4C Skills’ Integration in English Teaching Documents Used in EFL Classroom

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Abstract:
This content analysis research highlights 4Cs skills’ integration as a part of 21st Century skills that characterizes the quality of English teaching materials in higher education institutions. This research was grounded from teaching documents obtained from the eight English lecturers in a university in Pekanbaru, Riau, Indonesia. This research had been conducted from February until July, 2022. The research data was English teaching documents (teaching syllabus and semester tests) with 4C skills’ integration. There were 16 collected teaching documents consisting of 8 teaching syllabus and 8 semester tests. The checklist of 4Cs rubric covers “Communication”, “Creativity”, “Critical Thinking”, and “Collaboration” was adapted from the CTE Career Ready Practices and used to analyze English teaching documents. This research reveals the integration of 4Cs skills analyzed from teachers’ teaching syllabus reached the levels of “Meet Competency” and semester tests documents had integrated 4C skills in “Approaching competency” levels. This portrait represents teachers’ adequate understanding of 4Cs skills. The further research should undergo an in-depth study pertaining to how English teachers develop classroom environments with 21st-Century skills containing 4C skills’ integration in EFL classroom teaching and learning activities.

Keywords: 4Cs skills, communication, creativity, collaborative, critical thinking, English teaching documents

1. INTRODUCTION

Educational institutions are currently required to practice the learning process in fostering competent students in 21st century life. Graduates are expected to have communication skills, problem solving and critical thinking skills. This is the most important intellectual skill in the 21st century that must be possessed by every individual who is characterized by 4C skills (communication, collaboration, creativity, and critical thinking). Rotherham & Willingham (2009) asserted that developing 21st century skills require serious attention to aspects of curriculum, teacher quality, and assessment. Of course, the demands of 21st century skills have become the main focus and goal in facilitating students’ learning which should be implemented in the school curriculum. Therefore, teaching and learning activities accompanied by supporting teaching materials need to be carried out effectively in order to meet the learning needs of students in developing 4C skills.

Teaching materials have become the right potential space to integrate 4C skills. However, many teaching materials only accommodate the interests and needs of students
in certain aspects (Cunningworth, 1995). In the context of teaching EFL (English as a Foreign Language) in Indonesia, the biggest task of an educator is to approach students so that they not only learn the cultural elements presented in teaching materials but also do not miss information about the development of world culture. This is very important considering that mastering a language well is not only done by knowing or understanding how to use the grammar and vocabulary of the language, but also requires an understanding of the culture in the language itself (Marhamah, Daud & Samad, 2017). In fact, in the context of language learning, several studies have revealed the effectiveness of materials related to pedagogical values (Riasati & Zare, 2010), fulfillment of learning objectives (Riazi & Mosallanejad, 2010), or clarity and inclusiveness of teaching materials. However, a review of learning objectives alone is not sufficient without evaluating how teacher-transferred cultural content is integrated into teaching so as to facilitate the integration of 21-4C century skills.

With regard to the context of EFL learning, there are several problems faced by English teachers when integrating English culture into teaching materials. These problems relate to how to provide needed cultural information or what to teach because students often do not realize that their teacher is trying to teach the cultural aspects of the foreign language being taught. In addition, the reason someone takes language classes is not only to get a degree or get a good job easily, but because the most important goal in learning a language is to be able to communicate effectively and efficiently in interpersonal and transactional communication. As stated by Zhou (2011) & Seelye (1993) that the notion that language as a communication tool cannot be separated from the cultural framework of language. Without cultural knowledge, it will be difficult to understand the meaning of the language.

Language and culture are closely related. In this connection, (Agar, 1994) has emphasized that "culture exists in language and language goes hand in hand with culture", because it must be integrated automatically when the teacher teaches language; successful communication not only acquires linguistic codes, but also involves knowledge about the target language culture. Brown & Starkey (1994) describe the strong bond between language and culture as "so intertwined that one cannot separate the two without losing their linguistic or cultural significance". Regarding the importance of teaching cultural aspects apart from teaching the four skills (Speaking, Writing, Listening, Reading), Tomalin (2008) argues that culture should be taught as the fifth skill due to the dominance and globalization of English throughout the world. Gao (2006) explains that foreign language teachers should increase students’ cultural awareness as well as help them to improve their communication competence.

