

# The Implementation of 4c Skills (Creative Thinking, Critical Thinking and Problem Solving, Communication & Collaboration) in Learning Contextual Oral Language Skills

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**Abstract.** This study aimed to describe the implementation of 4C skills using multimedia technology, to describe the percentages of 4C skills and to analyze the barriers in implementing 4C Skills. It used descriptive qualitative method. The techniques of collecting data were observation, interview and documentation to 28 English education students of State University of Medan. Based on the findings and discussion, the research shown that 1) the implementation of 4C Skills in teaching learning process had been carried out properly. 2) the percentage of 4C skills, in creative thinking and critical thinking has (71,4%) this category have an excellent ability, Collaboration skill has (82.2%) very competent in solidarity, Communication skill has (78.6%) very competent in communicating using English. 3) the challenges faced by students in teaching learning process, some students difficult to expressed their opinion, not capable to solve the problems and students feel clumsy or not confident to communicate in English..

**Keywords:** 21<sup>st</sup> Century Learning, 4C Skills, Multimedia Technology, Contextual Oral Language Skills Course

## 1 Introduction

Facing the industrial revolution 4.0 era is not an easy thing. It need the role of education institutions including universities takes an important part in preparing human resources by upgrading the competency of graduates to have the 21st century demanded skills (learning and innovation skills) by concentrating on mastering the knowledge and technology [8] . 21st-century trend focuses more on specific specialties, so the objective of national education in Indonesia should be directed at the efforts of equipping the graduates having 21st-century skill such as curriculum renovation, giving opportunity for college students to learn various courses inside the university. The success of learning does not depend only on the environment and learning condition, but also on the student's prior knowledge. Some factors relating to the students, which are ability, interest, motivation, participation in learning, and so on. Because that condition, students need 4C Skills to support their competences.

4C skills are Creative thinking, Critical thinking and Problem Solving, Communication, and Collaboration. Creative Thinking engages the students to think unconventionally, establish ideas, imagine a new scenario because many jobs and developing industries need creativity from the workers. Critical Thinking is the ability to think critically and problem-solving. College students can assess the information coming to them daily through the web, apps, workplaces, and many other media. This empowers college students to measure the accuracy and information, analyze and evaluate the information, make reasonable decisions, and take action. Communication and collaboration skills invite college students to interact competently and respectfully with others, especially across cultures in the workplace and diverse and multinational communities in the global and digital era.

The explanation above show that 4C Skills has to be implemented in higher education curriculum. Therefore, the researcher conducts the study by implementing 4C skills in English language learning. Without 4C skills, the student's ability won't be realized well. College students cannot express their opinion, thought, and ideas orally as well as written. This is because 4C skills train the skills by studying and experience that can be gained from the lecturer. Hence, by the implementation of these 4C skills, college students are proficient in creativity, solve a problem, communication and critical thinking. This learning becomes fundamental to the curriculum designed by the Ministry of Education and Culture (Kemendikbud).

### **Literature Review**

#### **21<sup>st</sup> Century Learning**

21<sup>st</sup>-Century Learning become the most popular topic being discussed recently. Education institution is challenged to find a way to increase the student's ability to succeed at work and in life through mastering creative thinking skill, flexible problem solving, collaboration, and innovation.

It is quite important to identify the students' skills necessary to encounter the 21<sup>st</sup>-century. Conventional learning is learning emphasizing remembering or simple procedures, which won't promote the student's critical thinking and independence.

Every person should get involved in inquiry-based learning containing truth value and relevance so that can develop higher-order thinking skills. Because of that, educators are demanded to find a way to facilitate the students to learn more effectively.

The principle of 21st-century learning is blended learning by combining knowledge, thinking skills (critical, innovation, problem-solving), technology, and research [1].

#### **A. Creativity**

Creativity is the ability to produce, execute and deliver fresh ideas to others, open-minded, and responsive to new and different perspectives. Creative thinking can elaborate an idea by thinking using one of the national education objectives [7].

Creativity will be so dependent on someone's creative thinking, it is the process of someone's common sense in creating a new idea. Creativity can generate new inventions commonly called innovation.

The technology era is remarked by a lot of jobs taken over by machines in the future. Creative thinking in creating various innovations is one of the 21st-century skills that will make someone survive and can't be replaced by robots or system in the field of work they are in.

#### **B. Critical Thinking and Problem Solving**

Critical thinking is the ability to think rationally. Problem solving is the ability to tackle the case. By using these competencies, college students will be able to analyze complicated things and connect the information, as a result, there will be several perspectives and find the solution to a problem.

