

# Character Development In Virtual Class

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**Abstract.** Teachers in the 21st century are challenged to accelerate the development of technology, information, and communication. Teachers also play an important role in the development of students' character. This article informs the results of research in which character values can be developed in virtual classroom learning. Action Research on students of the FKIP UST PKK study program shows that virtual classroom learning is able to develop character values of discipline, honesty, responsibility, communication, and collaboration. However, virtual classroom learning requires that the teacher must have effective technology literacy and cybernetics learning strategies.

**Keywords:** character, virtual class, discipline, honesty, responsibility, and collaboration.

## 1 Introduction

The rapid development of information and communication technology affects all aspects of human life, both formal life in the management of institutions, businesses, and informal life in society. There is almost no limit of space and time, anyone can communicate more broadly and openly [1]. Even this development is very influential in the world of Education. Learning can be done without face to face directly between the teacher and students [2]. Teachers can provide teaching materials in digital content that can be accessed, stored, shared anytime and anywhere via the internet [3].

The phenomenon of learning methods that are carried out using information, communication, and network technology is currently growing. The method has advantages and disadvantages. The pros and cons of educators in the use of these methods cannot be avoided, because they are considered unable to transfer character values. Then it needs to be identified whether the type of learning is in accordance with the needs of students.

Virtual classroom learning is a learning method that presents material, graphics, simulations, evaluations, and feedback using electronic media (connected to an Internet connection) to deliver material and Virtual-based guidance. The advantages of this virtual classroom are high mobility, low price and more interactivity (between users/students, users/students with programs and users/students with other resource persons / accompanying lecturers).

Today many programs are developed to facilitate network-based learning methods. In general, software that supports virtual classes has a web base. types of virtual classes include: Learning Management System "LMS" which is software / software used for planning, sending

and also processing learning activities. Moreover, it is useful for documentation needs, reports on administrative activities, material. Learning Content Management System "LCMS" is a further development of LMS. LCMS is useful for creating, updating, publishing or managing the contents of an organized system on the internet.

The advantages of virtual classes are: More interesting because the learning process because it is interactive and flexible rather than with other media, students are not bound by place and time to be more relaxed, the teacher as a facilitator is providing and also supporting in the learning process given by the teacher through the website, learning can be done anywhere and anytime.

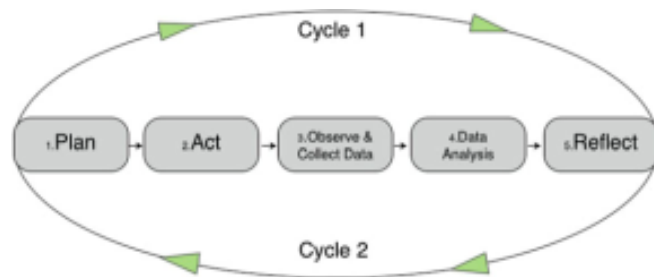
Classroom management can be seen as the teacher's ability to support managing time, space, resources, student roles and student behavior to provide a climate that drives the learning process [5]. Virtual classrooms are online spaces designed for learning. They are usually part of a larger learning platform such as a learning management system (LMS) or virtual campus. They facilitate direct teaching, either one-to-one or for groups. These include live video and audio streaming capabilities, interactive whiteboard settings, file repositories for sharing additional resources and text chat options.

The progress of the digital world has penetrated into all lines of life. Its presence must be balanced with the good character of its users. Therefore education carried out for the younger generation is not only oriented to mastery of science and technology, but the formation of strong character so that he can adjust to the development of the digital world. In fact, a good virtual class can be accessed from a variety of devices, including desktop computers, laptops, tablets, and even smartphones. An important advantage in using live virtual class recordings is that students can "control" programming by using the stop, rewind, replay, and fast forward features to continue at their own pace. Direct virtual classroom recording is also a very flexible media that allows students to use live virtual classes that are recorded at a time that is appropriate for them. The direct recording of virtual classrooms in distance education has had a positive impact on student success.