To deal with today's globalized English teaching, Indonesian education policy has emphasized that English teachers in Indonesia must develop a local cultural identity in their students along with developing their English language skills. More specifically, teaching English must ensure the attainment of spiritual attitudes, moral attitudes, knowledge and skills as a result of learning that is necessary for global life (Ministry of Education and Culture, 2016). Facing these conditions, English teachers need to integrate local cultural values in order to maintain national identity. And, they must also promote local content to students by incorporating local culture during the language learning process in the teaching process in English classes to maintain their own culture. This is also supported by Cheng (2002: 23) who states that the content of local culture has contributed to improving the quality of education.
Regarding the development of students' 4C skills, students are at the terminal literacy stage. They must have the 4C soft skills needed in 21st century competition which must be developed in learning at higher education institutions. They must have intensive exposure to 4C skills. As a matter of fact, in the field of English foreign language domain, there have been a lot of best ideas and practices undertaking the development of 21st century skills particularly 4C skills (Erdogan, 2019; Yu, Ruzanna & Mohammad, 2019; Czerkawski & Berti, 2020; Handayani, 2017; Fandiño-Parra, 2013).

After linking issues in terms of the importance of developing 4C skills demanded by 21st century education, this analytical study aims to reveal: (1) Are 4C skills adequately integrated in English teaching syllabus that highlights the elements of communication, creativity, critical thinking and collaboration? And (2) Are 4C skills adequately exposed in English courses semester test? This research was conducted based on the assumption that 4C skills are the main pillar that characterizes the quality of language teaching materials in universities. This study expects to provide important institutional and pedagogical contributions. Institutionally, mapping the quality of teaching content in higher education is an important step to map the quality of language learning. Specifically, it can be used to develop teaching syllabus, materials and evaluation methods that focus on students' 4C skills. In the pedagogical aspect, this research could contribute to improving the quality of 4C skills in which in the future it can further develop students' academic achievements and can support their future success in academic and carrier life.

2. METHOD

This study used a qualitative design that aims to answer research questions that reflect the actual situation at the time of the study. The researchers played a major role in obtaining sufficient data to better understand the research phenomenon and to gain a deeper understanding of the 21st century skills covering 4C skills integrated into learning. The content analysis method was used to determine the quality of teaching materials/documents that contain 4C skills. The data needed to reveal the quality of 4C skills integration were in the form of teaching documents, namely syllabus and Semester test documents from English courses used by lecturers of English education study program.

The researchers collected the data by using documentation technique. Documents of students' learning activities/assignments available in Google class were screenshot, downloaded and organized based on 4Cs element. The researchers prepared a checklist of the 21st Century Skills/4Cs rubric covering Creativity and Innovation, Critical Thinking and Problem Solving, Communication, and Collaboration adapted from the CTE Career Ready Practices (https://www.nd.gov/dpi).

21st-Century Skills/4Cs rubric, adapted from the CTE Career Ready Practices, was used to assess the integration of 4Cs skills in English teaching documents. This rubric documented 4C skills with the choice ready framework's essential skills element by using 32 indicators (Communication=7, Creativity=7, Critical Thinking=9, and Collaboration=9). The researchers prepared 16 sheets of 4Cs rubric to record scores from teaching documents. Syllabus and semester test documents were evaluated using the 4Cs indicators; a syllabus or semester test document integrated identical skills that matched to 32 of the 4Cs' indicators (100 % integration) was scored by "4" (the highest Mean from 4Cs) and interpreted as "Exceeds Competency". A document integrated 50-75 % or 16-24 skills from 4Cs indicators; it was scored by a Mean “2” until “3” and interpreted as “Approaching Competency” and “Meets Competency”. The integration of the 4Cs in a
teaching document less than 25% (only 1-8 skills from the 4Cs) was scored by “1” and interpreted as “Not Yet Reached Competency.”