Critical thinking skill is an important thing to have for students amid the swift information flow in the digital era.

The ability to think critically and problem solving has to be exercised and keep being practiced because it doesn't work otherwise. To build and practice the student's ability to think critically, the teacher should invite the students into a discussion so they are capable of seeing something from different perspectives, stimulate them to generate questions, and keep asking the students to add the rationale or pieces of evidence together with the argument and answer given. In the education field, critical thinking is considered can prepare the generation to follow the lesson and fulfill their intellectual needs [3].

#### **A. Communication**

The third student skill that should be developed is communication. This skill relates to how the students can express something in their mind orally and writing effectively. The main objective of teaching this skill is to make the students communicate well so the message they deliver can be received well by the recipient and avoid misunderstanding. In this skill, students are also trained to realize the situation around them, the use of media in communication, and with whom they are talking with.

Giving the chance for the students to express their opinion, tell their experiences, and ask questions in class are the way to practice students' communication skills. Through habituation and role modeling in communication, students will easier to promote their ability and for sure, make them more confident.

#### **B. Collaboration**

Collaboration is a new competition. In the 21st century, in addition to growing competitive souls, there is another more important thing to be taught, which is collaboration.

Collaboration is a form of the social process used to reach the main goal by assisting and understanding one another. Collaboration means the learning process to plan and work cooperatively, tolerating different opinions/perspectives, and participating in the discussion through contributing, listening, and supporting others [4].

The best way to teach collaboration is by making the students work in groups, discussing and conducting projects together. Students will learn how to give opinion and appreciate others. They will gain self-esteem because of having done their task well and contributing to the success of their team.

It is crucial to teach the students to be able to collaborate and cooperate with others to achieve a common goal. By collaborating, every student is trained to be able to complete the strengths and weaknesses of one another, so the final result can be maximal. In addition, collaboration is useful to teach the students to be more responsible, have empathy, and appreciate others who have different points of view.

#### **Contextual Oral Language Skills Learning**

Contextual Oral Language Skills is one of the courses studying two skills, which are Listening and Speaking. This subject train the students in speaking English. The more practice done by the students the get easier and fluently in English.

To achieve the learning objective, required learning media and learning methods to encourage skill so that the students improve the aspects such as pronunciation, fluency, intonation and xpression. Therefore, by implementing 4C skills in Oral Language Skills learning, hopefully, the student's ability in English will advance.

## 2 Method

This research focuses on the implementation of 4C skills and the obstacles in Contextual Oral Language Skills learning. Hence, the research method was qualitative. Qualitative method is a research method or procedure generating descriptive data such as written or oral words of observable people and behavior [2]. Regarding this, it can be said that this research was focused on the description of the collected data in the form of words in sentence or picture that has meant more than just number or quantity [6]. In this study, the researcher was the key instrument of the technique of collecting data, portraying, sketching, describing, explaining, and answering the problems of the study in detail.

Participant of this study was English Education study program students who were studying Contextual Oral Language Skills course at State University of Medan. Consisted of one class with 24 students.

### Research Instrument

Instruments employed were observation sheets and questionnaires (online survey tools) to collect the data and look for factual information or obtain the truth. The observation sheet contains objective indicators in the contextual oral language skills learning process by implementing 4C Skills. The questionnaire was made to acquire information about the obstacles to implementing 4C Skills in the learning process. The questionnaire was in Google form and answered by respondents of the subject of this research.

Technique of Collecting Data and Analyzing Data

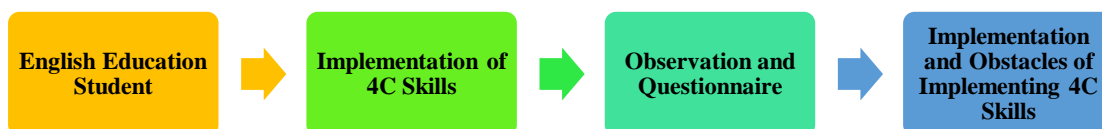


Fig.1. The Technique of collecting data and analyzing

## 3 Result and Discussion

### The Implementation of 4C Skills

#### a. Creative Skill

In developing the Creative thinking of the students, the lecturer assigned them to analyze pieces of comic pictures about health. Students were free to create to show their discussion results by role-playing according to characters in the comic.

