
AN ANALYSIS OF 21ST-CENTURY SKILLS REPRESENTATIONS IN A CAMBRIDGE TEXTBOOK USED IN THE INDONESIA EFL SETTING

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Abstract

The study analyzed the extent to which 21st-century skills are integrated into Cambridge English textbooks “Think Second Edition 1 A2 student Book” for grade 8, with a focus on core subjects, learning and innovation skills, information, media, and technology skills, and life and career skills as outlined by the Partnership for 21st Century Skills (P21). The content analysis method categorized the 690 tasks into various components such as goal, input, procedure, teacher/student role, and setting based on Nunan (2004). The results showed that the teacher and learner role is a component that needs to be more minimally integrated. Meanwhile, the results from integrated 21st-century revealed that 3 out of 5 core subject skills (Global Awareness, Health Literacy, and Environmental Literacy) were incorporated into textbooks. All four skills in the learning and innovation categories (Critical Thinking, Communication, Collaboration, and Creativity) and all skills in the information, media, and technology categories are present. However, only 2 out of 5 skills (Flexibility and Adaptation and Social and Cross-Cultural Skills) are included in the life and career skills category. Although Cambridge English textbooks effectively incorporate many 21st-century skills, there are significant shortcomings, especially in financial literacy, civic literacy, and some life and career skills. Likewise, the topic of ICT could be more minimally accomplished. With that in mind, it is recommended that educators supplement textbooks with additional materials and activities that address these areas that need to be improved to provide more balanced skills.

Keywords: 21st-century skills, textbook analysis, English Cambridge

INTRODUCTION

Learning materials are very important to support learning activities in the classroom. There are a lot of learning materials that teachers use for teaching and learning activities, but the most commonly used by teachers as learning materials are textbooks. Many experts reveal that most teachers rely on textbooks as the main learning resource in the classroom such as the expert opinion of Margana & Widyanthoro (2017), say that in addition to being used as a guide for students and teachers in learning, textbooks also function as a tool that connects between teachers and students in learning activities. Other expert opinions also suggest that textbooks can be used as the main component, instrument, and source of information in language teaching practices because textbooks contain core learning materials that contain a lot of input language for language learning (Tomlinson, 2011).

English textbooks in Indonesian schools should be analyzed to meet students' needs and integrate 21st century skills because every textbook has potential weaknesses such as its language content, instructions, and mismatch with students' needs. In addition, textbooks must be effectively analyzed from their content, approach and methodology to effectively achieve the desired learning outcomes. The purpose of conducting a textbook content analysis is to find out whether the English textbook used in school follows the curriculum and represents 21st century skills. Textbooks need to be effectively analyzed in terms of their content, approach and methodology to effectively achieve the desired learning objectives and learning outcomes (Nuraeni, 2023; Bounzid, 2016).

Researchers found several research phenomena conducted by previous researchers related to textbook analysis. First, research conducted by Adilah et al (2022). In their research, they found that after analyzing Cambridge ESL textbooks, more than half of the basic competencies of K-13 can be found in the textbooks. Where the basic competencies are students can understand passive sentences, procedure texts perfect, past, present, and future continuously, informational report text and narrative text. As for other research conducted by Testiana & Dian (2018), where their research found that after analyzing a textbook entitled "Cambridge English Idiom in Use Advanced" this book is very good at providing examples of idiomatic expressions along with the appropriate situations. The expressions are also grouped into chapters and units. The book is thematic, so readers can easily find the idioms they need.

Of the two studies above have similarities with the research that researcher will do, namely regarding the analysis of Cambridge English textbooks. However, the researchers analyzing 21st century skills in Cambridge textbooks are limited. Meanwhile, more than 200 schools in Indonesia have implemented English textbooks used for teaching materials (Ramadianti, 2021). Therefore, the current researcher aimed to explore the representation of 21st century skills in Cambridge textbooks, especially in English subjects.

