

4C-Based Learning Model: What, Why, How?

Ni Made Ratminingsih^{1*}, I Gede Budasi², Kadek Sonia Piscayanti³, Ni Luh Putu Era Adnyayanti⁴, I.G.A. Pt. Novita Sari Paragae⁵

^{1,2,3,4} Program Studi Pendidikan Bahasa Inggris, Universitas Pendidikan Ganesha, Singaraja, Indonesia

⁵ Program Studi Pariwisata Budaya Hindu, STAH Negeri Mpu Kuturan Singaraja, Indonesia

*e-mail: made.ratminingsih@undiksha.ac.id

Abstract

This article presents theoretical and empirical reviews on the nature, rationale and the implementation of teaching model developing students' 4C skills in the classroom. It also shares the research result conducted in Teaching English as a Foreign Language (TEFL) Course of English Education Study Program. This descriptive research was conducted in the form of Research and Development Model by Gall, Gall, and Borg which resulted in the development of 4C-based learning model integrated in task-based learning framework. The expert judgement on the quality of the model proved that the developed model gained the mean score of 4.85 (from 5 Likert Scale) which means that the model was considered very good. The 4C-based learning model is a solutive learning model to be used in the 21st century in delivering TEFL course. Thus, it is expected that the lecturers of TEFL Course implement the model regularly to enable student teachers to obtain the required skills later both in their real teaching practicum and in their future career.

Keywords: Critical Thinking, Communication, Collaboration, Creativity

1. Introduction

This world that is undergoing rapid changes requires every individual to be prepared to face the unpredictable challenge in the future. Nowadays condition with extreme competition, rapid spread of information, massive technology development, and globalization have changed the way people live, interact and work (Schwab, 2016). These changes may lead us to the bigger changes in the future. To be successful in life, it is crucial for someone to learn how to set purposeful goals, how to work with other people who have different perspectives, how to find opportunities and how to get multiple solutions to problems (Afandi et al., 2019; Erdogan, 2019). Our educational system should also respond better to this changing world since it plays a vital role in developing the knowledge, skills, attitudes and values that enable people to contribute to and get benefit from an inclusive and sustainable future (Erdogan, 2019). In education, academic achievement of the students is no longer seen as the only factor determining their success in the future, but more to gain a competence in communicating by using second language and acquire basic skills such as collaboration, critical thinking, problem solving, creativity and research gathering (Bialik & Fadel, 2015; Erdogan, 2019; Pardede, 2020). This reformation of education was considered firstly in United States of America by the movement of the 21st century skill.

For the reformation of education, Partnership for 21st century learning (P21) established "Framework for 21st Century Learning" and put forward 18 skills that are considered to be the necessity for students' success (Kids, 2019). These skills were later considered too complicated and too many that Roekel (2012) simplified them into four skills. The four skills, which are known as 4C (critical thinking, collaboration, communication and creativity), are considered essential for the students to be successful in this era (Erdogan, 2019; Halverson, 2018; Pardede, 2020; Ratminingsih, 2017). Critical thinking skill and creativity are crucial to enable someone to solve problems, while collaboration and communication skills are important to enable him/her to interact and collaborate with others. When someone have this set of skills, they will be able to become globally competitive

*Corresponding author.

learners and get success in any situation they might be in the future (Ismail et al., 2016) and make them become independent (Davila, 2016).

In accordance with the importance of 4C skills, English teachers nowadays are not only responsible to present the instruction that can help the students to be able to communicate in English, but also to help them achieve 4C skills (Ismail et al., 2016). Therefore, teacher candidates should be trained how to develop 4C skills of their future students. TEFL (Teaching English as a Foreign Language) course has a big role since this course focuses on the pedagogical competence of the students, especially in teaching English with various teaching methods and techniques or strategies. It is important to ensure that the teacher candidates will be able to integrate 4C skills in their classroom since they need to be competent enough to make the implementation effective (Radifan & Dewanti, 2020). The 4C skills are important for teacher candidates in two situations. In one situation, they are university students which also need to develop their own 4C skills (learning needs), while in another situation, they also need to know how to develop the 4C skills of their future students (target needs). The achievement of 21st century skills is carried out by updating the quality of learning, helping students develop their participation, adapting personalization of learning, emphasizing project/problem-based learning, encouraging collaboration and communication, increasing the students' involvement and motivation, cultivating creativity and innovation in learning, using appropriate learning tools, designing learning activities that are relevant to the real world, empowering metacognition, and developing student-centered learning (Zubaidah, 2016).

