# Building Students' Creativity During The Pandemic Covid-19 Using Project-Based Learning

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Abstract. The world changes massively, so it is necessary to prepare adequate human resources with competent skills so that they are ready to adapt and compete on a global scale. Empowerment and improvement of human resources through education are keys to following the development of the Industrial Revolution 4.0. All graduates should be equipped with some skills needed to face the industrial revolution. One of the skills is creativity. However, the Covid-19 pandemic influenced the implementation of teaching and learning that must be carried on virtually. The condition forced the teachers to find the solution to facilitate the students by selecting the right teaching model. This research was conducted to answer the question: "How can Project-Based Learning build the students' creativity in Profession English Subjects?" This research employed a qualitative approach. The data was collected using observation in the online class, interviewing the representative students, and collecting the documents. The researcher used an observation checklist proposed by Torrance to find out their creativity. The results show that the students created a project at the end of the lecture. They were assigned to make a book chapter for teaching English to elementary school students and a video teaching English through songs. The students' creativity appeared when they created the projects. It can be seen from the indicators of their curiosity, flexibility, and originality in creating the works.

Keywords: Profession English Subject, Project-Based Learning, Students' Creativity

#### 1. Introduction

The Covid-19 epidemic has begun to impact significant changes in Indonesia, particularly in education, since March 2020. On March 24, 2020, the Minister of Education and Culture released Circular Letter No. 4 of 2020 Concerning the Implementation of Education Policies in Times of Emergence of Corona Virus Disease (Covid-19). The Minister of Education and Culture highlighted in this circular the policy of studying from home for the safety and health of children and their families. The Indonesian government prohibited any school from holding offline meetings in class. Online learning is the final solution, allowing students and teachers to continue with their regular learning activities.

Teachers and lecturers have a new difficulty as a result of the Covid-19 epidemic. On the one hand, they must use technology to complete the learning task. The globe, on the other hand, has entered the Industrial Revolution Era 4.0. In education, they must equip graduates to confront the difficulties of the Industrial Revolution 4.0 era. Because global changes and advances occur at such a quick pace, enough human resources with competent abilities must be prepared to adapt and compete on a global scale.

To face the Revolutionary Era 4.0, all graduates, according to Zubaidah (2018), must be prepared with the 4C talents of Creativity, Collaboration, Critical Thinking, and Communication. Creativity is described as the capacity to produce fresh ideas or solve problems in creative ways. Collaboration requires working together, adjusting to a team, and sharing duties to achieve common goals. Critical thinking is the ability to think outside of the brain, and it is all about problem solving. Finally, communication is the capacity to effectively convey ideas, questions, and solutions. The four Cs are among the most significant 21st-century talents that students must master.

According to Sternberg (1999), creativity is defined as the ability to generate innovative (i.e., original, surprising) and acceptable work (i.e., useful, adaptive to task constraints). Creativity, as defined by Hwang et al. (2007), is the capacity to solve problems or create something valuable and original. Furthermore, creativity is defined by Saefudin (2012) as "a product of the ability (creative thinking) to generate new ways or things in dealing with a problem or circumstance."

Creativity is a 21st-century talent in which students must produce something from three perspectives: originality, novelty, and difference, or perceiving things from a different angle. According to Krumm et al. (2016), creativity is the greatest level of expressing a fresh concept and the capacity to integrate unrelated themes in creative ways to avoid known patterns. Torrance explains Zubaidah's innovative thinking skills (2018). He described creativity as the ability to identify issues, establish assumptions, produce new ideas, and express the results of those difficulties.

Profession English is a subject provided by the Elementary School Education Program, Faculty of Teacher Training and Education, University of Nusantara PGRI Kediri. The learning outcome of the subject is that the students can select and develop materials for teaching English to elementary school students, and they can apply the English instruction at school. In this subject, they are introduced to methods and strategies that can be used to teach English to young learners in the Indonesian context. The emphasis of this subject is that the students can develop the materials and teach young learners with child-friendly learning.

To attain the learning objective, the subject professor employed Project Based Learning. In this topic, project-based learning is utilized to develop students' creativity. Understanding the content allows students to articulate innovative ideas for issue solving. According to Bell (2010), project-based learning is an innovative method to learning that teaches numerous techniques important for success in the twenty-first century. Students lead their learning via inquiry, and they collaborate to investigate and produce projects that represent their understanding.

This research aims to answer the question: "How can Project-Based Learning build the students' creativity in Professional English Subjects?" The research results give valuable insight for teachers, lecturers, and teacher candidates who want to teach using Project Based Learning as it describes the steps of teaching.