REVIEW OF LITERATURE

21st-Century Skills Based on Partnership (2009)

From Rinekso's (2021) study, there are five well-known organizations designing Frameworks for 21st-century learning, one of them is Partnership for 21st Century Skills (2009), there are 16 skills with for aspect integrated into this framework. There are life and

career skills, learning and innovation skills, media and information skills, and life and career skills. The Partnership for 21st Century Skills framework is a framework that researchers will use to analyze 21st-century skills in the textbooks that researchers have determined. The reason why the researcher chose this framework is because, first. This framework was developed by a well-known educational organization that leads education to become more innovative in the 21st century, namely partnerships for the 21st century (Rinekso, 2021). Second, this framework is quite popular among educators for learning activities. Of course, many researchers have explained this framework in more detail, one of which is the book by Trilling and Fadel (2009). The book was published by John Wiley & Sons. Third, the framework refers to more than specific competencies, such as critical thinking and problem-solving, communication, collaboration, and creativity, that lead to learning skills. However, the framework also refers to excellence for the future. For example, global awareness, finance; Economics; business; and entrepreneurship, civic literacy, health literacy, and environmental literacy. So, the four major components in the partnership for 21st Century skills framework can be linked to the textbook so that later the textbook can be represented

METHOD

The research method chosen for this study is qualitative content analysis. This approach allows for describe the representation of 21st-century skills in a Cambridge textbook. Content analysis is a systematic and replicable technique for compressing many words of text into fewer content categories based on explicit rules of coding (Krippendorff, 2019). This method is particularly relevant for the present research as it allows for the identification and quantification of specific concepts or themes within textual data (in this case, the textbook content).

The researcher conducted an analysis on a book used for the research, which is an EFL textbook from Cambridge University, utilized in one of the Indonesian schools for second-grade junior high school students. The title of the book is Think Second Edition 1 A2 Student's Book. This textbook consists of 12 units and 111 pages, and it was chosen because it complements the existing curriculum in schools and is used in one of the Indonesian schools.

The researcher used data collected for this study was analyzed using three steps to qualitative data analysis from Miles et al. (2014), there are: data reduction, data display, and conclusion drawing (Miles et al. 2014).

FINDINGS AND DISCUSSION

Findings

The researcher found several skills presented in Cambridge textbooks. It can be seen in the following table of summary results from the analysis of 21st-century skills.

Table 1 The summary of representation 21st-Century Skills

Category of 21st-century skills	Total Tasks	Percentage
Aspect of Core Subject and 21st-Century Themes Skills		
Global Awareness (GA)	9	1,5%
Financial, Economic, Business, Entrepreneurial Literacy (FEBEL)	-	-
Civic Literacy (CL)	-	-
Health Literacy (HL)	6	1%
Environmental Literacy (EL)	7	1,2%
Aspect of Learning and Innovation Skills		
Creativity and Innovation (CI)	56	9,3%
Critical Thinking and Problem Solving (CTPS)	100	16,6%
Communication (COMM)	254	42,3%
Collaboration (COLL)	99	16,5%
Aspect of Information, Media, and Technology Skills		
Information Literacy (IL)	18	3%
Media Literacy (ML)	38	6,3%

Information, Communication, and Technology (ICT)	3	0,5%
Aspect of Life and Career Skills		
Flexibility and Adaptability (FA)	6	1%
Initiative and Self-Direction (ISD)	-	-
Social and Cross-Cultural (SCC)	5	0,8%
Productivity and Accountability (PA)	-	-
Leadership and Responsibility (LR)	-	-

Based on the research summarized in Table above, it is evident that the aspects of Learning and Innovation Skills and Information, Media, and Technology Skills are comprehensively represented in the Cambridge textbook. The Learning and Innovation Skills aspect demonstrates a strong focus on developing creativity, critical thinking, communication, and collaboration. Communication stands out with the highest percentage at 42,3% (254 tasks), followed by Critical thinking and problem solving at 16,6% (100 tasks), Collaboration at 16,5% (99 tasks), and Creativity and Innovation at 9,3% (56 tasks).

Similarly, the Information, Media, and Technology Skills aspect includes all the relevant skills, though to varying extents. Information Literacy is represented in 18 tasks (3%), Media Literacy in 38 tasks (6,3%), and ICT Literacy in just 3 tasks (0,5%). The low representation of ICT Literacy activities indicates that this category is the least integrated within the Cambridge textbook.