In this research, data analysis was the process of searching and compiling data systematically that were obtained from documentation, and checklist. The data were organized into categories of 4Cs’ skills, described into units, synthesized, compiled into patterns, selected which ones were important, how findings were presented and interpreted, and made conclusions. For making easy to understand the analysis, the researchers used a very common qualitative data analysis model: organizing data, coding data, sorting/classifying data, reducing data, describing and interpreting, and then concluding.

This content analysis research was grounded in the context of teaching materials/learning documents for English courses that contain local cultural content/elements that integrate 4C skills. In addition, in accordance with the nature of "content analysis", this study also used a quantitative element in the form of how data was recorded by using descriptive statistics and then illustrated with tables for better understanding. Researchers used two recording units: recording 4C skills from syllabus document and recording semester test documents used by English lecturers at University in Pekanbaru, Riau, Indonesia.

3. FINDINGS AND DISCUSSION
3.1 Findings
3.1.1 4C Skills’ Integration in English Syllabus Documents

This study identifies the 21st century 4C skills (Communication, Creativity, Critical Thinking, and Collaboration) which are integrated in English teaching documents, namely syllabus and semester test documents in English courses. There were eight syllabus documents and eight semester test documents collected from 8 lecturers who teach English courses such as Intensive Course, Speaking for Group Activities, Second Language Acquisition, Cross Cultural Understanding, Translation and Interpretation, Semantics & Pragmatics, Introduction to Literature, and Applied Linguistics. The researchers have used descriptive statistical analysis to process the scores of the 4C skill rubric that were evaluated from the syllabus documents as presented in table 3.1.

| Table 3.1 Descriptive Statistics of 4C Skills’ integration evaluated from syllabus documents |
|-----------------------------------------------|---|---|---|
| 4C Aspects          | N  | Mean | SD |
| Communication       | 8  | 3.25 | .46|
| Creativity          | 8  | 3.10 | .25|
| Critical Thinking   | 8  | 3.08 | .38|
| Collaboration       | 8  | 3.02 | .32|

The first research question is looking for answers that focus on the integration of teachers’ 21st century skills containing 4Cs skills (Communication, Creativity, Critical Thinking, and Collaboration) which were evaluated from the syllabus document. Table 3.1 shows the 4C skills’ integration scores in the syllabus document. The use of the 4C rubric
has documented the first aspect, namely “Communication” shows Mean= 3.25 which indicates “Achieving competence”. The second aspect, namely "Creativity" has a Mean = 3.10 which also indicates "Achieving competence". For the third aspect of 4C skills "Critical Thinking" shows Mean = 3.08 and the fourth aspect, namely "Collaboration" shows Mean = 3.02 which still shows the 4C level of "achieving competence". The highest Mean from the syllabus document analysis that was evaluated showed Mean=3.25. It can be concluded that the integration of the 4C skill elements analyzed from the syllabus documents used by English lecturers was in the category of "achieving competence".

Furthermore, table 3.2 descriptive statistical analyses of the average score of the 21st century 4C skills rubric evaluated from the syllabus documents can provide clearer information about the 4 elements calculated as a whole.

Table 3.2 Mean of 4C Skills evaluated from Syllabus Documents

<table>
<thead>
<tr>
<th>4C Skills</th>
<th>N</th>
<th>Min.</th>
<th>Max.</th>
<th>Sum</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8</td>
<td>2.87</td>
<td>3.67</td>
<td>24.90</td>
<td>3.11</td>
<td>.34</td>
</tr>
</tbody>
</table>

Table 3.2 illustrates the output of 8 scores from 8 syllabus documents using descriptive statistical analysis. The minimum score shows 2.87 and the maximum score = 3.67. The total score is 24.90. The mean of the total 4C skills reached 3.11. Meanwhile, the low standard deviation value of 0.34 indicates that the score of the syllabus document based on the rubric calculation obtained and analyzed is homogeneous. Thus, it can be concluded, from the data on the average score of 21st century skills containing 4C skills evaluated from the syllabus document used by 8 English lecturers was in the level of "achieving competence".

