

CONTENT ANALYSIS: THE INTEGRATION OF CRITICAL THINKING, CREATIVITY, COMMUNICATION, AND COLLABORATION (4C SKILLS) IN THE ENGLISH LANGUAGE EDUCATION PROGRAM CURRICULUM UNIVERSITAS LANCANG KUNING

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ABSTRACT

The integration of twenty-first-century competencies has become an essential focus in higher education, particularly in English Language Education programs that aim to prepare future teachers with critical, creative, communicative, and collaborative abilities. This study aimed to identify the types of 4C skill indicators critical thinking, creativity, communication, and collaboration integrated within the curriculum of the English Language Education Program at Universitas Lancang Kuning and to determine the most dominantly represented skills reflected in the Semester Lesson Plans (RPS). This study employed a qualitative content analysis supported by quantitative frequency analysis. The data consisted of RPS documents from selected compulsory courses across semesters one, three, and five, complemented by two elective courses. The analysis examined several structural components of the RPS documents, including Program Learning Outcomes (PLOs), course descriptions, Course Learning Outcomes (CLOs), Sub-Course Learning Outcomes (Sub-CLOs), learning indicators, instructional activities, learning materials, and assessment components. The findings revealed that all four 4C skills were integrated across these curriculum components. A total of 155 units representing 4C skill indicators were identified in the analyzed documents. Among these, critical thinking appeared as the most dominant skill (48 units, 30.97%), followed by communication (46 units, 29.68%), creativity (33 units, 21.29%), and collaboration (28 units, 18.06%). These results indicate that the curriculum has incorporated all four competencies, with a stronger emphasis on analytical and communicative abilities in preparing prospective English teachers.

Keywords: 4C Skills, Curriculum Analysis, Semester Lesson

1. INTRODUCTION

In the past decade, educational systems worldwide have increasingly emphasized the mastery of twenty-first-century competencies, widely known as the 4C skills: critical thinking, creativity, communication, and collaboration. This shift reflects the growing recognition that traditional content-centered instruction is no longer adequate for preparing students to meet complex academic, professional, and social demands. Modern learning environments require learners to analyze information critically, generate innovative solutions, communicate effectively across diverse contexts, and collaborate within multidisciplinary teams. Accordingly, higher education institutions are encouraged to intentionally embed these competencies within instructional design and curriculum planning to ensure students' readiness for future challenges (Trilling & Fadel, 2009).

As global industries become increasingly interconnected, the demand for graduates equipped with strong 4C competencies continues to rise. These competencies are widely recognized as key

drivers of innovation and effective problem-solving while enabling individuals to function productively in diverse and technology-mediated workplaces. Educational researchers emphasize that the 4C competencies form the foundation of lifelong learning and digital-age citizenship, supporting learners in adapting to rapid changes in information, technology, and workforce expectations. Consequently, the integration of 4C skills into educational curricula has become an important indicator of graduate readiness in the twenty-first century (Edwin et al., 2025).

In Indonesia, the urgency to strengthen 4C competencies is reflected in recent educational reforms that emphasize higher-order thinking, creativity, communication, and collaboration as fundamental learning outcomes. Contemporary research indicates that the 4C framework remains the predominant conceptual model within Indonesian educational settings. For instance, Indriyani et al. (2025) report that students' 4C abilities can be effectively developed through activities such as problem-solving, peer interaction, and creative expression. These findings highlight that strengthening 4C competencies has become a national priority across different educational levels.

Within English language learning in Indonesia, the integration of 4C skills has also gained increasing attention. Empirical studies indicate that technology-supported English learning environments can significantly enhance communication, collaboration, creativity, and critical thinking among students (Siregar & Harida, 2023). In addition, Project-Based Learning (PBL) has been widely implemented in Indonesian EFL contexts and has been shown to strengthen critical thinking, creativity, and collaborative learning through inquiry-driven tasks (Indriyani et al., 2025). These findings affirm that 4C competencies play an essential role in supporting effective English as a Foreign Language instruction.

At the higher education level, universities are increasingly responsible for preparing graduates who can respond to rapid technological and societal changes. As higher education institutions respond to twenty-first-century demands emphasizing innovation, adaptability, and interdisciplinary collaboration, curriculum design becomes a key mechanism for embedding critical thinking, creativity, communication, and collaboration within learning outcomes, course structures, and instructional activities. Well-designed curricula guide learner-centered instructional practices aligned with contemporary educational expectations (Darling-Hammond & Oakes, 2021).