Unfortunately, some essential skills are still underrepresented in this Cambridge textbook. Within the Core Subject aspect, only 3 out of 5 skills are integrated: Global Awareness with 9 tasks (1,5%), Health Literacy with 6 tasks (1%), and Environmental Literacy with 7 tasks (1,2%). This leaves Financial, Economic, Business, and Entrepreneurial Literacy, and Civic Literacy unaddressed.

Furthermore, the Life and Career Skills aspect shows a low integration percentage, highlighting a need for improvement. Only 2 out of 5 skills are represented: Flexibility and Adaptability with 6 tasks (1%) and Social and Cross-Cultural Skills with 5 tasks (0,8%). The remaining skills—Initiative and Self-Direction, Productivity and Accountability, and Leadership and Responsibility—are yet to be integrated into the textbook. This imbalance suggests a need for a more comprehensive approach to fully equip students with the necessary 21st-century skills. Below is a presentation of the 21st- century skill distribution percentage.

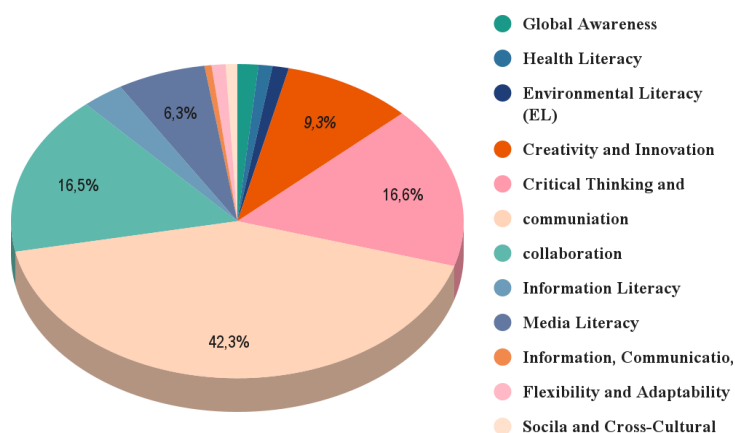


Figure 1.2 The Percentage of the 21st Century Skills Distribution

1. Global Awareness (GA)

The global awareness skills are available in nine tasks, which are explained mainly in the form of information or stories containing information about each country's culture, currency, and food names, and even in pictures that imply traditional Indonesian clothing and historical places. This skill is also essential for students in the current century because students can be widely knowledgeable about the culture of other countries, especially Indonesia. An example of a question below that includes information literacy skills.



Figure 1 The Task of Global Awareness (P26)

In this category of the task, learners are asked to match currency images from different countries with relevant information about each currency. This process requires students to read and understand information about the currencies of other countries, which in turn expands their knowledge of the country's culture. By performing this task, students learn about the economic aspects and more deeply about the cultural and social context associated with the currency. This task helps increase their global awareness and enriches their understanding of the interconnected world.

2. Health Literacy (HL)

Health literacy is taught through information about stories, watching videos, and pictures of healthy food. This ability is demonstrated in 6 tasks that teach students about the importance of health and well-being. Below is one of the tasks presented in health literacy.

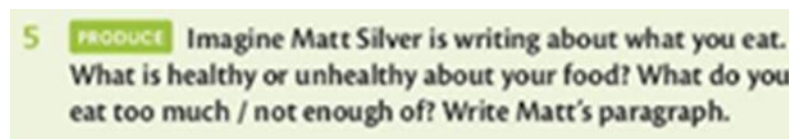


Figure 2 The Task of Health Literacy (P.34)

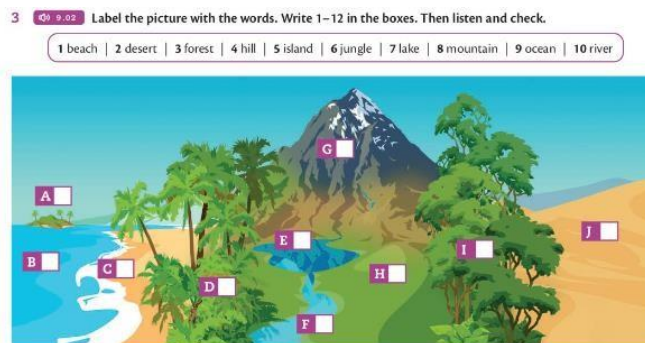
This activity teaches health literacy skills to students by asking them to analyze and evaluate their eating habits. This question encourages students to think about and assess their diets, with a focus on health aspects and imbalances in food consumption; by doing this, students are trained to understand basic concepts about nutrition and how

different types of food can affect their health. Students should consider whether the foods they consume are healthy and evaluate whether they are eating too much or too little of a particular type of food.