## 2. Methodology

The research approach is qualitative as it describes the phenomena that occurred in the learning process. The research subjects were the lecturer of Profession English and three students who took the subject. The students represented the highly motivated, medium, and low motivated students. The techniques of collecting the data were observation to identify the learning process. In this case, the researcher used a field note and checklist proposed by Torrance (in Zuabaidah 2018) that focused on the ability to formulate problems, make assumptions, generate new ideas, and communicate results in an interview. Besides, she interviewed the lecturer and the students to confirm the process of building creativity based on the learning activity using Project Based Learning. The last technique was analyzing the documents: the lesson plan, the instructional materials, and the products created by the students. Finally, she followed the steps of data analysis proposed by Miles and Huberman (1984) in Sugiyono (2016), which consist of data collection, data reduction, data display, and conclusion: drawing.

## 3. Findings and Discussion

This part presents the research findings and discussion. The beginning part is the findings, which cover the description of Profession English, the steps of Project-Based Learning, and the learning activities to develop the students' creativity. After the finding, the discussion of the research is presented.

#### 3.1 Profession English

Students enrolling in the Elementary School Education Program at the Faculty of Teacher Training and Education at the University of Nusantara PGRI Kediri must take Profession English. This module allows students to teach English to elementary school pupils. The learning purpose of this topic is for students to be able to select and create materials for teaching English to elementary school kids, as well as to implement English instruction at school.

The lecturer of Profession English stated that English is an extracurricular subject at elementary school, so the learning activity is different from the learning activity of the main subjects. English instruction at elementary school was to develop the students' character and communication skills. Therefore, this subject introduced the students to the methods and strategies that could be used to teach English to young learners in the Indonesian context. The emphasis of this subject was to enable the students to teach English to young learners with child-friendly learning. After they had understood the concept of teaching, the students were assigned to develop the materials and design the teaching preparation to be applied in the classroom.

The instructional materials of the subject consisted of the concept of friendly child English for young learners, the material development, teaching strategies, learning activities, lesson preparation, and designing book chapters. The first two materials were for the basis of developing instructional materials and media for young learners and selecting the right teaching strategy and learning activity. The other material was lesson preparation. The students were assigned to prepare teaching practice to perform in front of their peers in this material. The last material was about designing book chapters. The students were assigned to create book chapters in groups of three students. The chapter was developed on a certain topic and covered four language skill activities.

The lecturer applied blended learning. It was a combination of online Learning and conventional Learning (face-to-face or direct classroom meetings). For most of the meetings, online learning was carried out as the learning process was during the outbreak situation. The lecturer used both synchronous and asynchronous learning. The synchronous activity utilized Zoom Meeting so that the lecturer could interact with the students. She could explain the materials and inform the assignment. By having synchronous learning, the students could present the result of group discussion and the projects.

She also used Edmodo and WhatsApp for asynchronous learning. If the students had problems, they could ask on the WhatsApp Group. Edmodo was used to share the lesson plan, the materials, and the assignment. The lecturer thought that the media mode was useful enough as the students could upload the assignment, and the lecturer could give feedback. Moreover, it recorded the history of the student's involvement and progress in the learning activity.

The direct meeting was only done in the last two meetings to give a chance for the students to do teaching practice in front of their peers. The lecturer and the students employed the health protocol strictly. Only 50% of the total students came to the class. The rest of the students were assigned to finish the book chapter.

#### 3.1 Steps of Project-Based Learning

This part presents the steps of Project-Based Learning applied by the lecturer. The steps were selecting materials, planning, developing, and presenting. The first step was done before the learning process. The lecturer made preparation, which was written in the lesson plan. She selected the materials to share with the students. The materials included some reference books, teaching media, and hand out. The concept of theory was presented in Powerpoint. All of the materials were shared in Edmodo according to the presentation sequence. She had already designed some projects that the students had to create: a video, teaching manuals, and a book chapter.

The second step was planning. In this step, the lecturer shares ideas about the project and the requirements for designing the project. At the beginning of the meeting, the students had to make a group of three students. This group was a permanent group as all of the projects had to be done by the same group. Each group got one topic related to the learners' world: happy family, healthy fruits, friendly animals, my hobby, my ideal profession.

The lecturer informed the students about the learning outcomes, learning activities, and projects they had to create in one semester. In the second step, each group had to plan the design of the projects. They discussed and worked together in groups. After that, they developed the projects. The last step was presenting the products. The students presented each product differently. For example, they had to share the video they created on Google Drive. After all the students watched the video, the students and the lecturer gave valuable feedback in Zoom Meeting. The second product was a book chapter. The students submitted the draft of the book chapter in Edmodo. A week after they submitted them, the lecturer and the students discussed the book chapter's goodness and weaknesses. They had to revise the book chapter after getting the

feedback. The final product was a lesson plan. The students had to prepare the plan to be performed in the class.

#### 3.1 The Learning Activities to Develop The Students' Creativity

Learning activities in this research means the activities done by the students to reach the learning outcomes, especially to create the projects. The activities to create the three projects involved discussion, selecting the materials, creating products, and teaching practice. From the interview to the students, it was known that those activities could develop their creativities. Here are some of the answers:

Student 1

Teaching practice was challenging for me. Before teaching, we had to formulate the objectives, select the materials, and choose fun activities for young learners. Besides, we had to distribute different parts to teach as the group consisted of three students, and each student had to perform teaching.