## **2 research Methods**

### **2.1 Research design**

An action research approach was taken for this study and adapted from a model by Kemmis and McTaggart who tried the idea of improvement in the practice of self-learning. In this classroom action research aims to develop aspects of student character through the application of virtual classes as real actions and the process of developing discipline, honesty, responsibility, and cooperation



**Fig.1.** Adapted Kemmis and McTaggart action research model

The subjects of this study were the third-semester students of the Family Welfare Education Study Program (PKK) FKIP UST 2018/2019 academic year, who attended the Learning Strategy courses as many as 4 classes. Each class consists of 30 students.

The object of research is an effort or action to improve the character of students in the attributes of honesty, discipline, responsibility, and cooperation through assignments to virtual classes. Observation data that has been obtained, calculated and presented, to find out how much character improvement students have. Assessment criteria are achieved if the percentage of observation results is in the category of good or very good. Character evaluation criteria are as follows:

**Table I.** Indicator of character criteria

Average score interval	Category
$3,25 \leq \text{skor} \leq 4,00$	<i>Exelent</i>
$2,50 \leq \text{skor} \leq 3,25$	<i>Good</i>
$1,75 \leq \text{skor} \leq 2,50$	<i>Midle</i>
$0,00 \leq \text{skor} \leq 1,75$	<i>Bad</i>

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This research was conducted in two cycles with 4 stages of activity in each cycle, namely the stages of planning, implementation, observation, and reflection followed by re-planning.

## 2.2 Cycle 1 Actions

The action in the first cycle consisted of commitment at the beginning of the lecture through contract learning about the use of virtual classes in assignments of courses. The semester learning plan was agreed with lecturers and students. Preparation of student character observation sheets in completing lecture assignments. In the first cycle, the assignment of a review of the Learning Plan used in Vocational Schools in groups. The results of the discussion and review were uploaded to the total number of ustjogja.ac.id through each student's account. Each group uploads the same task.

Observation activities are carried out after students upload their assignments. From the results of observations carried out an analysis of the action I, then performed the second cycle of action to correct the problems that arise in the first cycle.

### 2.3 Cycle 2 Actions

The Cycle II plan was compiled through assignment 2 in the form of a study of learning strategies chosen in terms of learning theory. Assignments are carried out individually and the results of the study are uploaded with a time limit of 1 week. Observations are made on the results of the assignments that have been uploaded, both timeliness, honesty, cooperation, and responsibility.

## 3 Result and discussion

After the first action is taken and monitoring the effect is known to the development of student character in learning, it can be concluded that learning takes place in accordance with the plan. Characters developed in learning include; honesty, responsibility, cooperation, and discipline. The next stage is student learning according to the scenario. The following is a qualitative descriptive as a result of research per cycle.

Based on the results of observations of the first action, the lecturer can create a class character profile and find out the problems of student character. Some important notes that can be put forward are the lack of consistency of student behavior related to discipline in collecting tasks, responsibilities, cooperation, and honesty as well as low time management.

Based on the information in the first cycle of the first action, the second action was carried out. In the second act, the lecturer evaluates the first action and gives more motivation in completing learning tasks. At the end of the first cycle, students reflect on discipline, honesty, responsibility, and cooperation. The results of self-reflection show that most of the students' characters achieve results almost always, except in the discipline of working on assignments.

The stages of character development in virtual class learning start from building work commitments, assignments, and reflections that are responses to events, activities or skills, and new knowledge that they receive. In addition, the teacher provides an assessment of the character of students during the learning process takes place.

**Table II.** Learning procedure

Learning Aspects	Procedure	Student Activity
	Students are divided into groups	Students study in groups
Class management	<ul style="list-style-type: none"> <li>• Commitment to collecting learning tasks using a virtual class</li> <li>• Type of assignments for one semester</li> <li>• Establish the time of collection of tasks</li> <li>• Monitor the collection of tasks</li> </ul>	<ul style="list-style-type: none"> <li>• Looking for various reference sources</li> <li>• Conduct group discussions</li> <li>• Formulate the results of the discussion</li> <li>• Compile paper</li> </ul>

Learning Aspects	Procedure	Student Activity
		Students are divided into groups
	<ul style="list-style-type: none"> <li>Evaluate and provide feedback on student assignments</li> </ul>	

