

# SPECIFIED 21<sup>ST</sup> CYBER-BASED LEARNING ACTIVITIES

Perspectives from JHS EFL Teachers in Indonesian EFL Context

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### **Abstract**

This study aimed at investigating the specified 21<sup>st</sup> Cyber-based learning activities. The emergence of using specified 21<sup>st</sup> cyber-based learning activities is due to the integration of digital literacy and the 4Cs. The method of the study is descriptive qualitative study with SWOT data analysis technique. Then, to ensure the validity and reliability of the data analysis, methods triangulation was used to check the consistency of findings generated by different data collection methods. The data were collected through documents analysis, classroom observation, and interview section. The result of the study showed that JHS EFL teachers have different perspectives about the specified 21<sup>st</sup> cyber-based learning activities due to cultural attributes of Indonesian EFL learners which have society's perspective behavior of collectivism, reticence and passivity. However, in line with the use of specified 21<sup>st</sup> century-based learning activities, another result showed that students need EFL learning activities which implementing the subskills of the 4Cs. Additionally, the EFL learning activities should be integrated with the 4Cs both in the cyber-based and classroom-based learning to answer the education challenge in 21<sup>st</sup> century education.

Keywords: Cyber-based, Cultural Attributes of EFL learners, EFL learning activities, JHS teachers

#### Introduction

The educational curriculum of 21st century learning should be emphasized transforming information and specialized knowledge by utilizing technology. 21st century learners should be able 1) to use information, share, communicate to solve complex problems, 2) to innovate and adapt in responding to new demands, 3) to utilize the advanced of technology in generating new ideas [1]. It means that in this digital-age, 21<sup>st</sup> century learners do not acquire knowledge just for the sake of acquiring it but, they have to do something with it and give a meaning for their future career and life. Since that new learning paradigm of 21st century learning, primary and secondary schools until higher education schools should consider integration of 21st century skills in the teaching and learning process. 21st century are a combination of content knowledge, specific skills, expertise, and literacies necessary to be success in work and life [2]. 21st century skills consist of three sets of skill, those are; Learning and Innovations skills (the 4Cs), Literacy (Information, Media

and Technology) skills, and Life and Career (Flexibility, Leadership, Initiative, Productivity, and Social) skills [3].

Primary and secondary schools in Indonesia with Curriculum 2013 (K-13) has been designed to prepare Indonesian students to the needs of 21st century skills in this digital and globalization era particularly, learning and innovation skills and literacy skills [4]. Curriculum 2013 is expected to answer both the needs and challenges to improve the quality of education in Indonesia [5]. Based on the revision of curriculum 2013 in 2017, there are some things to be concerned on curriculum 2013. First, curriculum 2013 implements scientific approach in which learning process consists of observing, questioning, exploring, associating, and communicating segments. Second, information, media, and technology literacy is emphasized as an important competency in this 21<sup>st</sup> cyber-based learning. Third, 21st century learning and innovation namely, critical communication, collaboration, and creativity should be integrated in the learning activities.



Last, students' exercises should be based on HOTS (High Order Thinking Skill). The second and third point of Curriculum 2013 become an attention for the teachers to develop specified 21<sup>st</sup> cyber-based learning activities with the integration of learning and innovation skills and the utilization of technology skill.

The integration of 21<sup>st</sup> century learning and innovation skills or it is identified as the 4Cs [6] should consider the sub-skills of each proposed by National Education Association in 2012. First, the sub-skills of critical thinking skill are; reason effectively, use systems thinking, make judgements and decisions, and solve problems. Second, communication skill has five sub-skills namely; articulate thought and ideas orally and written, listen effectively, multiple ways for variety purposes, utilizing multiple media and related technology, and coping different environments. Third, the sub-skills collaboration skill are; demonstrate ability to work effectively and respectfully with diverse teams, exercise flexibility and willingness to be helpful in making necessary compromises to accomplish a common goal, and assume shared responsibility for collaborative work and value the individual contributions made by team member. Meanwhile, creativity has three sub-skills namely; think creatively, work creatively with others, and creative production.

