



# Design and Implementation of Team-Based Learning Models as an Effort to Develop 21st Century Skills

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**Abstract** : This paper explores the design and implementation of the team base learning model in the Social Studies Education Study Program of FIS UNNES. In particular, we focus on how to design learning with a team base learning model and how to implement it in learning in the classroom. The method used is by in-depth interviews, observations and literature reviews. The results of this study found (1) the process of designing a team base learning model was carried out by a team of lecturers involved in lectures to identify course characteristics, design an assessment system, identify student characteristics and design semester learning plans; (2) the implementation of the team base learning model is carried out by paying attention to groups that must be formed and managed properly, students need to be conditioned to have a sense of responsibility for individual and group work, group assignments must be able to build collaboration, students must receive feedback quickly and regularly from lecturers. The 21st century skill indicators owned by students have been well achieved through the implementation of this team base learning model.

**Keywords** : Team Based Learning Model, Group Work, 21st Century Skill

## Introduction

The transformation of universities in Indonesia through the independent campus program, independent learning is expected to produce graduates who are superior, competitive, adaptive, flexible, productive, competitive with the character of Pancasila. In supporting the achievement of this goal, transformation is carried out through the achievement of higher education IKU (Main Performance Indicators) based on the Decree of the Minister of Education and Culture of the Republic of Indonesia Number 754 / P / 020 concerning The Main Performance Indicators of State Universities (IKU-PTN) [1]. There are eight ICUs that must be achieved by universities, one of which is IKU 7, which is a collaborative and participatory class.

IKU 7 will have an impact on the quality of college graduates, because this section is related to the learning process carried out by lecturers and students in the classroom. Collaborative and participatory classes can actively engage students and also stimulate them in the learning process in the classroom. In 21st century learning, critical thinking is needed, being able to solve problems and make inclined to be a center of knowledge and students are more passive in the learning process, many theories are given but often these theories cannot be understood by students as a whole without factual proof in the student life environment.

Buck Institute for Education in Wijayanti [2] explains that project-based learning is a systematic learning method that involves learners in learning knowledge and skills through the preparation of complex inquiry, authentic questions and work and product design.

Studies and research results have provided the basics that learning using a team base project can be an effort to make learning more meaningful. Research by Rosidah, C. T., & Pramulia, P [3] stated that learning with team base projects in students has a higher average compared to learning in the classroom. Similarly, Nur Siyam's research results [4] stated that the average student learning score has increased when using the team base project method. However, the results of existing research have not found a learning model that is used to be used in the team base project method.

In IKU 7, learning must be based on case solving and team-based projects. This research only focused on learning using the team-based project method. The courses contained in the social studies education study program consist of general courses, professional courses consisting of various social science families ranging from geography, history, economics, sociology of anthropology, politics and so on. Some of the existing courses go through three stages in the learning process that will take place, namely planning, learning process and evaluation. In planning, a rule has been given that in the evaluation of the team-based project component, it gets a proportion of 50% of the total assessment criteria.

This is certainly a challenge in the learning process that will be carried out for one semester, not just giving with the lecture or discussion method without paying attention to activeness and meaningfulness for students. Based on the above problems, this study focuses on finding answers in terms of planning the use of the team base project model and the implementation of the learning model to develop the skills of 21st century students in the social studies education study program of FIS UNNES.

### **Methods and Research Design**

This research was conducted at the Social Studies Education Study Program FIS Unnes. The source of research data was obtained directly in the field, with primary data obtained through in-depth interviews and observations on learning in the Social Studies Education Study Program. Focus Group Discussion (FGD) techniques are also used to support data collection and analysis on certain themes as needed. Data analysis is carried out by analytical descriptive analysis methods.

Data analysis is carried out inductively, that is, starting from the field or empirical facts by going into the field. Data analysis in qualitative research is carried out simultaneously with the data collection process. The analysis used is data analysis as Miles, Huberman and Saldana describe [15], which includes the stages of: a) data collection; b) condensation of data; c) presentation of data; and d) conclusion making

## Results and Discussion

This research was conducted through several stages. These stages include:

### 1. Identifying problems, potentials and solutions

The first step that the research team took was to identify the problem. Based on a field study conducted by the research team, problems were found based on the Decree of the Minister of Education and Culture Number 3 / M / 2021 concerning Key Performance Indicators (IKU), the achievement of IKU PTN will also be a benchmark for providing performance-based BOPTN incentives, the achievement of IKU 7, namely collaborative and participatory classes, does not have clear guidelines even though in practice this has been done by lecturers and students in social studies education study programs. The learning methods used based on the IKU guidelines of universities to create collaborative and participatory classes are case methods and team base learning. The case method has been carried out in several courses, but for the base learning team, it requires special attention because during pandemic conditions and learning is carried out with the concept of distance learning, it makes its own challenges in carrying out the method.

Another problem encountered is that there has not been a way of planning, implementing, and evaluating the use of the team base project model in several courses in the Social Studies Education Study Program. Planning so far has been carried out through the rps preparation process without any discussion with the lecturer team until in the implementation process sometimes obstacles arise. In learning with the team base project method, it requires sustainability in the learning process. Meanwhile, in the implementation of the teaching team, sometimes there is a discontinuation of the learning process due to the change of lecturers. In the implementation of the evaluation, a team base project-based assessment rubric has also not been prepared. The assessment so far has placed more emphasis on cognitive assessment with the greatest proportion being in UAS and UTS assessments.

Based on this problem, the research team saw the potential that the team base learning method could be applied in learning in the Social Studies Education Study Program based on the characteristics of the courses. Many courses can use this method so that it can help create collaborative and participatory classes and students have 21st century skills.