Previous studies on 4C skills have been conducted by some researchers especially in English Language Teaching, but there is not any research investigating these skills in TEFL course. First, previous study integrate 4C skills to enhance students' English writing skill and found that they successfully helped students to improve their writing skill (Yu & Mohammad, 2019). Not only in writing skill, other study explained the 4C skills in relation to education and connected them to language teaching and the integration to four language skills (reading, listening, writing and speaking) (Erdogan, 2019), and also put forward the incorporation of 4C skills into integrated skills (Pardede, 2020). Another research was investigated how 4C skills were incorporated in Senior High School Teachers' Lesson Plans of English subject (Radifan & Dewanti, 2020). The nature of English teaching which usually emphasizes students' four skills is not the same with the nature of TEFL teaching, which also requires the students to comprehend theories in addition to their ability in implementing those theories in practice. Thus, it is very essential to conduct a study which concerns on the insertion of 4C skills in TEFL subject which is held in tertiary level. Based on these facts, the objectives of this paper are to discuss the nature of the 4C-based learning model, its usefulness, implementation, and syntax with all the activities in learning TEFL course in English Education Study Program.

2. Method

This research was a descriptive study developed in the form of Research and Development (R&D) Model by Gall, Gall, & Borg (2003). One of the data collection methods used was a focused group discussion (FGD) which was attended by 6 out of 8 lecturers teaching TEFL course in the English Education Study Program conducted in the academic year 2018/2019. The aspect/indicators that used in this study shown in Table 1.

Table 1. Good Characteristics of Learning Model

No.	Good Characteristics of Learning Model
1.	It is based on educational theories and learning theories from experts.
2.	It has a specific mission and educational goals.
3.	It can be used as a guide for improving teaching and learning activities in the classroom.
4.	It has components of a learning model.

No.	Good Characteristics of Learning Model
5.	It has an impact as a result of applied learning model.
6.	It can be used as a guide for making teaching preparation (institutional design)

The results of the discussion in the FGD were used to strengthen and explain the finding obtained from the results of the student needs analysis questionnaire on 4C skills in TEFL course, which were further used to develop 4C-based learning model integrating task-based learning framework as explained in the finding and discussion

3. Result and Discussion

Results

The 4C-based learning model with the task-based framework has the following learning syntax. Syntax of 4C-based Learning Model shown in Table 2

Table 2. Syntax of 4C-based Learning Model

Syntax	Purpose	Main Activities
Pre-Activity	Preparing the students for classroom learning	<ol style="list-style-type: none"> 1. Presenting the purpose to be achieved in each meeting 2. Reviewing previous learning materials 3. Directing the focus of students on the topic or material to be studied in class.
Main Pre-Activity	Preparing the students to carry out tasks	<ol style="list-style-type: none"> 1. Providing initial direction (orientation) about the task 2. Discussing the tasks 3. Presenting the procedure of the task
During Task	Involving students actively working on task	<ol style="list-style-type: none"> 1. Looking for related resources for doing the tasks 2. Selecting and sorting out relevant and reliable sources to complete the task 3. Analyzing information from various sources in solving problems 4. Linking all the related information into a synthesis 5. Evaluating the results of class simulations and lessons learned assisted by the teacher
	Critical Thinking	
	Communication	<ol style="list-style-type: none"> 1. Discussing the division of tasks among members of the groups 2. Communicating the information obtained to complete tasks in groups 3. Presenting the results of group discussions 4. Providing responses in the form of questions or comments on the results of other groups' presentations 5. Responding to questions raised by other groups 6. Delivering the conclusions of the class discussion