Student2:

Creating some products encouraged us to be creative. We had to select the materials and adapt the materials with the learners' abilities, but at the same time, we had to think about how to provide interesting learning activities for young learners.

Student 3:

The most interesting part was when we had to create a book chapter. We were assigned to create a song for children, a simple text, and some activities to teach four skills, and we had to design the layout of the book, which was different from the given examples

From the students' response above, it can be said that their curiosity, flexibility, and originality in creating the works when they develop the materials for teaching English to young learners and create book chapters. They had to create a product different from the existing examples.

According to the lecturer, she had some reasons to assign the students to create the projects. First, the students had to understand that the world changed so fast. University graduates must have the ability to find the best ways fast. By giving challenges to the students, they would find the solution to their problems. They had to create a video, teaching practice, and book chapter in this case. Second, creativity needs risk-taking. The students tried to create the project first. After they had finished the project, their friends and the lecturer criticized them by giving feedback in a good way. If a student found the product's weaknesses, s/he would suggest the solution. Finally, creative students had to be able to communicate their ideas so that other people understood the new things they proposed.

After presenting the finding, the following part presents the discussion. The discussion focuses on the learning process during the Covid-19 Pandemic, Project-Based Learning, and how the learning activities develop the students' creativity.

According to the findings above, Profession English was offered during the academic year when there was an outbreak of the Covid-19 Pandemic. The learning process has to be done from home using technology. The professor employed blended learning as the learning strategy. Most of the learning process was online. When the students had teaching practice performance, the direct

meeting was only held twice. The learning method, on the other hand, is consistent with the Guidance on Curriculum Development for Higher Education issued by the Directorate of Higher Education, Ministry of Education and Culture (2020: 64). It is said that the learning strategy employs blended learning (hybrid learning). It mixes traditional learning (in-person sessions in the classroom) with internet learning. Information must be included in the learning process. It is stated that the learning approach uses blended learning (hybrid learning). It combines conventional Learning (face-to-face or direct meetings in the classroom) and online Learning. The learning process must involve information and communication technology. In short, blended learning is useful for teaching the subject during the pandemic.

Secondly, the finding of this research supports some previous studies about blended learning. Firstly, George-Walker and Keeffe (2010) stated that blended learning is now proposed as one solution that addresses student learning and higher education organizational needs. Furthermore, Bakhriddinova (2020) mentions many advantages of Blended Learning. Some of them are that teachers can use their time effectively, students can be more active, and all learners can learn from students' mistakes. These research findings prove that those advantages could be found during the learning process. The students could learn during the direct meeting and indirect meeting.

Furthermore, previous research has demonstrated that Project Based Learning encourages student creativity. To begin, Katz and Stupel (2015) conclude that collaborative research promotes creativity and self-efficacy. Project-based learning encompasses a wide range of activities, one of which involves students to collaborate in groups to create a project/product. The exercise encourages pupils to be creative. Then, Ummah, In'am, and Azmi (2019) demonstrate how Project-Based Learning fosters and enhances students' creativity. Project-based learning, according to Nurhajati (2019), is a teaching technique that assists pupils in developing their character. They are problem solvers, responsible, work well with others, work independently, think critically, and manage their time well. Finally, Setiawan, Puspitasari, and Baptista (2020) contend that Project Based Learning may be used to increase High Order Thinking Skills including the ability to analyze, evaluate, and create. The study's findings indicate that PBL may increase a range of skills needed for the Fourth Industrial Revolution, including creativity.

The outcomes of the study also show that students have the opportunity to develop creativity, which includes the capacity to create issues, establish assumptions, produce new ideas, and explain results in an interview. It is consistent with Torrance's creative indicators (in Zuabaidah 2018). Finally, certain projects help students increase their curiosity, adaptability, and uniqueness in their work.

#### 4. Conclusions

The Covid-19 pandemic should not be considered a serious problem in the learning process. It is a challenge for teachers or lecturers to be more creative. They can choose the available online applications or Learning Management systems according to the needs of the students and the teaching strategy. The students have to know the features and functions of the application and the system. Blended learning can be applied during the pandemic through direct or face-to-face meetings and online learning. However, teachers and lecturers must follow health protocol.

Furthermore, Project-Based Learning can encourage students' inventiveness. Through learning activities, students improve their abilities to analyze, evaluate, and create. It also teaches students how to construct issues, establish assumptions, produce new ideas, and present outcomes in an interview setting. Furthermore, the teaching technique teaches students to be more inquiring, adaptable, and authentic in their product creation. Finally, it is proposed that instructors and lecturers use Project-Based Learning as a learning approach since it encourages students' creativity.

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