## 2. Model development (discussion, FGD, model analysis)

Problems, potentials and solutions that have been known together by the research team, the next step taken is to develop a team base learning model in the Social Studies Education Study Program. In an effort to develop this model, the research team conducted an FGD together with lecturers who taught courses in the Social Studies Education Study Program to map the criteria for which courses were suitable for the application of the team base learning method. In addition to determining the appropriate courses for the application of the team base learning method, the research team also identified the needs in implementing the method. The results of the FGD produced several things including:

- a. There needs to be an understanding to lecturers and students about the change in the learning paradigm, if originally only introduced existing concepts to not only introduce concepts but also guarantee that students can use these concepts.
- b. The roles and functions of lecturers who have undergone a transformation from just conveying information and concepts to designers and managers of the instructional process as a whole.
- c. The roles and functions of students have also undergone a transformation. If originally students were more passive and individual, then now they are required to be more active and responsible as well as with fellow students and apply the concepts they learn.
- d. There needs to be a common understanding of the application of the team base learning method, especially for courses that are taught by more than one lecturer starting from planning, implementation to evaluation.

Based on the results of the FGD, the research team then compiled a model for the the Social Studies Education Study Program. The model is compiled by looking back at the RPS in the course chosen as a pilot project to develop a model in this team base learning method. The RPS that has been compiled is refined to meet the syntax in this method. The syntax will show the learning process activities carried out in the classroom, confirming what projects will be done by students. The research team



then also compiled an assessment document used in the team base learning method. The course used as a model is the Social Phenomenon Studies 2 course. This course has achievements so that students are able to identify, identify and analyze various social phenomena in the field based on theories and concepts of social science from the point of view of History, Geography, Economics, Sociology, Anthropology, Law and Politics.

The RPS that was compiled was improved to meet the syntax of the team base project model and meet the assessment standards of the model. Sintak in the team base project is a derivative of the project base learning model, the syntak consists of Start with the big question, Design a plan for the project, Create a schedule, Monitor the student and the progress of the project, Asses the outcome, Evaluate the experience.

*a. Create a schedule*

The preparation of the schedule is carried out jointly between lecturers and students in various activities that will be carried out in completing the project. This collaborative process allows students to be given direction in order to manage their time well, explore something new and remind students if there are things that deviate from the original goal of the project. Learning carried out in the classroom will have limited time, therefore in the team base project learning model, students can use time outside the predetermined lecture schedule to continue their project. The time outside the classroom can be used by students ranging from looking for literature according to the project to be studied, looking for data in the field to guidance with lecturers who teach courses to maintain the quality of the project they are compiling.

*b. Monitor the student and the progress of the project*

Lecturers have the responsibility to monitor the activities carried out by students. Monitoring is carried out by facilitating students in every project work process they do. Lecturers can act as mentors in student activities, lecturers can teach students how to manage work in groups until each student has their own role without knocking down the other party. The monitoring process is carried out by lecturers as well as an effort to maintain the quality of projects that are being prepared by students. In this monitoring, lecturers can also check the progress of project implementation.



If students find obstacles in working on projects, lecturers can be involved together with students to find solutions until these obstacles can be resolved. The mentoring process can also be carried out feedback activities to students on things that have been done by students. Feedback is needed so that students have an understanding of the stages they have gone through, lecturers can also find out the developments that have been passed by students

*c. Asses the outcome*

Assessment activities are carried out to measure the achievement of standards, assess projects produced by students. The measurement process is carried out individually or in groups. At this stage, students are asked to tell their experiences while completing the project that was carried out before. The measurement process is carried out by lecturers using the assessment rubric that has been carried out so that all aspects of the project made by students measured precisely. At this stage, 21st century skills are also measured in students.

*d. Evaluate the experience*

In this final stage, lecturers and students reflect on the activities and project results that have been produced. The reflection process is carried out in groups or individually, they can tell their experiences while working on the project

Some other things that are considered in making a team base learning learning model include:

a. Groups must be well formed and managed.

The formation of a good group can reduce weaknesses that can arise, especially the problem of cooperation between group members. Some of these weaknesses can create communication obstacles that can make the project to be made by students disrupted. These obstacles can come from differences in culture, habits, interests, motivations. So in the formation of this group, lecturers must understand the characteristics of students well. Some things that can be observed by lecturers to students first



include the level of knowledge, resources owned by students, skills possessed by students. The group formed should ideally be permanent during the course so that cohesion between group members can be formed properly.

- b. Students need to be conditioned to have a sense of responsibility for their individual and group work.

In the condition of learning in groups, several things are of concern, namely the preparation of each group, the time and effort made to complete tasks and interaction with each other productively. Lecturers need to check the initial preparation by giving assignments individually first, if they fail to do this individual task, the student can be given treatment because it can potentially hinder teamwork in their group

- c. Group assignments should be able to build collaboration

The principle of working as a group is the contribution and collaboration between group members. The task given should ideally lead students to be able to divide their work and coordinate the process of work

- d. Students should receive feedback quickly and regularly from lecturers.

Feedback can make group performance effective. Feedback, evaluation can motivate students to correct the shortcomings of their group in working on their projects

### **Discussion and Recommendations**

Based on the discussion above, conclusions can be drawn to develop a team base project planning model is the main key to the successful use of this model. Planning can be implemented in the preparation of semester learning plans (RPS) which in its application requires coordination with fellow lecturers who teach courses. Another thing that needs attention is that lecturers need to know the characteristics of students, so that in the formation of groups heterogeneous groups are formed. In providing feedback, it is also carried out as quickly as possible so that students can advance their projects in accordance with predetermined standards.



The recommendation that can be given through this research is that the culture to develop 21st century skills needs to be applied by lecturers and students through the learning process, students and lecturers need to understand that there has been a paradigm shift in learning that was originally teacher centered to student centered.

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