Within the English Language Education Program at Universitas Lancang Kuning, the integration of the 4C competencies has become an important focus in aligning the curriculum with national and global expectations for modern English language education. The program consists of diverse courses, including theoretical subjects, language skill courses, practicum experiences, and teaching simulations. These courses are expected to facilitate the development of critical thinking, creativity, communication, and collaboration among pre-service English teachers.

Preliminary information regarding the implementation of 4C competencies within the program was obtained through an interview with the Head of the English Language Education Department at Universitas Lancang Kuning on 8 December 2025. The interview revealed that although all courses are expected to facilitate the development of critical thinking, creativity, communication, and collaboration, the extent and clarity of their implementation vary across subjects. The Head of Department explained that the development of 4C competencies often depends on lecturers' instructional strategies, teaching approaches, and time allocation. As a result, some competencies, particularly creativity and collaboration, appear less consistently facilitated compared to critical thinking and communication.

Although the importance of 4C competencies has been widely acknowledged, most previous studies in Indonesia have examined these competencies from the perspective of instructional practices rather than curriculum design. Studies conducted by Anggraini et al. (2024), Ashadi

(2024), Hidayatullah et al. (2025), Marwa et al. (2023), and Tamela and Dwi (2021) indicate that research on 4C skills predominantly focuses on classroom implementation through group projects, Project-Based Learning, assessment practices, or lesson-plan development. Consequently, limited attention has been given to examining how these competencies are systematically embedded within curriculum documents.

Therefore, a clear research gap remains regarding how 4C skills are integrated at the curriculum level, particularly within English Language Education programs where competency development should be formally structured. This study aims to analyze the integration of 4C skill indicators within the English Language Education Program at Universitas Lancang Kuning by examining the Semester Lesson Plans (RPS) to identify the types of 4C skills represented and determine the most dominant competencies reflected in the curriculum documents.

2. METHOD

This study employed a qualitative descriptive research design using content analysis to examine the integration of 4C skills critical thinking, creativity, communication, and collaboration within the curriculum of the English Language Education Program at Universitas Lancang Kuning. Qualitative research is appropriate for exploring and interpreting meanings embedded in educational phenomena through the examination of texts and contextual data (Creswell, 2014). In this study, the qualitative approach was used to understand how 4C competencies are embedded within formal curriculum documentation rather than measuring variables or testing hypotheses.

Within this qualitative framework, content analysis was applied as the primary analytical strategy. Content analysis allows researchers to systematically examine textual data in order to identify patterns, categories, and meanings related to specific analytical focuses. Through processes of coding, categorization, and interpretation, content analysis enables researchers to analyze how particular concepts are represented and structured within documents. In this study, content analysis was used to identify and interpret the presence of 4C skill indicators within curriculum texts. The analysis focused on how critical thinking, creativity, communication, and collaboration are represented across curriculum components.

The study was conducted in the English Language Education Program, Faculty of Education and Vocational Studies, Universitas Lancang Kuning, Pekanbaru. The primary data source consisted of curriculum documents in the form of Semester Lesson Plans (Rencana Pembelajaran Semester/RPS). Eleven courses were selected as the focus of the analysis through purposive sampling. These courses consisted mainly of compulsory courses representing the core structure of the program across different semesters, complemented by two elective courses included to support the analysis of digital and professional communication contexts. The selected courses represented several academic domains within the program, including language skills, language systems, and pedagogical courses.

Document analysis was used as the technique of data collection. The RPS documents were obtained through academic coordination with the department and course lecturers. These documents were examined to identify the integration of 4C skills within curriculum components such as course descriptions, learning outcomes, learning indicators, instructional activities, learning materials, and assessment components. To support systematic analysis, a set of analytical indicators was used as the research instrument. The indicators were adopted and adapted from Herlinawati et al. (2024) and served as a coding framework for identifying the presence of critical thinking, creativity, communication, and collaboration within the RPS documents.

The data were analyzed using the qualitative data analysis procedures proposed by Miles et al. (2014), which consist of data condensation, data display, and conclusion drawing. Data condensation involved selecting and coding relevant information from the RPS documents related to the integration of 4C skill indicators. The coded data were then organized and displayed to illustrate the distribution of each 4C skill across curriculum components. To further support interpretation, the frequency of each indicator was calculated using percentage analysis ($\text{frequency}/\text{total units} \times 100\%$) in order to determine the most dominantly represented 4C competencies within the curriculum.