Syntax	Purpose	Main Activities
	Collaboration	<ol style="list-style-type: none"> 1. Forming groups to complete the tasks in accordance with the lecturer directions 2. Determining the division of tasks and the work system based on the group members' agreement 3. Synchronizing various information obtained in the process of completing tasks in group discussions 4. Preparing group presentations 5. Discussing responses to questions and comments from other groups 6. Discussing in groups the materials, strategies / techniques, and learning media used in learning simulations 7. Concluding the results of the class discussion together at the end of the presentation
	Creativity	<ol style="list-style-type: none"> 1. Formulating information results from various sources into a report 2. Making a summary report of several topics that have been discussed in the form of a video "mastery of the material" 3. Designing materials, strategies / techniques, activities, and student worksheets for learning simulation activities 4. Designing innovative media to support presentation and learning simulations 5. Making a report on the analysis of the simulation video.
Post-Task	Taking responsibility to the task	<ol style="list-style-type: none"> 1. Making a group work journal 2. Reflecting on the process of working on individual and/or group tasks 3. Providing peer assessment of the result of presentation and simulation of other groups 4. Conducting self-assessment of the task 5. Conducting a process and product assessment 6. Providing feedback on the lesson learned
Post Activity	Ending the learning process in class	<ol style="list-style-type: none"> 1. Reviewing the material that has been discussed at the meeting 2. Informing the material to be discussed in the next meeting

Being assessed by two experts in the field, the 4C-based learning model obtained the mean score 4.85 out of 5 of Likert Scale, which means that it is considered to have a very good quality. The result of calculation on quality of the model shown in Table 3. It is obvious from table 1 that the task-based learning framework is the building block of the 4C based learning model especially in the main activity stage. This is the most important part which should be maximized by the teacher in order to develop the students 4C skills in their learning. Thus, it should be more learner-centered. In relation to this, learning is a process experienced by students towards perfection as a result of the interaction between a number of learning components (Marhaeni, 2013). According to the constructivist view, the learning

process does not only ask students to memorize information, but also give them opportunity to build their own understanding. Student-centered learning will greatly assist them in: a) developing the ability to interact with others, such as being able to work in teams, being able to respect the opinions and views of others, being able to act critically, but still tolerant and respect conflicting views, b) fostering a deeper understanding of a particular topic, and c) improving abilities and process skills, especially in problem-solving (Lan et al., 2000). The 4C-based learning model is an appropriate model to be used in developing students' abilities, especially in responding to challenges in the global era. The 4C-based learning model is a learning model that emphasizes the development of 21st century skills, namely: critical thinking, communication, ability to collaborate - work together, and creativity. The learning model which emphasizes the 4 main skills is designed in a task-based framework. That is, the design of the stages of the learning process will use a task-based concept by promoting activities that train and develop 4 main skills of the students.

Table 3. The Quality of the Model

No.	Good Characteristics of Learning Model	Quality Score
1.	It is based on educational theories and learning theories from experts.	5.0
2.	It has a specific mission and educational goals.	4.5
3.	It can be used as a guide for improving teaching and learning activities in the classroom.	5.0
4.	It has components of a learning model.	4.75
5.	It has an impact as a result of applied learning model.	4.75
6.	It can be used as a guide for making teaching preparation (institutional design)	5.0
Mean		4.85

Discussion

Task-based concepts that include pre-task, during task, and post-task activities can facilitate the learning process of students to create effective activities and develop more communicative learning experiences (Martin, 2015). Task-based learning activities involve a variety of instructional activities so that students can try and creatively complete the stages of the assigned task (Buyukkarci, 2009). The 4C-based learning model is suitable to be integrated with the task-based framework considering that the purpose of these two main concepts is to provide more opportunities for students to be able to build, train, and develop their skills and knowledge. The students are not only asked to understand a concept in depth but they are also trained to be able to use and practice the information they get. Meanwhile, the teacher plays an important role in directing, motivating, and supporting students. The emphasis will certainly refer to the ability of students to 1) think critically so that they are able to process, analyze, and solve problems, 2) communicate well, effectively, and responsibly, 3) collaborate, work well in teams, and 4) be creative and innovative in producing something new.