Students then utter new ideas about the process of medical treatment activity, what doctors should say to patients, and prescribe the medicines. This show that students can create a condition for creativity and innovation in learning. And of course, perform it confidently.

#### b. Critical Thinking Skill

In discovering Critical Thinking, the lecturer ask the students to observe a video about health. Students were given the freedom to reveal their knowledge about health and issues in the health sector. The lecturer also command the students to have critical thinking in observing the video, analyzing the kind of conditions happening in the health sector, and trying to solve those issues.

Based on the observation result, students discuss what they got in observation and verify it with the data and theory in the book. Students expand their knowledge to find the solution from different sources. Critical thinking activity improve the students' ability in thinking and problem solving, and students attempt to express their idea based on data validation.

**c. Collaboration Skill**

Observation result in the implementation of students' collaboration skill has been conducted successfully. Seen when the students were working in groups to discuss health together. This collaboration skill was also seen when they were discussing in the team, each student paid attention to other member's suggestions, coordinated with other group members, presented the group discussion result confidentially, and managed all group members to actively participate in role-playing.

**d. Communication Skill**

In the implementation of Communication, students practiced this skill very well. The communication in the class used English properly and correctly. It was seen when the students had discussions with group or intra-groups, expressed ideas and opinions, and arranged sentences using new vocabulary.

Students can conclude the discussion result based on the analyzing result spoken and written, deliver it with full of confidence, and maintain carefulness, honesty, responsibility, and a tolerant attitude in giving and listening opinions.

**The Percentages of 4C Skills Objective Indicators in the Learning**

Based on observation during the learning, the percentage of 4C skills indicators was adjusted to the Likert Scale theory. Likert Scale was a scale used to measure the attitude, opinion, and behavior of respondents towards certain questions [5].

The answer of each instrument used Likert Scale has a gradation from very positive to very negative with the scores 4,3,2,1 as follows:

**Table 1. Likert Scale**

<b>Criteria</b>	<b>Score %</b>
<b>Very competent</b>	<b>4</b>
<b>Competent</b>	<b>3</b>
<b>Rather incompetent</b>	<b>2</b>
<b>Incompetent</b>	<b>1</b>

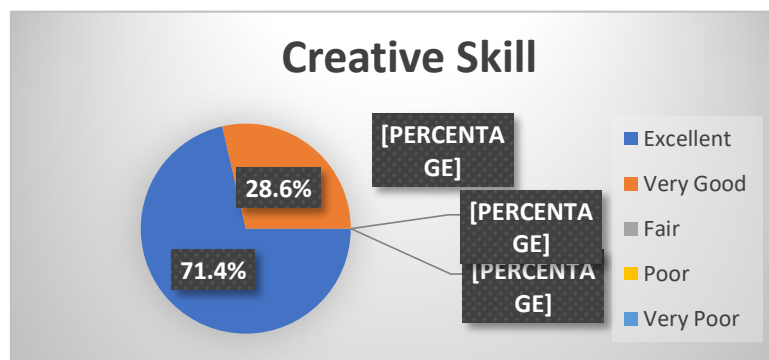
After obtaining the data, the result of the Likert Scale is calculated using the formula below:

$$\text{Percentage} = \frac{\text{total score}}{\text{the amount of data}} \times 100 \%$$

**Table 2.** The interpretation of Likert Scale Score

Criteria	Score %
Excellent	81-100
Very Good	61-80
Fair	41-60
Poor	21-40
Very Poor	≤20

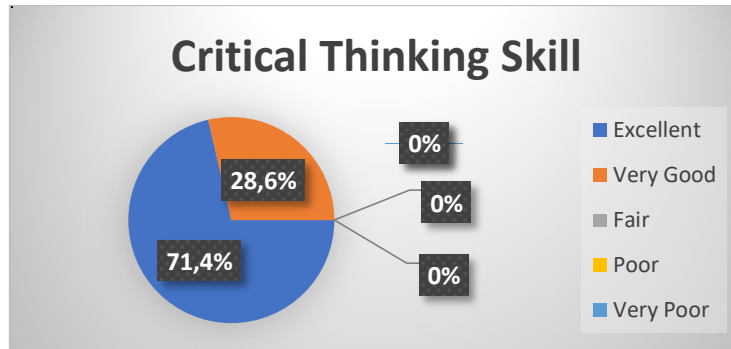
**a. Creative Skill**



**Fig 2.** Creative Skill

Based on observation results, 20 students were categorized as very competent with a percentage (71,4%). In this category, students have an excellent ability in giving feedback to others and perform assertively. Speaking in a good manner and delivering ideas coherently. In competent predicate, there were 8 students or 28.6% have good ability in analyzing and pitching their creative ideas but cannot express the ideas obviously.