To ensure the trustworthiness of the findings, triangulation was applied by comparing evidence across different curriculum components within the RPS documents, including course descriptions, learning outcomes, instructional activities, and assessment components. The use of multiple RPS documents from different courses strengthened the credibility of the analysis by providing diverse sources of curriculum evidence.

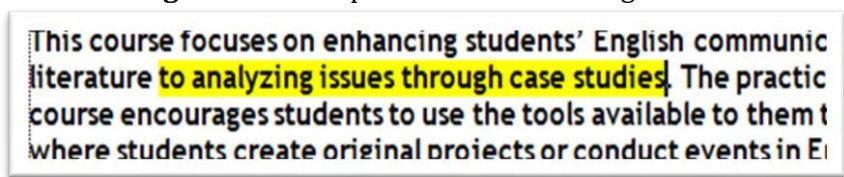
3. RESULTS

This section presents the research findings obtained through qualitative content analysis of curriculum documents. The data were collected from the Semester Lesson Plans (RPS) of several courses in the English Language Education Program at Universitas Lancang Kuning. The analysis focused on identifying the integration of Critical Thinking, Creativity, Communication, and Collaboration (4C skills) as reflected in the learning outcomes (CPMK and Sub-CPMK), learning activities, and assessment components described in the RPS documents.

a. The Integration of 4C Skills in the Semester Lesson Plans (RPS)

Excerpt 1

Figure 1.1 Example of Critical Thinking



This course focuses on enhancing students' English communic literature to analyzing issues through case studies. The practic course encourages students to use the tools available to them t where students create original projects or conduct events in E

Integration in Semester Lesson Plans (RPS)

The excerpt above reflects the integration of critical thinking skills, particularly in the indicator of evaluating solutions. The phrase “analyzing issues through case studies” indicates that students are required to examine real or simulated problems systematically. Case study-based learning encourages students to identify problems, analyze situations, evaluate possible solutions, and formulate logical conclusions. These activities involve higher-order thinking processes, as students must interpret information, connect theoretical knowledge with practical contexts, and provide reasoned responses.

The inclusion of case study analysis suggests that students are actively engaged in examining complex issues rather than receiving information passively. Therefore, this component of the lesson plan indicates that critical thinking skills are intentionally integrated through analytical and problem-based learning activities.

Excerpt 2

Merancang dan melaksanakan proyek "Projecting three parts of a research article (Findings, Discussion & Conclusion) from working on a mini research on Speech Act Theory, Conversational Analysis, or Ethnography of Communication".

Figure 1.2 Example of Creativity Indicator in Semester Lesson Plan

The instructional task presented in this excerpt demonstrates the integration of creativity skills, particularly in the indicators of generating new ideas, demonstrating originality, and developing ideas creatively. The phrase "*merancang dan melaksanakan proyek*" (designing and implementing a project) indicates that students are required to create and develop an academic product based on mini research activities.

Unlike routine assignments, this task requires students to generate original content derived from their own research findings. In preparing the Findings, Discussion, and Conclusion sections, students interpret data, formulate arguments, and organize their ideas in a coherent academic structure.

This activity reflects creative development because students transform research data into meaningful academic writing. Thus, creativity skills are embedded in the lesson plan through project-based tasks that encourage original thinking and independent academic production.

Excerpt 3

them practice and improve their critical reading skills, including: res having individual presentation, group and class discussion, and com teaching-learning activities are conducted through lecturing. discussion

Figure 1.3 Example of Communication Indicator in Semester Lesson Plan

The instructional activities outlined in this excerpt demonstrate the integration of communication skills, particularly in the indicators of expressing ideas clearly, oral communication, presentation skills, active listening, and responding appropriately.

The inclusion of individual presentations requires students to articulate their ideas in a structured and understandable manner, which supports the development of presentation skills and clear verbal expression. Through oral presentations, students organize arguments coherently and deliver information to an audience, strengthening their academic communication competence.

In addition, group and class discussions provide opportunities for interactive communication. In these activities, students are expected not only to express their opinions but also to listen to others and respond appropriately to different viewpoints. Therefore, the presence of structured presentations and discussions in the lesson plan indicates that communication skills are intentionally embedded within the instructional design.