The 4C-based learning model integrating the task-based framework promotes the development of 4C skills in maximizing the learning process. Moreover, the task-based framework with the learner-centered activities providing greater opportunities for the students to develop their potential and skills. Using this learning model, the students are directed and supported to be able to solve the problems they face during the TEFL learning process. They are trained to be able to collaborate and work together in completing given tasks. They are directed to be able to develop creative thinking skills and express the ideas they have in designing products and tasks given in the learning process. In addition, they are also trained to be able to communicate their learning outcomes in the presentation and discussion process. All activities designed in the 4C-based learning model complement each other.

Activities in the learning process should be presented in their entirety because each element represents the strengthening for each of 21st century skills.

The forms of activities that can be carried out in developing and creating the 4C-based learning model incorporating the task-based framework in TEFL course which enhance critical thinking are activities of identifying and analyzing (Nargundkar, Samaddar, & Mukhopadhyay, 2014; Syawaludin, Gunarhadi, & Rintayati, 2019; Twiningsih, 2020). In more detail explanation, proposed steps of critical thinking which includes identifying the issue, thinking about goals, brainstorming possible solutions, thinking through results that are possible, trying one of the solutions, and evaluating the outcome. Learning activities that can improve students' critical thinking skills really need to be improved so that they are more motivated and challenged to solve problems and improve the quality of learning (Kogut, 1996; Nugraha et al., 2017). The lecturers' ability to explore the students' knowledge is crucial in the success of the student in producing their critical thinking skill (Nargundkar, Samaddar, & Mukhopadhyay, 2014; Syawaludin, Gunarhadi, & Rintayati, 2019; Twiningsih, 2020). Thus, it is important to conduct appropriate activities to maximize students' critical thinking.

The learning activities that can be carried out to improve students' critical thinking skills are: (1) Actively collecting, selecting, and sorting information sources. The existence of lecturers or teachers is no longer the only source of information for students. The students need to be trained to actively and independently seek and collect information from various sources (multi sources). Sources of information are not limited to books and research journals. They can be given the opportunity to make direct observations in schools or conduct simple interviews with several students and teachers regarding the learning process in class. They can then discuss their respective findings and consult the lecturer with other students. The process of collecting, selecting, and sorting information in the first activity require the students to identify and analyze which can improve students' ability to think critically (Nargundkar, Samaddar, & Mukhopadhyay, 2014; Syawaludin, Gunarhadi, & Rintayati, 2019; Twiningsih, 2020), (2) Observing the simulation process. To practice critical thinking skill, it is important to emphasize that the focus of learning is on the process, not only on learning outcomes. Therefore, the information and theories that students learn in class should not only be at the memorization stage. There are several steps that can be applied to improve students' critical thinking skill. First, after studying and understanding the theories discussed in class, they are asked to do simple simulation related to the material and theories they have learned. So that the learning process is not just at the basic stage of "learning to know", but has increased at the "learning to do" stage. After that, they are asked to observe and pay attention to the simulations conducted by their friends. They can then compare the theory in the book with the simulations carried out in class. They can assess the strengths and weaknesses that can occur by observing the simulation process directly. In addition, they can also learn how to overcome weaknesses and problems that happen in class (problem solving). Finally, students can make conclusions based on the observations they have made. In relation with the steps of critical thinking, the activities have completely fulfilled the steps of critical thinking (Changwong et al., 2018).

The students identify the material and theory they will present, set the goal of what they want to achieve after the simulation of their group, brainstorm the way to achieve the goal, trying the way to achieve the goal by simulating it, and evaluate their simulation, and (3) Analyzing videos. To carry out this activity, the students are first divided into several groups. There are two options that can be done to perform video analysis. The first option is for students to record themselves a video of the learning process in class. Meanwhile, for the second option, students can analyze the existing video learning process. For the first option, the students in groups are asked to visit different schools and record one of the learning activities in class. In the process of recording the video, only representatives need to enter the classroom. This is intended to avoid noise and reduce the discomfort of the learning process for students and teachers in the classroom. This video then needs to be observed and analyzed by students. They can observe and see real situations in the field and compare it with the learning theories they get in class. For the second option, students in groups are

asked to observe and analyze learning videos conducted in several countries. They can then compare the characteristics and learning processes that take place in these countries and compare them with the theories they have learned in class.