Moreover, a technologically literate person can utilize technology as a tool for organization, communication, research, and problem solving [7]. Then, technology literacy as an individual ability to adopt, adapt, invent, and evaluate technology to positively affect his/her life, community, and surrounding [8]. Saubari and Baharuddin (2016) stated that technology literate people know what technology is capable of, they are able to use technology proficiently, and they make intelligent decisions about which technology to use and when to use it. The rising of technology in educational field makes the teachers to be literate in Technology technology. literacy

educational situation is defined as the ability to effectively use technology to accomplish the learning tasks. The goal of technology integration in education is how to be competent and wise in utilizing technology to facilitate the learning 10]. The teachers need to be encouraged and ready to enhance students in having life-long knowledge and skill in the learning environment. The teachers need to transfer the knowledge of utilizing gadgets wisely for learning purpose. developing technology literacy and implementing it in the classroom situation, it involves a complex interaction of epistemic and pedagogical beliefs, intrapersonal factors, social factors, and affordances of environment [11].

Fostering 21st century learning and innovation skills as well as integrating technology skill into learning activities becomes a bit complex due to the influence of social culture on EFL students of Junior High School (JHS) in Bali. Literatures on culture of EFL students in Bali, Indonesia, state that students tend to be collectivist, reticent, and passive [12]. Cultural attributes of Balinese society are frequently regarded as the main society's perspective cause for collectivism, reticence and passivity. The personalities of students affect the way they learn the subject materials in school. They need a long-term development to be adapted in the new learning practices. Concerning the sociocultural perspective most of the students in Indonesia are not ready yet to be independent learners or autonomous learners [13]. Thus, teachers' role is being a facilitator and counselor as they help students to take responsibilities on setting their own goals, planning practice opportunities, and assessing their progress in learning. In this case, the teachers need to guide the students to choose the technology tool that they will use to accomplish the required learning. In the authentic classroom situation, teachers train the students in the use of a variety technology. Thus, the students might gain expertise in selecting and utilizing technology accomplish their learning goals [10].



Based on the observation conducted in several public junior high schools in Bali, the majority of the teachers particularly English as Foreign Language (EFL) teachers still have not fully embraced the new pedagogical practices with the 4Cs and technology integration. They do not yet feel confident in integrating the 4Cs as well as exploiting technology to support new approaches in teaching. Most of the teachers are still at the initial phase of using technology to enhance existing pedagogical practice. Additionally, pedagogy is still mostly subject-centered. EFL teachers have been tried to integrate the 4Cs to their learning though the teachers still have difficulties especially, in applying and integrating creativity and critical thinking thus, the learning activities have not fully integrated the 4C maximally. EFL teachers are still confused of how to corporate the 4C into EFL learning particularly with the integration of technology (any tool, piece of equipment or device, electronic mechanical). Regarding to the teachers' problems in EFL teaching, this article is aimed at investigating how the culture of JHS EFL students in Bali, Indonesia can influence the integration of technology and the 4Cs into learning activities. The investigation will be described the form of teacher's in perspectives.

### Methodology

The present study was a descriptive qualitative study on junior high school EFL teachers' perspective toward the specified 21st cyber-based learning activities in Indonesian particularly Balinese EFL context. In the purpose of checking the validity reliability of the data analysis, and also avoiding the bias in the result of this study, methods triangulation was used to crosschecked the findings obtained by different data collection methods. The data were collected through document analysis, classroom observation, and interview section. Thus, the data could be inspected from different EFL teachers' perspective. The subjects of the study were 40 EFL teachers in

twelve junior high schools in Bali. The document analysis was used to cross-check the learning materials and the learning activities used by the teachers. The classroom observation was conducted to find out whether the teachers have implemented the 4Cs learning activities as well as the sub-skills for each of the 4Cs in teaching and learning process. The interview was aimed to investigate junior high school EFL teachers' perspective toward the emergence specified 21<sup>st</sup> cyber-based learning activities. The interview used a semi-structured interview which was consisted of a list of open-ended questions. The result of the classroom observation and interview section was further analyzed by using SWOT data analysis technique.

# **Findings and Discussion**

# 1.1 21<sup>st</sup> cyber-based learning activities and cultural attributes of Indonesian EFL learners

Asian students, especially Balinese, have some difference in personalities from others students. Most of the students in Bali have a high motivation in learning English and have a good persistence in learning. It is because the place where they live is a tourism area in which most of the people uses English in communicating with the foreigners. Literatures on culture of EFL Learners in Indonesia Bali, particularly, state that learners tend to be collectivist, reticent, and passive [12]

Most of the Balinese students are very reticent and passive in doing individual authentic the classroom observation, it showed that the students did not show their enthusiasm and activeness in doing an individual task. The students were not confident to communicate by using English in written or oral form. They also preferred to work together with their friends rather than learning collaboratively to solve the problem and reach the goal. Thus, the teachers need to develop learning activities to make the students feel motivated and confident in learning English.