3.1.2 4C Skills' Integration in Semester Test Documents

To know 4C skills’ integration in semester test documents, the researchers analyzed the data by using descriptive statistics to process the scores of the 4C skills rubric. There were eight semester test documents evaluated. The analyses of the documents presented how 4C skills were integrated by the English teachers in English Education Study Program, in a University in Pekanbaru as presented in table 3.3.
Table 3.3 Descriptive Statistics of 4C Skills’ integration evaluated from Semester Test Documents

<table>
<thead>
<tr>
<th>4C Aspects</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>8</td>
<td>2.25</td>
<td>.70</td>
</tr>
<tr>
<td>Creativity</td>
<td>8</td>
<td>2.33</td>
<td>.60</td>
</tr>
<tr>
<td>Critical Thinking</td>
<td>8</td>
<td>2.27</td>
<td>.54</td>
</tr>
<tr>
<td>Collaboration</td>
<td>8</td>
<td>2.08</td>
<td>.69</td>
</tr>
</tbody>
</table>

The second research question also seeks answers that focus on the integration of 4Cs century skills (Communication, Creativity, Critical Thinking, and Collaboration) evaluated from the Semester test documents. Table 3.3 shows the 4C integration scores in the Semester test document. The use of the 4C rubric has documented the first aspect, namely "Communication" shows Mean = 2.25 with a level of "Approaching to Competence". The second aspect, namely "Creativity" has a Mean = 2.33 which also indicates the level of "Approaching to Competence". For the third aspect of "Critical Thinking" shows Mean = 2.27 and the fourth aspect, "Collaboration" with a Mean = 2.08 is at the level of "Approaching Competence". The highest Mean from the analysis of the evaluated Semester Exam documents shows Mean = 2.33. From the data that has been analyzed, the researchers concluded that the integration of the elements of the 4C skills evaluated from the Semester test documents for English education lecturers was in the category "Approaching to Competence".

Table 3.4 descriptive statistical analyses of the average score of the 21st century skills rubric containing 4C evaluated from the Semester test documents can provide clearer information about the 4 elements calculated as a whole.

Table 3.4 Mean of 4C Skills evaluated from Semester Test Documents

<table>
<thead>
<tr>
<th>N</th>
<th>Min.</th>
<th>Max.</th>
<th>Sum</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>4C</td>
<td>8</td>
<td>1.00</td>
<td>2.75</td>
<td>17.88</td>
<td>2.23</td>
</tr>
</tbody>
</table>

Table 3.4 describes a summary of the calculation of 8 scores from 8 Semester test documents using descriptive statistical analysis. The minimum score shows 1.00 and the maximum score = 2.75. The total score is 17.88. The mean of the total 4C skills reached 2.23. Meanwhile, the low Standard Deviation value of 0.61 indicates that the Semester test document score based on the rubric calculation obtained and analyzed is homogeneous. The researchers conclude that the data on the average score of 21st century skills containing 4C skills evaluated from the Semester test documents used by 8 lecturers was in the level of "Approaching Competence".

Based on the results of data analysis from the integration of 4C skills in English teaching documents, it can be compared that the average score of syllabus document...
analysis is 3.11 higher than the average score of semester test document analysis (2.23). The integration of 4C skills in the syllabus, document has reached the level of "Meeting Competence" while the integration of 4C skills in the semester test document is still at the level of "Approaching Competence". It can be concluded that lecturers who teach English courses have not balanced yet the integration of 4C skills between teaching syllabus and the semester test.