Next is the tasks which develop communication skill. In the classroom interactions, lecturers need to provide enough opportunity for the students to communicate to prepare them for the job market (Khambayat, 2017). There are two main activities held: (1) Conducting small group/pair work. The students who are divided into small groups in the form of group work/pair work can practice their ability to communicate. They can practice conveying their views or opinions in the group, they can also practice discussing with other students to complete the tasks and problems given. Discussion topics or given case problems needs to be examined further so that they contain an information gap. It is important to enable them to be debated. Instructors/lecturers can occasionally direct the students during the discussion process to ensure equal participation of each group member. It is in line what is suggested that lecturers should assign opportunities for group discussion (Khambayat, 2017). The more often the students work and have discussion together, the more comfortable they will be in the classroom. Thus, their willingness to communicate will increase. (2) Making vlog. The activity of making vlogs is familiar to students. Vlogs or video blogging are personal notes or narrations in the form of videos. They are asked to record their own videos and tell or report on a topic based on the material discussed. This video recording activity can increase students' confidence to communicate their understanding and thoughts in the form of presentation and public speaking. They can edit and add some pictures and background sound so that their videos can be made more interesting. The video is then uploaded to a YouTube account. Furthermore, the students only need to collect the video link so that it can be listened to and discussed in class. Presentation can improve students' communication skill especially in building their confidence, courage and responsibility (Sugito, 2017). Presentation in the vlog provides a chance for the students to practice that may lead to the improvement of their communication skill (Busà, 2010; Sukitkanaporn, & Supakorn, 2014).

Collaboration is another skill being emphasized in the 4C-based learning model. Learning in collaboration is an educational approach to teaching and learning that involves groups of learners working together to solve a problem, complete a task or create a product. In the collaborative learning environment, the learners are challenged both socially and emotionally as they listen to different perspectives and are required to articulate and defend their ideas. In so doing, the learners begin to create their own unique conceptual frameworks and not rely solely on an expert's or a text's framework. In collaborative learning, students have the opportunity to converse with peers, present and defend ideas, exchange diverse beliefs, question other conceptual frameworks and are actively engaged (Vickers et al., 2020). The learning activities that can improve students' collaboration skill are: (1) Working in Group. Group work activities have proven to be effective in class, but the common group work activities need more modification. For example, by cooperating in doing presentation and simulation activities. The goal is that the students do not only understand the theories, but they can also master how to apply the concept in terms of simulation. To vary the activity, the teachers can do modification by asking each group to prepare to simulate all the material. Previously they only needed to focus on their presentation material, but now they have to pay attention to the explanations of all groups. They all have to prepare if they are selected to carry out a learning simulation based on the group's previous presentations. This is certainly more challenging and demands good cooperation from each group member, (2) Assigning Equal Proportion of Collaboration. The problem that often occurs from activities that involve several people in a team is the different working proportion. Therefore, the proportion of work completion of each team must be properly monitored by the lecturer. The lecturer can choose one member of the group to be the leader. This leader is in charge of making a summary note that reports the portion of each member's task completion. Lecturers can always monitor activities in class and match them with the summary notes collected. In

addition, this summary note can also be used as a reference for conducting process assessment and assessing students' attitudes in class.