In the 21st century learning, teachers also should focus on digital literacy. However, the responses of the students showed that according to cultural attributes of Balinese society, the students were not really ready to integrate the 4Cs skill especially in implementing cyber based learning activities due the number of digital immigrants' teachers in most of junior high schools in Bali and also the technological tool in their school. It made the specified cyber based learning activities did not run well in the teaching and learning process. Therefore, the digital immigrant teachers need to be adaptive to the current era. The digital immigrant teachers should improve their digital literacy by joining digital professional development training or conference.

Learning enhances through technology [14), it means that technology could be a good media to make learners more success in learning. However, the challenge for Asian, especially Balinese, teachers in Indonesia is to understand how best to teach with technology while developing the appropriate learning activities with paying attention to the cultural attributes of Balinese students.

# 1.2 The integration of the sub-skills of the 4cs in the classroom learning activities

classroom observation Based on the conducted by the researchers, the learning activities which were implented in the classroom were not fully cyber-based learning activities integrated with the 4Cs. It showed from observations conducted in 10 classrooms by the researcher, it was found that, the teachers have not embraced yet all the subskills in each of the 4Cs. The teachers also stated that they did not frequently use the cyber-based learning activities integrated with the 4Cs. Most of the teachers developed the learning activities based on the English skills (listening, speaking, reading, writing), without paying attention yet to the cyber based learning activities integrated with the 4Cs. It is also supported by the data transcription of the interview section which stated that most of the teachers have difficulties in developing creativity and critical thinking learning activities. On the other side, the teachers have developed various communication and collaboration learning activities in the teaching and learning process.

The results of the classroom observation and the data transcription of the interview section highlighted about several things towards the integration of the 4Cs in both of cyber based and classroom based learning activities. First, in applying the creativity skill, the teachers mostly have not developed the subskills of creative production / innovation. It showed from the classroom observation that the teachers mostly asked students to write a story or text and did mini drama. The activities given by the teachers did not reflect the meaning of creativity deeply. Though, creative production is the root of progression and often an important aspect of innovation and change. Being creative means that a person has the ability to see new opportunities, to find an innovation, to produce original ideas, to flexibly adapt to changing situations, and to apply one's imagination to solve complex problems [15].

Second, from the critical thinking side, the teachers mostly used systems thinking and make judgement and decision subskills. They mostly asked students to arrange the sentences or paragraph into a good paragraph / text or doing true or flase activity. The teachers have not considered yet about reason effectively and problem solving subskill as important subskills of critical thinking. It is because reason effectively involve analyzing and evaluating skill to assess the arguments in detail to generate a reasonable perspective or thought [16]

The third skill is communication skill. Although the teachers have implemented learning activities which enhance communication skill, the teachers have not embrace to the use of multiple media and related technology in fostering students' communication skill. The teachers mostly used role play and storytelling activities to improve students' communication skill. They



have not realized that there are various media and technology such as Prezi, vlogging, Voki, Schoology etc. to enhance students' communication skill. Vlog contributes to recognize weaknesses, review and correct them (reflective learning, self-regulation skill) and to develop self-expression, communication, information sharing, critical thinking in terms of individual and social development [17].

The last but not least skill is collaboration skill. Collaboration skill is regularly used by teachers since most classes in junior high schools in Bali consist of a big number of students. However, the problem is the teachers allowed the students to choose the group by themselves. Though, the most important thing in fostering collaboration skill are making the students demonstrate ability to work effectivelly and respectfully with diverse teams. Thus, students will distribute fairly and they could work effectively to reach a goal. The purpose of collaboration is to give the people involved the opportunity to work together so as to generate ideas and at the same time gets feedback on those ideas [18].

# 1.3 Teachers' perception towards the integration of the 4Cs in specified cyber-based learning activities

There were several perceptions of junior high school English teachers in Bali towards the integration of the 4Cs in specified cyber based learning activities. The respondents of this study were 40 English teachers in junior high schools in Denpasar, Bali. From the interview, it found that there were 70% teachers were classified as digital immigrant teachers and 30% teachers were digital native teachers. The results of the study were obtained through interview to several English teachers and classroom observation in junior high schools in Denpasar, Bali. The results of the interview and classroom observation were analyzed by the researchers by using SWOT analysis.