Excerpt 4

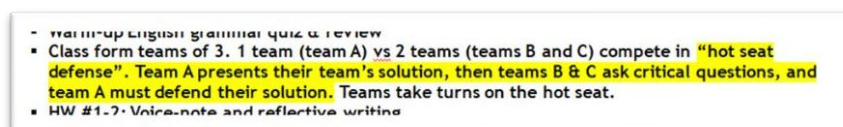


Figure 1.4 Example of Collaboration Indicator in Semester Lesson Plan

The team-based interactive activity described in this excerpt illustrates the integration of collaboration skills, particularly in the indicators of working cooperatively, sharing responsibilities, active participation in groups, and collective decision-making.

The formation of teams and the requirement to present a “team’s solution” indicate that students must collaboratively develop and agree on a shared response before presenting it. Each team is required to coordinate ideas, prepare arguments collectively, and defend their solution during the hot seat session.

This structure promotes active participation and cooperative interaction among group members. The emphasis on presenting a team solution also indicates that decisions are made collectively rather than individually.

Therefore, this instructional activity demonstrates that collaboration skills are integrated into the lesson plan through structured team-based learning tasks that encourage shared academic responsibility.

Table 1.1 Coding Framework of 4C Skills Indicators

4C Skill	Indicators	Example from RPS
Critical Thinking	analyzing problems, evaluating solutions, reflective thinking	analyzing issues through case studies
Creativity	generating ideas, originality, developing ideas creatively	designing and implementing a mini research project
Communication	expressing ideas clearly, oral presentation, responding to others	individual presentation and class discussion
Collaboration	working cooperatively, sharing responsibility, collective decision making	team-based solution and hot seat session

b. The Dominant 4C Skills Integrated in the Semester Lesson Plans

The analysis also identified the dominant 4C skills integrated in the semester lesson plans of compulsory courses within the English Language Education Program at Universitas Lancang Kuning.

Table 1.2 Dominant 4C Skills Integrated in the Semester Lesson Plans

No	4C Skills	Total of Recording Units	Percentage
1	Critical Thinking	48	30.97%
2	Communication	46	29.68%
3	Creativity	33	21.29%
4	Collaboration	28	18.06%

	Total	155	100%
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As shown in Table 1.2, critical thinking is the most dominant skill integrated in the lesson plans, with 48 recording units (30.97%). This finding indicates that analytical and evaluative activities are strongly emphasized across the analyzed courses.

Communication ranks second with 46 recording units (29.68%). The integration of communication skills is reflected in the frequent use of presentations, discussions, and interactive learning activities that require students to express and respond to ideas in academic contexts. Creativity appears in the third position with 33 recording units (21.29%). These indicators are mainly reflected in project-based tasks, writing activities, and assignments that require students to generate original academic work.

Meanwhile, collaboration is the least dominant skill, with 28 recording units (18.06%). Although group discussions and team-based activities are present in several lesson plans, their frequency is lower compared to the other 4C skills.

Overall, the findings indicate that critical thinking is the most prominently integrated skill in the semester lesson plans, followed by communication, creativity, and collaboration.

4. DISCUSSION

a. Integration of 4C Skill Indicators in the Semester Lesson Plans

The findings of this study indicate that the four components of 4C skills—critical thinking, creativity, communication, and collaboration—are integrated into the Semester Lesson Plans (RPS) of compulsory courses in the English Language Education Program at Universitas Lancang Kuning. The integration is reflected in the learning outcomes (CPMK and Sub-CPMK), instructional activities, and assessment components described in the RPS documents. This suggests that the curriculum incorporates 4C skills as part of its formal academic structure rather than treating them as supplementary elements.

This finding supports the view that twenty-first century competencies should function as core components of curriculum planning, particularly in higher education contexts where students are expected to develop complex cognitive and social skills. Previous studies emphasize that the integration of critical thinking, creativity, communication, and collaboration within instructional design enables students to engage in deeper learning processes (Dede, 2020; Trilling & Fadel, 2009).

The presence of 4C skills becomes evident through the specific indicators identified in the RPS documents. Critical thinking appears in learning outcomes that require students to analyze and evaluate ideas. Creativity is reflected in assignments that encourage idea generation and independent exploration. Communication is represented through presentations, discussions, and academic writing activities. Meanwhile, collaboration is embedded in group work and peer interaction. The appearance of these indicators across multiple components of the lesson plans indicates that the integration of 4C skills is systematically planned within the curriculum.