Creativity is very related with critical thinking in solving the problem. The process of creativity is identified in Osborn-Parnes' Creative Problem-Solving Model, which consists of five stages: finding fact, clarifying problem, finding idea, generating solution and finding acceptance (Isaksen, Dorval, & Treffinger, 2011). Creativity is a skill we need in solving the problem, since problem solving includes several stages: generating ideas which uses creative thinking and cognitive processes, followed by evaluating and implementing the ideas which is related to critical thinking (Grohman et al., 2006). Creativity can be either stimulated or inhibited by environment (Nakano & Wechsler, 2018). Education also has a role in someone's creativity (Levin-Goldberg, 2012) which indicates the important role of teachers or lecturer developing the talents of the students. There are several activities that can be carried out to train students' creativity, including: (1) Making Vlog. In addition to practicing communication skills, making vlogs can also train students' creative abilities. The reports that they usually collect in writing can now be made orally in a video. They can present their reports and thoughts creatively and design their videos to make them more interesting. The most important point in making this vlog is the mastery of the material and the exposure they convey, (2) Doing simulation of teaching methods. In addition to practicing critical thinking skill and the ability to work in teams, simulation of teaching method is also a learning activity that can improve students' ability to think creatively. They are asked to be able to design a simulation method based on the theory they have learned from the presentation of the material. The students are challenged to match what learning activities are compatible with the methods they are learning. In addition, they also have to creatively design suitable media to support the simulation of the teaching methods they are practicing, and (3) Selecting updated material. Information and materials are always evolving and always showing new trends. Therefore, the students also need to adjust the material and information they use in class according to the current development. Especially when simulating the teaching methods in class, they should use warm and up-to-date topics so that it is interesting. They must learn to quickly adapt and use up-to-date media so that the learning simulations are not boring. Moreover, appropriate and up-to-date learning media and material have been strongly positive to promote achieving the goals of learning (Vickers et al., 2020).

The Nature of 4c-Based Learning Model

To improve the quality of education, the applied learning model must be in accordance with the needs and developments of the times. For this reason, the learning model that is deemed appropriate to today's demands is 4C, namely: Critical Thinking, Collaboration, Communication and Creativity. Critical thinking is the ability that helps the students to be able to reason, understand complex conditions and problems. The ability to think critically helps them understand the interconnection of problems with other things, arrange them in a system, disclose and analyze them, so that they are able to solve (Arifin, 2017). The second skill is communication that is considered an essential human skill. Effective communication does not cause different perceptions from the giver and recipient of the message. To make an effective communication, the students need to have the right communication techniques. These techniques should be trained and developed to support students' performance and life skill (Zubaidah, 2018). In learning, language plays an important role as a medium of communication. Knowledge and skills are acquired through the use of language in communication. Thus, communication skills become the foundation for gaining knowledge and skills.

The next important skill is collaboration. Collaborative learning is crucial in producing a graduate that are ready to work. It is considered that collaborative and interpersonal skills are the most desired character that the employers look for when they are hiring the employee (Levin-Goldberg, 2012). This ability needs to be developed to help them work in a team. In learning, immature students must be assisted by those who are more mature in achieving the expected competencies. They must collaborate in solving various life problems that exist around them (Zubaidah, 2016). In collaborating, each student is expected to have

responsibility in his/her own role. They are also expected to place themselves and respect the perceptions of other team members. The final skill, which is the mouth of all skills is creativity. At the beginning of the phase, the students are expected to know and understand a material, while at a higher level, they are expected to be able to use and apply. In the next stage, they are expected to be able to create something new, innovate, and be creative using the knowledge they have. The students are given the challenge to produce something new from the process of reasoning. This is what often creates opportunities for new ideas to emerge. Therefore, it can be synthesized that 4C-based learning is very important to be developed in order to produce prospective teachers who have skills that are relevant to the times so that they can plan and organize innovative and effective learning.

Why Using 4C-Based Learning?

4C-based learning has positive impacts, both in short term (in the learning process), and in long term (on student's life in general). The advantages of 4C-based learning in the learning process are as follows: through activities that require students to think critically, they feel challenged and motivated (Kogut, 1996; Nugraha et al., 2017). The higher the intensity and the efforts are made the students' critical thinking ability increases; cooperative learning makes the students active, responsible, and can increase their enthusiasm for learning (Kogut, 1996); cooperative learning in 4C can provide the students with a chance to practice solving problems in an environment that is considered "safe" (Killen, 2007), reduce their dependence on lecturers, and provide them with more learning opportunities (Johnson & Johnson, 2009); cooperative learning in 4C-based learning improves students' learning achievement and positive learning behavior (Killen, 2007); cooperative learning in 4C allows the students to correct misconceptions based on the results of discussions (Kogut, 1996).