Strengths. Based on the interview, the researcher found several strengths as follows. First, by developing the specified cyber based learning activities, it will improve student's 21<sup>st</sup> century learning skill and digital literacy. To prepare students to be creative and lifelong learning individuals in a rapid growth, technology in education plays an important role for enhancing learning performance [19]. Second, in paying attention to the Balinese cultural attributes of the society, the teacher knows what kind of learning activities appropriate to the students to enhance their skills. Developing technology literacy and implementing it well in a classroom situation likely involves a complex interaction of epistemic and pedagogical beliefs, intrapersonal factors, social factors, and affordances of the environment [11]. In this strength, technology literacy educational situations is defined as the ability to effectively use technology (i.e., any tool, piece of equipment or device, electronic or mechanical) to accomplish required learning tasks.

Weaknesses. In this study, the researchers also found several weaknesses. The specified cyber based learning activities must be supported by the learning media and technological tool. Without technological tool, the teachers and students couldn't be successes in implementing the cyber based learning activity. However, several junior high schools in Bali do not have enough technological tools, such as computer, Wi-Fi, laptop, LCD projector, etc. Hence, the government and the school should take attention on them to fulfill the demand of 21st century learning. Another weaknesses is from the teachers side. The government need to conduct regular teachers' professional development regarding to develop cyber based learning activities. From the interview, the researchers found that the teachers were already aware of the importance of utilizing technology into the teaching and learning process, but there was no space for them to develop and practice their skill in utilizing



technology. Thus from this weaknesses, the teachers hope that they will get regular training regarding to the development of cyber-based learning activities.

Opportunities. Besides the strengths, the researcher showed several opportunities related to this study. First, the teachers need to develop the 4Cs based learning activities for the students it prepares them to be ready to face college and work force. Another opportunity is by developing the specified cyber based learning activities with paying attention to the Balinese cultural attributes, it trains the students in the use of a variety of technologies so they might gain expertise in selecting and using technology to accomplish their learning goals. Today's business and job market require competencies such creativity, critical thinking, communication, collaboration, the ability to interact with people from many linguistic and cultural backgrounds [20]. It is clear that by integrating the 4Cs and digital tools into classrooms, schools, and districts around the country it produce learners and employees adequately prepared for the 21st century demand.

Threats. Based on the interview, the researchers analyzed the threat which might be faced by the teachers for the future demands. From the students' side, the students rarely use their gadgets to access learning sources. Most of the students who already have their own gadget use them for the entertainment purpose only, i.e. accessing social media and playing a game. A survey conducted by Kominfo and UNICEF in 2014 that 30 million children adolescents in Indonesia were internet users, and digital media was the main choice of communication channels, with most of them have used online media for more than a year, and almost half of them learnt about internet from their friends [21]. Therefore, the teachers and students need to work together to develop and utilize gadget or any other technological tools wisely as a leraning media.

From the teacher side, is the English teachers need to develop their digital literacy to keep up with the current demand to be professional English teachers in the digital era. Because the digital-immigrant teacher appeared to be more adopted in the implementation of digital media compare with digital native teachers which prefer to be adapted [22]. Most of the tachers were already aware of digital literacy, but they are need to take an attention also to the praxis (training) and phronesis level (practical competence) [10]. Those three compenents should be considered as factors to be success teachers of the future.

Another threat is the teachers should consider the cultural attributes of EFL learners in conducting the specified cyber based learning activities to support teaching and learning process. The developed learning activities should appropriate with the cultural attributes of Balinese students which tend to be passive, reticent, and collectivist. The challenges faced by EFL teachers are how to integrate the 4Cs and cyber based learning activities with the cultural attributes of the Balinese students. They do not only cope with how to enhance the digital literacy and the 4Cs, but also with the passivity, reticence, and collectism. Thus, the EFL teachers in Indonesia should think of suitable learning activities to decrease students' passiveness and collectivism.

## Conclusion(s)

In this 21st century, the skills needed are very different from the 20<sup>th</sup> century. integration of technology enhances learning. Technology helps both teachers and students in delivering the material/tasks in the teaching and learning process easier. It is clear that the 4Cs and cyber-based learning activities need to be integrated to the teaching and learning process. Moreover, the cultural attributes of Asian, specifically Indonesian and Balinese, students should be considered in developing  $21^{st}$ appropriate specified cyber-based learning activities. In addition, the teachers



were already aware to the importance of technology and digital literacy in the 21st century learning. However, awareness was not the only thing that the teachers needed. To succeed in this digital era, the teachers also should consider the praxis level (training) and phronesis level (practical competence). They must first understand why a specific technology should be used to evaluate technology literacy of students. In term of technology literacy, the teachers must have be able to determine which specific technology might be best to be used by the students. This study analyzed the result of the classroom observation and interview section by using SWOT data analysis technique which designed to help the teachers and other researchers to understand, develop, and promote the 4Cs effective learning activities and technology integration.

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