3. Environmental Literacy (EL)

This textbook integrates several environmental literacy skills. This skill is dominated only by introducing the type of environment and weather and the story of the seasons that occur in the world. The analysis found seven tasks categories in environmental literacy skills. The question below is one example that illustrates environmental literacy.

Figure 3 The Task of Environmental Literacy (P86)



In this problem, students are asked to match images of different types of ecosystems and geographical features with relevant information. Students learn about different types of natural environments and their characteristics through this task. They are also encouraged to read information related to each image, which increases their understanding of the environment and expands their knowledge of the diversity of ecosystems in the world.

4. Creativity and Innovation (CI)

Creativity and innovation skills are primarily described in the components of the procedure. Some questions ask students to think creatively and innovate in terms of making a sentence, describing daily activities at home, mentioning healthy foods, and others. Within this skill are 56 tasks that ask students to think creatively and find new solutions to problems at hand. Here is an example of a question that requires students to think creatively and innovate:

13 Write a short dialogue for the picture.



Figure 4 The Task of Creativity and Innovation (P41)

Activities like these allow students to use their imagination and creativity in relevant contexts. Students have to create dialogues based on images, which directly encourages creativity and innovation skills. By asking students to imagine and write a conversation between two characters in a picture, they must use their imagination to create relevant and exciting situations and dialogues. This process encourages students to think outside the box, develop storylines, and think of innovative ways to communicate the message. It not only hones their writing and communication skills but trains them to innovate how they convey ideas. This kind of assignment allows students to explore their creativity and come up with original solutions or stories, which are essential skills in developing creativity and innovation in different areas of life.

5. Critical Thinking and Problem Solving (CTPS)

Critical thinking and problem-solving are the second most integrated skills in this textbook. This book is dominated by critical thinking and problem-solving skills and has as many as 100 tasks. Regarding this integration, this often asks students to analyze information, pictures, evaluate arguments, and make decisions based on logical thinking and evidence. For example, tasks such as below:

8 **SPEAKING** Compare your ideas in pairs.

Statement 1 shows that the person does not know how wonderful our world is.

Why do you think that?

Because the person isn't interested in people living in wild places.

Maybe this person needs more information to understand how wonderful these places are.

Figure 5 The Task of Critical Thinking (P51)

This activity is particularly relevant to the critical thinking and problem-solving category because students require to evaluate a statement, provide logical reasons to support their opinions and participate in discussions that compare different perspectives. By engaging students in analysis and reasoning about a given statement, this activity develops their ability to think critically and construct cohesive arguments. Additionally, paired discussions encourage students to consider other points of view, overcome uncertainty, and reflect on their opinions, all of which are at the core of critical thinking and problem-solving skills.

6. Communication (COM)

The next skill is Communication skills, which are the most integrated skill in this textbook. There are 254 tasks integrated into this skill. These skills are found in activities that focus on speaking, writing, and discussing, helping students develop the ability to communicate their ideas and opinions effectively. Examples of activities such as:



6 **SPEAKING** Complete the sentences about someone you made a wrong judgement about. Share your answers with a partner.

Someone I changed my opinion of is _____

At first he/she seemed to be _____

Now I think he/she is _____

I changed my opinion because _____

Figure 6 The Task of Communication (P24)

This task is included in the 21st-century skill, namely communication, as it requires students to express their thoughts and feelings clearly, both in writing and orally, by completing sentences that describe how their opinions about someone have changed. Additionally, students must share their answers with a partner, which demands effective communication to explain the reasons behind their change of opinion and engage in discussion. Furthermore, students must listen actively and respond appropriately to their partner's views, which is essential to interpersonal communication. Therefore, this activity significantly enhances students' communication skills in a social context.