Furthermore, the advantages of using the 4C-based learning model for students outside the classroom are: the ability to think critically can help the students to solve problems effectively (Snyder & Synder, 2008; Thomas, 2011). To be someone who can work effectively in the workplace, one must be able to solve problems to make the right decisions. This requires the ability to think critically. Critical thinking enables a person to interpret, analyze and provide alternative solutions to problems in facing current and future challenges (Nugraha et al., 2017); 4C-based learning model can increase self-confidence, positive interpersonal relationships with others, and positive behavior in working with others in everyday life (Killen, 2007); by having creativity, a person can improve problem-solving abilities, adaptability, self-expression abilities, and improve general health (Runco, 2004). It can be concluded that 4C-based learning has various advantages that it does not only have a direct impact in the form of the acquisition of knowledge and skills from classroom learning, but also convey accompanying impact, namely competence in solving various problems outside the classroom.

How to Implement The 4c-Based Learning Model?

Teaching techniques that focus on memorization do not support the improvement of critical thinking skills. Therefore, learning must focus on the application of a theory, in order to stimulate student thinking processes. Learning that supports the improvement of the ability to think critically must contain a questioning technique, which enables the students to analyze, synthesize, and evaluate information to solve problem and make decisions, instead of repeating information or memorizing (Snyder & Synder, 2008). That critical thinking is a mental habit that requires the students to reflect on the results of their thinking and find ways to continue to achieve a better process, so that they have to filter the information they get by critical way of thinking (Xu, 2011). In addition to teaching techniques, assessment or assessment of learning must also be adjusted to develop critical thinking skills (Snyder & Synder, 2008; Thompson, 2011). Assessment should be intellectually challenging, not only requiring students to memorize (Schafersman, 2019). Thus, assessments with more subjective instruments, such as essay questions and case studies, were considered better for assessing students' understanding rather than multiple choice questions.

Exchanging ideas in groups is also said to be very good for developing critical thinking skills. One of the strategies that can be done to improve critical thinking skills is to hold group discussions both inside and outside the classroom (Kogut, 1996). It can be carried out by asking the students to reach certain agreements to solve certain problem and answer a certain question. Not only in terms of critical thinking, from the point of view of collaboration and communication, the students are also required to work in groups. In a cooperative class, individual success depends on the success of others, so that each student has a share in the success of others, or what is called positive interdependence (Johnson & Johnson, 2009). Two ways to develop interdependence, first, by asking students to produce one work together and second, by giving the same value to each group member. The role of lecturers in encouraging student creativity is very crucial. Lecturers should not only create situations or activities that can increase student creativity, but also play an active role in helping students or providing stimulation during the implementation of these activities. Several techniques to increase creativity, such as reinforcement, prompting, modeling, and situation manipulation (Hilal et al., 2013).

Based on the explanations, it can be summarized that 4C-based learning should meet the criteria (1) providing opportunities for students to analyze, synthesize and evaluate learning material, (2) working in groups with positive interdependence between group members, (3) providing activities which allow students to share ideas communicatively, (4) reducing boundaries, so that students can optimize creativity in completing tasks or activities and (5) the role of lecturers in motivating, providing suggestions and giving examples in the implementation of student group activities.

4. Conclusions and Suggestions

4C-based learning model is a solutive learning model to be used in the 21st century in delivering TEFL course. The framework used is Task-based Language Teaching (TBLT) which consists of Pre-Task, During Task, and Post Task. The 21st century skills are inserted in all relevant stages. TEFL course that is taught using the 4C-based learning model guides the students to have critical thinking skill, in finding, sorting, selecting, and synchronizing information (critical thinking) and making written summaries (written task or written communication) through group work (collaboration). Group work is carried out collaboratively, where all members have different responsibilities but still help each other to increase understanding. Then they practice oral communication to show mastery of the material being studied (oral task or communication) through making video presentations - vlog (creativity). They also practice giving an assessment of their learning outcomes in the form of self-assessment, which is assessing mastery of the material being studied, and peer assessment, namely assessing the presentation of friends (critical thinking). With the 4C-based learning model, the student teachers are expected to be able to design and implement innovative and effective learning as to prepare them later when having their teaching practicum or becoming real teachers.

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