This result is consistent with the argument that curriculum documents reflect institutional learning priorities. When competencies are explicitly stated in learning outcomes and instructional planning, they indicate intentional integration rather than incidental instructional practices (Kelly, 2019). Furthermore, the use of indicators adapted from Herlinawati et al. (2024) provides a systematic framework for identifying how 4C skills are represented within the Semester Lesson Plan (RPS). Therefore, the RPS documents serve as evidence that the English Language Education Program has integrated twenty-first century competencies into its curriculum framework.

b. Dominant 4C Skill Indicators in the Semester Lesson Plans

The analysis of the Semester Lesson Plans also reveals that the distribution of 4C skill indicators is not proportionally balanced. Among the four competencies, critical thinking appears as the most dominant skill, accounting for 30.97% of the total recording units. It is followed by communication (29.68%), creativity (21.29%), and collaboration (18.06%). Although all four competencies are represented in the curriculum, the results indicate that certain skills receive greater emphasis within the structure of academic planning.

This finding is consistent with previous studies that reported the dominance of critical thinking and communication indicators in curriculum and instructional documents (Radifan, 2020; Marwa et al., 2023). The prominence of critical thinking suggests that the curriculum prioritizes analytical and evaluative competencies as central academic orientations within the English Language Education Program.

In higher education contexts, critical thinking is widely recognized as a foundational competence that supports academic reasoning, problem solving, and informed judgment (Facione, 2023). The emphasis on analytical learning outcomes, evaluative assignments, and reasoning based tasks in the RPS reflects this academic orientation. Within English language education specifically, activities such as critical reading, academic writing, and research based tasks naturally require students to engage in higher order thinking processes, which may explain the stronger representation of critical thinking indicators.

Communication emerges as the second most dominant competency, which aligns with the disciplinary nature of an English Language Education curriculum. As the program aims to develop students' ability to express ideas effectively in both oral and written forms, instructional activities such as presentations, discussions, and academic writing tasks are systematically embedded in the Semester Lesson Plan (RPS). This finding is consistent with the view that communication competence represents a core academic and professional requirement in language education (Derakhshan et al., 2016).

Although creativity and collaboration appear less frequently compared to critical thinking and communication, their presence across the Semester Lesson Plans indicates that they remain integral components of the curriculum framework. Creativity is reflected in assignments that encourage idea development, innovation, and independent exploration, while collaboration is embedded in group based activities and peer interaction.

The comparatively lower frequency of these indicators does not suggest exclusion; rather, it reflects differentiated emphasis within the curriculum structure. Creativity supports innovation and adaptive problem solving in higher education contexts (Beghetto, 2020), while collaboration is widely recognized as an essential competency for effective professional engagement and teamwork in contemporary learning environments (OECD, 2017).

Overall, the findings indicate that while the English Language Education Program integrates all four 4C skills within its curriculum framework, greater emphasis is placed on critical thinking and communication. This distribution reflects a curriculum orientation that prioritizes analytical reasoning and communicative competence as foundational academic competencies, while still providing opportunities for creativity and collaborative engagement.

5. CONCLUSION

This study examined the integration of four 21st century competencies (Critical Thinking, Creativity, Communication, and Collaboration (4C skills)) within the Semester Lesson Plans (RPS)

of the English Language Education Program at Universitas Lancang Kuning. The findings indicate that all four competencies are embedded in several components of the RPS, including learning outcomes, instructional activities, and assessment tasks, demonstrating that the curriculum structurally incorporates 21st-century skills into its academic planning. The analysis identified a total of 155 recording units representing 4C skill indicators. Among these, Critical Thinking emerged as the most dominant competency (30.97%), followed by Communication (29.68%), Creativity (21.29%), and Collaboration (18.06%). This distribution suggests that the curriculum places stronger emphasis on analytical reasoning and communicative competence while still integrating opportunities for creative and collaborative learning. Overall, the findings confirm that the English Language Education curriculum has conceptually embedded 4C skills within its instructional planning. However, the relatively lower representation of creativity and collaboration indicates the need for more balanced integration of these competencies in curriculum design. Future research may further explore how the integration of 4C skills in curriculum documents is implemented in actual classroom practices.

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