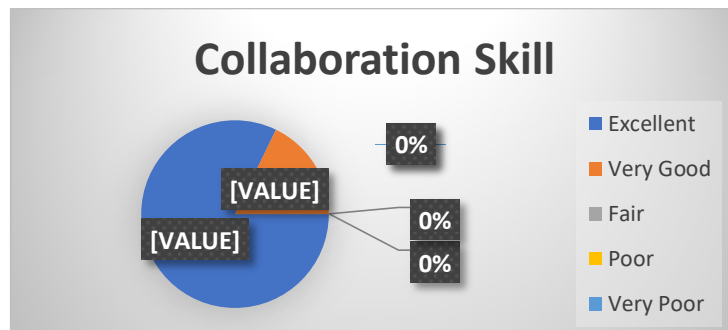
**b. Critical Thinking Skill**



**Fig. 3. Critical Thinking Skill**

Based on the observation result, there were 20 students (71,4%) who were very competent in analyzing, elaborating the analyzing result well, and solving the problem by concluding the suggestion and solution of the problems by connecting it with daily life conditions and supporting with the data analyzed by their team. In addition, 8 students (28.6%) were categorized as competent in explaining analysis result, and offering solutions to the problems by showing the data but cannot link it with real-life situations.

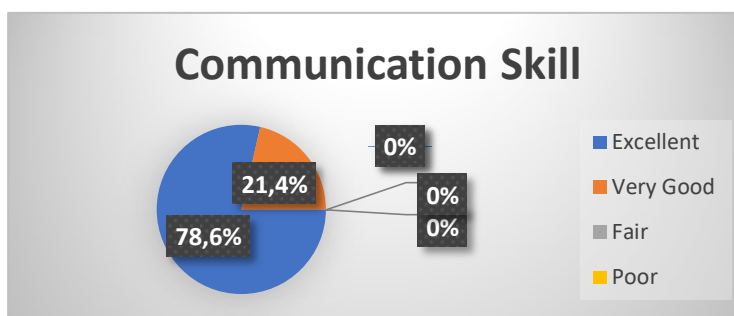
**c. Collaboration Skill**



**Fig. 4. Collaboration Skill**

In Collaboration skill, there were 23 students (82.2%) who were very competent in coordinating the group members, listening and giving insights into others' opinions, and maintaining solidarity and togetherness between group members. Moreover, there were 5 students (17.8%) who can be team leaders but not very well managed, listening to others' saying but not giving any valuable responses, and having less togetherness with group members.

#### d. Communication Skill



**Fig.5.**Communication Skill

In Communication skill, there were 22 students (78.6%) who were very competent in listening and responding to others' opinions, communicating in English well with clear intonation and supported with appropriate body gestures. Furthermore, there were 6 students (21.4%) who were competent in listening to others' opinions without any response, yet communicating in English with not-so-clear intonation and pronunciation.

#### C. The Obstacles in Implementing 4C Skills

The implementation of 4C Skills in Contextual Oral Language Skills learning has been conducted based on the requirement and procedure of learning implementation of 4C Skills. However, there were some obstacles in the implementation which were:

1. In creative thinking skill, there were some students who were not capable in linking the problems with the concept beyond the course or connecting it with daily life. It happen because the students only focus on the object in the picture in the question.
2. In communication skill, some students were not good in act of the characters in the comic. Based on the interview, some students were feel clumsy and embarrassed to act like the figure what they are role-played.
3. The obstacles regarding time allocation and the duration time in conducting the learning was not sufficient to implement the whole 4C skills.

## 4 Conclusion

There are so many benefits implementing 4C skills in learning, such as enhancing English ability particularly speaking using appropriate intonation and pronunciation with supporting body gestures. Students can improve their ability in analyzing the problem, designing ideas, and connecting it with daily life using data and observation. The implementation of the 4C Skills in Contextual Oral Language Skill course has been carried out well. This can be seen from the learning objective indicators of each 4C skill indicating that the average students are competent enough in every single skill. However, there are some obstacles in implementing these skills such as some students are not capable to connect the problems with knowledge beyond the course and when talking in English, some students feel clumsy, embarrassed, and fearful of being wrong. Moreover, the obstacles regarding time allocation, and time available to implement the learning is not sufficient to apply the whole 4C skills.



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