The results of the implementation of the lecture process with the application of the virtual class in the first cycle have been implemented well, but there are still students who do not understand how to use the portal on the lecture task feature. In addition, student assignments have not been directly corrected and given feedback. In group activities, there are still some students who are not actively collaborating, so that at the time of presentation only monopoly by certain students

To correct these deficiencies, reflection on cycle I provides recommendations as follows: (1) each student has an easily accessible account, (2) each student has a smartphone that supports the use of the UST portal, (3) assignments equipped with devices that clarify the execution of tasks, (4) lecturers directly correct student assignments and the following week feedback is given.

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To correct these deficiencies, I recommend recommendations as follows: (1) each student has an easily accessible account, (2) each student has a smartphone that supports the Academic Information System UST, (3) assignments equipped with devices that clarify the execution of tasks, (4) lecturers directly correct student assignments and the following week feedback is given. The first cycle, the average percentage of achievement of the lecture process and is in the excellent category. The implementation of virtual classes using the UST Academic Information System has been shown in the success indicators shown in Table 3.

The virtual class components implemented in accordance with success are discipline, honesty, cooperation, and responsibility. The character development of student discipline is indicated by the accuracy of collecting assignments according to their time. The character of student honesty is indicated by assignments that are not indicated by plagiarism and references are included. The development of cooperative characters is shown in the group assignments of all students uploading the same task as a result of the discussion. While the character development of responsibility is shown by students responsibly acknowledging mistakes if they cannot complete the task in time, and show a commitment to better learning.

**Table III.** Character development in virtual class

Learning Aspects	Learning Procedure		
	Indicator	Cycle I	Cycle II
discipline	<ul style="list-style-type: none"> <li>Obedience in gathering assignments</li> <li>Obedience in doing assignments</li> <li>Obedience to learning</li> </ul>	2.8	3.2

Learning Aspects	Learning Procedure		
	Indicator	Cycle I	Cycle II
	activities		
honesty	<ul style="list-style-type: none"> <li>• Does not do plagiarism</li> <li>• Admit mistake</li> </ul>	3.0	3.4
cooperation	<ul style="list-style-type: none"> <li>• Suitability of group assignments</li> <li>• Actively involved in groups</li> </ul>	2.6	3.2
responsible	<ul style="list-style-type: none"> <li>• Correcting errors</li> <li>• Increase learning commitment</li> </ul>	2.8	3.1

Cycle II was implemented following the input of the results of the reflection of the first cycle, according to the scale of character development. The percentage value included in almost all students gave rise to indicators of character discipline, honesty, responsibility, and cooperation.

The character of honesty is shown by students working on their own assignments and the sources of references quoted are listed. Discipline character shows improvement as shown in the following picture. Student learning activities are measured using parameters 1) discipline in collecting assignments, 2) honesty in completing tasks, 3) responsibility in completing tasks, and 4) collaboration and collaboration in doing assignments. From the research data, it was found that the four parameters indicated an increase in discipline up from cycle 1 to cycle II.

In general, based on observations, the character of discipline, honesty, responsibility, and cooperation in the student team has increased from cycle I to cycle II after being applied to virtual classes in learning strategies on an ongoing and continuous basis. In other words, the application of virtual classes in learning can improve the character of students.

## Conclusion

Based on the results of character development class action research through virtual class learning in learning strategy courses in the FKIP UST PKK, it can be concluded: (1) Virtual class learning has an implementation level of 96.7% in cycle I and 100% in cycle II and there is an increase of 3.3 %; (2) There is an increase in student character in terms of discipline, honesty, collaboration, and responsibility.

Suggestions and comments obtained from the results of this study are (1) Character education cannot be implemented in a short time, but must be continuous and continuous, (2) Character education can be done in virtual class learning through collecting tasks individually or in groups to measure indicators of discipline, honesty, cooperation, and responsibility, (3) Material selection should have the same level of difficulty, (4) Virtual class-based assignments should be equipped with adequate tools to help students complete their tasks, and (5) Data and analysis techniques data needs to be made comprehensively and systematically based on the character indicators of other values.

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