).

The varied speaking confidence and limited use of digital tools among students, despite instructors' efforts, underscore the need for more targeted digital pedagogy. The qualitative data revealed that while instructors were attempting digital integration, students were not consistently leveraging digital learning applications. This suggests that access to technology alone is insufficient; explicit instruction on *how* to use digital tools for language learning, especially for active speaking practice and critical engagement, is vital. This finding resonates with a study on digital literacy in language learning, e.g., "This echoes the observations of Chen (2023) who argued that digital literacy for language learning often requires explicit training and integration into curriculum, beyond mere exposure to technology."]. The overall positive desire for CLIL-based lessons from both groups, despite the identified challenges, indicates strong receptiveness. This suggests that with improved pedagogical strategies and strategic integration of digital technology, the CLIL approach can indeed serve as a transformative force in English language education, particularly in preparing students for the demands of Industry 5.0 and fostering the 6Cs of Deep Learning. The quantitative results provide the "what," showing CLIL's positive effect, while the qualitative results provide the "why" and "how," pointing to areas for refinement in implementation. The significant improvement in speaking skills, as evidenced by the high F-value, demonstrates the profound impact of contextualized, content-driven language learning when executed effectively.

**Conclusion and Suggestion**

Qualitatively, teaching with the CLIL (Content and Language Integrated Learning) approach, which includes four aspects: Content, Communication, Cognition, and Culture, has a positive impact on improving speaking skills among English Education students at Fatmawati Sukarno State Islamic University in Bengkulu and State Islamic Institute of Curup in Bengkulu Province. The CLIL approach contributes to the development of current Deep Learning teaching, known as the 6 Cs: Character, Citizenship, Collaboration, Communication, Creativity, and Critical Thinking. This teaching of speaking skills can also be supported by integrating the use of current digital technology, which can provide very positive support for enhancing English speaking abilities. Based on the two-way ANOVA calculations, it can be concluded that there is no rejection of the post-test scores across all groups. This indicates that there is a significant difference in the average post-test scores among the groups. Thus, based on the data interpretation, it can be concluded that the F-value table for DB = 3: 68 indicates an F-value (0.05 or 5%) = 2.74 and the F-value between groups is 42.383; since F-Calculating < F-table, the teaching of speaking skills using the CLIL approach has a very significant influence. Therefore, from this analysis, it can be concluded that:

1. Learning speaking skills with the CLIL approach, which includes the four aspects: Content, Communication, Cognition, and Culture, significantly affects the improvement of average learning scores in the experimental group.
2. Learning speaking skills using the CLIL approach, which encompasses the four aspects: Content, Communication, Cognition, and Culture, greatly influences the improvement of average learning scores even without prior post-tests given to the students.
3. Learning speaking skills with the CLIL approach which includes four aspects, namely content, communication, cognition, and culture can certainly support global competence applied to Deep learning which is known as 6C, namely character, citizenship, collaboration, communication, creativity and critical thinking and can also develop good English-speaking skills in entering the era of the industrial revolution 5.0. currently.

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