7. Collaboration (COL)

Collaboration is the third most integrated skill in this book. This skill is reflected in the 101 tasks, which emphasize that students work together to achieve common goals and respect each other when students join other teams. These textbooks often organize group activities that require cooperation and interaction between students. For example, like the task below:



Figure 7 The Task of Collaboration (P36)

This task involves students working together to compose and act out dialogues. In this activity, students must design conversations that fit the picture, divide the roles, and decide how best to convey them. This process involves discussion, negotiation, and joint decision-making, all essential elements of collaboration. In addition, when acting out dialogues, students must support and pay attention to each other, ensuring they can both perform well. Through these activities, students develop communication skills and learn the importance of teamwork, listening to each other, and actively contributing to joint efforts to achieve common goals.

8. Information Literacy (IL)

Information literacy is the next skill in this textbook, with as many as 18 tasks. It's just that this skill does not teach students how to search, evaluate, or use information from various sources effectively but only provides information in the form of stories and media (videos) about culture, hobbies, sports, etc. For example, in a video of this:



Figure 8 The Task of Information Literacy (P44)

From this task, student provided a video about family traditions worldwide. By watching these video students can get new information about tradition from around the world. This video will provide more information for students about cultures from various countries.

9. Media Literacy (ML)

In addition to information literacy, this book is also integrated into media literacy skills. It is concerned with critically analyzing and evaluating media content. This skill is represented in 39 tasks that mainly analyze media through videos. One example of media literacy integrated in this book is:



Figure 9 The Task of Media Literacy (P12)

The above activities, students have to watch a video, where the video is one of the visual media that shows moving images accompanied by audio. In the task, students are asked to watch the video first before completing the task that has been given. It also helps students develop the ability to think critically about the media they consume. In an age of abundant information, media literacy is essential for students to understand, assess, and use media wisely.

10. ICT Literacy (ICTL)

Although media and information literacy skills are integrated, ICT skills in this book are minimal. ICT (Information and Communication Technology) literacy skills are only represented by three tasks; it only introduces electronic devices. There are pictures below that integrate ICT literacy skills into ICT literacy:



Figure 10 The Task of ICT Literacy (P66)

In this

problem, students should match vocabulary according to the original picture. The image introduces technology tools only, but there is no ICT category that provides instruction on how to use these technological tools. Given the rapid development of technology in the 21st century, it will be very important to increase the focus on these skills in this sophisticated era.

11. Flexibility and Adaptability (FA)

This flexibility and adaptability require students to adapt to roles, responsibilities, schedules, and other contexts. Of course, students are asked to work effectively. Four tasks represent the ability to use flexibility and adaptability skills, which are described as encouraging students to collaborate and adapt quickly to different instructions. Examples of questions relevant to this skill are provided:

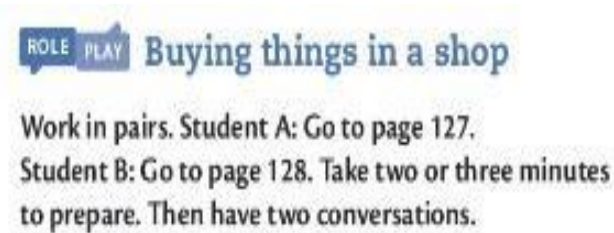


Figure 11 The Task of Flexibility and Adaptability (P23)

Looking at the nature of the task, students must prepare a three-minute conversation and present it in front of the class, which fosters flexibility and adaptability. This exercise challenges students to think on their feet, adapt their speaking style to different audiences, and respond dynamically to any unexpected questions or reactions from their peers. By engaging in this activity, students enhance their ability to adjust their communication strategies in real-time, demonstrating both flexibility in their thought processes and adaptability in their presentation skills. This task prepares students to handle real-world scenarios where these soft skills are essential.

12. Social and Cross-Cultural (SCC)

The last skills integrated into this textbook are social and cross-cultural. This skill is described as information in videos, articles, or stories about the country's culture (outside/inside). In Cambridge textbooks, these social and cross-cultural skills are

represented in 5 assignments aimed at broadening students' horizons about global culture and developing students' ability to interact effectively with people from different cultural backgrounds. Here is one input article that promotes social and cross-cultural skills:



Figure 4.2.12 The Task of Social and Cross-Cultural (P44)

Through this task, students will socialize the habits that occur in each country. The assignment also encourages students to speak and reflect on their culture and how those traditions shape their identity. In addition, this assignment will also lead to new information for students, or, in other words, cultural exchange. When one student shares his tradition, another student will also listen to his tradition.