3.2. Discussion

Integrating 4C Skills in English Teaching Documents

In the era of globalization, 21st century skills are needed because these skills refer to the skills that today's students expect to succeed in future careers. Therefore, 21st-Century Skills presents the 4C skills of communication, collaboration, creativity, and critical thinking as the main skills of learning and innovation in the 21st Century. Kim, et al. (2019) mention that the development of competencies known as 21st century skills has received great attention as a means to improve the quality of teacher teaching in order to improve the skills of 21st century teachers which in turn will foster the skills of 21st century learners. Meanwhile, this study reveals that the syllabus used by English lecturers in the context of this research has integrated 4C skills at the level of “Achieving Competence”. This finding illustrates that students have been trained with 21st century skills in learning in their English class. This finding is in line with the importance of facilitating 21st century skills for students by researchers Valtonena, Hoanga, Sointua, Naykkib, Virtanenc, Poysa-Tarhonenc, Hakkinenc, Jarvel ab, Makitalob, & Kukkonena (2021) have investigated students' perceptions of 21st century skills and the importance of this new perspective on how pre-service teachers view 21st century skills while in teacher education.

Teachers must have an awareness of educating students with 21st century skills, which require individuals to be knowledgeable and skilled to catch up with ever-evolving technologies in the global workforce. In fact, this study also found that the semester test materials that have been used by English lecturers in a university in Pekanbaru have integrated 4C skills at the "Approaching Competence" level. To overcome these problems, Erdoğan, (2019) confirms that teachers can cultivate students' 21st century skills by creating opportunities and facilities followed by finding some innovations in learning to find themselves closer to a more appropriate path for a more prosperous future life success in education and the workforce. In addition, Martínez-Cerdá, Caprino, & Torrent-Sellens (2015) propose a creative way of teaching using media in schools that is integrated with 21st century skills. Teachers can use media content by highlighting several topics that lead to awareness of 21st century skills using social innovation techniques, teacher management knowledge, creative classrooms with media tools, efficient and sustainable media education initiatives, and open educational contexts that support empowering teacher's role in school.

Several studies have paid great attention to developing 21st century skills in students. The pattern of development can be done by promoting communication, collaborative, creativity, and critical thinking of students in the context of classroom learning (Proulx, 2004; Piaw, 2010; Zivkovil, 2016; Zubaidah, Aloysius, Susriyati, & Mistianah, 2018; Wildan, Hakim, Siahaan, & Anwar, 2019; Supena, Darmuki, & Hariyadi, 2021). Importantly, this study also found that the 4C element of "critical thinking" which is integrated in the teacher's teaching document (semester test) is at the level of "Approaching
to competence”. Of course, these findings illustrate the teacher's understanding in fostering students' critical thinking. In fact, there are several studies related to the development of students' critical thinking. Warsah, Morganna, Uyun, Afandi, & Hamengkubuwono (2021) investigate the impact of collaborative learning (CL) on critical thinking skills in various subjects. The findings reveal that CL has a positive and significant impact on students' critical thinking skills. CL also supports the retention of their critical thinking skills. In addition, Suryanti and Nurhuda (2021) have studied the effectiveness of the problem-based learning model (PBL) with an assessment rubric on the development of students' critical thinking in learning.

4. CONCLUSION

Teachers as important agents in developing 21st century skills to students can be monitored from the available documents that have been used in the teaching and learning process. This content analysis research describes teacher practices and classroom processes through teaching documents to measure the quality of classroom learning whether it is adapted to the 21st century skills particularly 4C skills. This study found the integration of the 4C skill elements that were analyzed from the teaching syllabus and also semester test documents have reached the levels of “Meeting Competence” and “Approaching to competence”. This portrait represents a fairly good understanding of teachers in integrating 21st century skills containing 4C skills in ELT classroom. This study suggests future study to pay attention to the development 4C skills that should be immediately integrated into EFL classroom by developing best practices to facilitate more effective teaching and learning in this era of globalization.

REFERENCES