Discssion

All analyses of 21st-century skills conclude that researchers have found 11 out of 16 skills based on the framework of Partnership 21st-century (2009). Among the four aspects integrated into this textbook, the most widely promoted aspect is learning and innovation skills, often called 4C skills (Creativity and innovation, critical thinking, Communication, and Collaboration). This shows that this Cambridge textbook has integrated the skills most needed in learning and innovation skills. As explained before, 21st-century skills are critical to be integrated into education so that students can have the provisions to prepare to face future global challenges. Alismail and McGuire (2015) believe that effective teaching should include mastery of core academic subjects and developing skills that enable students to think critically, innovate, and collaborate. Trilling and Fadel (2009) also support this view by emphasizing that 21st-century skills, including critical thinking, innovating, and collaborating, are at the core of modern education. They argue that today's world needs individuals with academic knowledge and social and emotional skills that enable them to work effectively in teams, adapt to change, and lead responsibly.

However, the lack of integration of financial, economic, business, and civic literacy skills and life, initiative and self-direction, productivity and accountability, and leadership and responsibility skills in Cambridge textbooks can be a significant drawback. Meanwhile, textbook

balance can help students gain academic knowledge and relevant and comprehensive skills (Rinekso, 2020). With these shortcomings, teachers must be able to insert learning materials using abilities that need to be integrated into this textbook. It is highly recommended that all skills be integrated thoroughly and balanced. Teachers are advised to develop tasks supporting initiative and self-direction skills, emphasizing self-directed projects that allow students to take initiative and direct their learning. In addition, functions emphasizing productivity, accountability, leadership, and responsibility should be added to ensure that students learn to adapt, work in teams, lead, and take responsibility for their actions.

In addition, Barrot (2018) and Ozverir & Herrington (2011) emphasize the importance of contextualizing the teaching and learning process to help students gain knowledge and skills and practice them in real-life contexts. The real-life situation of students today is often related to the internet, social media, online games, and digital reading. This shows the importance of using technology in learning because students are currently "digital natives" (Seemiller & Grace, 2016). Meanwhile, the material and topics promoted in ICT literacy skills here could be more extensive. Fandino (2013) emphasized that teaching English (ELT) should allow students to articulate their thoughts and ideas effectively using oral, written, and nonverbal communication, as well as various other media and technologies.

CONCLUSION

This study aims to uncover the extent to which 21st-century skills are integrated into Cambridge textbooks, specifically in the context of English language learning for 8th-grade junior high school students. This research aims to evaluate the representation of various skills considered essential for success in the 21st century, such as core skills, learning and innovation skills, information, media and technology skills, and life and career skills. In addition, this study also aims to provide relevant recommendations for teachers, students, textbook writers, and future researchers to improve the quality of education that is more in line with the demands of the current digital era and globalization.

Based on the analysis of Cambridge textbooks, the integration of 21st-century skills in this textbook is quite significant, although some aspects still need improvement. The elements of learning and innovation skills and information, media, and technology skills have been well integrated in this book. In the aspect of learning and innovation skills, critical thinking skills,

communication, collaboration, and creativity are all represented by a relatively high percentage of tasks, showing a strong focus on developing these skills.

In addition, all skills are integrated into information, media, and technology skills, although the percentage for ICT literacy skills is still relatively low. This textbook promotes information and media literacy through various activities requiring students to access, manage, and evaluate information effectively. However, there are shortcomings in core subjects and life and career skills, where not all skills are integrated in this textbook.

Although Cambridge textbooks have covered many 21st-century skills, there is room for improvement, especially in integrating abilities that are not yet fully represented. These include financial, economic, and business skills, civic literacy, initiative and self-direction, productivity and accountability, and leadership and responsibility. Further efforts are needed to ensure that all these essential skills can be balanced in the textbook to support students' holistic development.

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