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Research Paper

Building Interactive Communication with Google Classroom

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Abstract

Google Apps for Education (GAFE) is a technology is provided and designed for college by promoting the use of information technology and collaboration. One of Google Apps for Education products is Google Classroom being a learning media between for Lecturers and Students to build interactive communication. Interactive communication leads to good feedback in the form of educational transformation from learning source to learner. This is what improves the engagement for the students themselves. By the concept of digital classroom, students no longer just sit passively in the classroom, they are interested in themselves to explore the things offered by technology. Building interactive communication among students need a good strategy. Strategy not only serves as a concept map that shows only direction, but is able to demonstrate operational tactics to achieve the established goals. A teacher or lecturer who does not have a good teaching strategy will not be able to create good communication with students. Building interactive communication among students need a good strategy. Strategy not only serves as a concept map that shows only direction, but is able to demonstrate operational tactics to achieve the established goals. A teacher or lecturer who does not have a good teaching strategy will not be able to create good communication with students.

Keywords: *Interactive, Communication, Google Classroom*

1. Introduction

Learning is a process of communication. Communication is the process of transmitting information from one to another for a particular purpose[1]. Communication is said to be effective if the communication that occurs lead to two-way information flow, that is with the emergence of feedback from the recipient of the message. The quality of learning is influenced by the effectiveness of the communication that occurs in it[2], [3]. Effective communication in learning is a process of transforming messages in the form of science and technology from educators to students[4]–[6], where students are able to understand the purpose of the message in accordance with predetermined objectives, thereby increasing the insight of science and technology and cause behavior change for the better. Teachers are the party most responsible for the ongoing effective communication in learning, so that lecturers as teachers are required to have good communication skills in order to produce an effective learning process[7].

The purpose of an interactive communication strategy is to build good communication in order to make sense of, give each other feedback that can lead to the purpose of the communication. So that created the lecture process in the lecture hall that can run well. A good lecture process is that a lecturer does not dominate lectures but can act as a facilitator for students, so students are more active in it. Online media is one of the rapid development of information and communication technology at this time. Online media is a medium that we can find on the internet that can be accessed anywhere and anytime as long as there is internet network.[8] The development of online media took part in supporting the learning process. Online media become one of the media which now become a tool to get information and can be used as learning resource. The use of online media as a learning resource like a library that feels right to produce global information without the distance and time. With the development of ICT use there are five shifts in the learning process: (1) from training to appearance, (2) from lecture hall to where and at any time, (3) from paper to "online", (4) physical to networking facility, (5) from time to time cycle[9].

Learning activities is a process of transforming educational messages in the form of learning materials from learning resources to learners. Learning resources in the learning activities are lecturers and the message conveyed is the learning material received by the recipient of the message of the student. In the learning process occurs communication to convey messages from lecturers to students with the aim that the message can be received well and affect the understanding and changes in behavior. Thus the success of learning activities depends on the effectiveness of the communication process that occurs in the learning.

Learning activities have several components of actors in it that is lecturers and students, in addition to the two components there are also components that have important role is the media. Media in question here is a tool used to send messages or content material from lecturers to students and vice versa. The existence of media is not the only component that guarantees the success of a process of learning activities, but without any media that support the learning activities cannot be implemented maximally.

Communication as a medium of learning can also be done by using communication media such as telephone, computer, internet, e-mail, and so forth. The interaction between lecturers and students is not only done through face-to-face relationships but also by using these media. Lecturers can provide services without having to deal directly with students. Similarly, students can obtain information in a wide scope from various sources through cyber

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space or virtual space using a computer or the internet. This media is called online media[10].

One of the online media search sites on the internet, Google has launched its newest application for education. The new app is named Google Apps for Education (GAFE). Google Apps for Education (GAFE) is a technology provided and designed for schools and universities with the use of online information and collaboration technologies. One of the existing facilities in Google Apps For Education (GAFE) is Google Classroom[11]

With Google Classroom this lecturer and student connected digitally. The latest Google app is in addition to accessible on a PC can also be accessed via android and iOS-based phones and tablets. One of the sophistication of this application is that it can be used together in a collaborative learning group. The effective use of Google Classroom can save time, because it can be accessed anywhere and anytime by using internet connection to enable lecturers to provide tasks or information to students through this application and also upload learning materials.

With the new application from Google is triggering the academic community of IAIMNU Metro to apply communication learning through online media in order to improve the better learning service

Interactive communication is the process of delivering messages from the communicator to the communicant where between the two sides can be directly related to each other either through the media or not through the media and mutually occur feedback or reciprocity in it[12].

Communication arises because of the interaction between individuals and individuals, individuals with groups, or groups with groups. The process of communication is the delivery of information from the communicator to the communicant through the media actively. While interactive is the interaction between two or more people. Interaction of teaching and learning is mutual communication between lecturers and students to achieve the purpose of lecturing activities. In order for lecturers to teach well, the lecturers in each learning must be attractive, interactive, inspiring. Interactive indication is lecturer can build interaction conveniently with students, so that students do not feel afraid to ask and think[13].

The interaction of teaching and learning is said to be normative because there are values in it. In educational interaction element of lecturers and students must be active, it is not possible process of educative interaction when only one element is active. Interactive communication occurs because of the two individuals that actively interaction, resulting in feedback, meaning that communication happens is two-way.

According Syaiful Bahri Djamarah which describes the pattern of communication between faculty and students in two directions.[14]

1) n communication as a two-way interaction or communication, the lecturer acts as the giver of action or the recipient of the action. Similarly, students can, as a recipient of action, can also as action. Between lecturers and students will occur dialogue?

2) n communication as a transaction or communication in many directions, communication does not only occur between lecturers and students. Students are required to be more active than lecturers, such as lecturers can serve as learning resources for other students.

Express this opinion on the pattern of two-way communication interaction as follows:

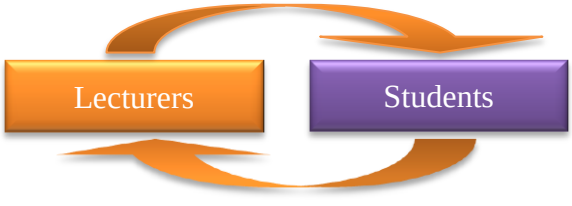


Fig 1:. Pattern of lecturer-students-lecturers

1. Pattern of lecturer-students-lecturers
   Here is feedback (feedback) for the lecturers, students learn from each other.
2. Pattern of lecturers-students, students-lecturers, students-students

Figure 2 Pattern of Lecturer-Student, Student-Lecturer, Student-Student Optimal

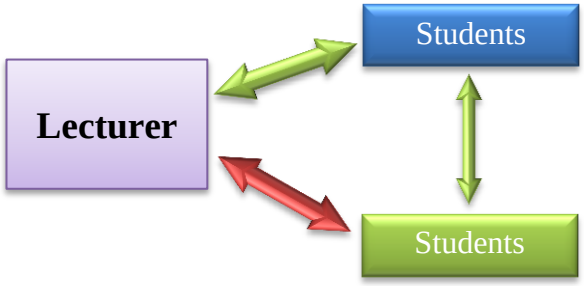


Fig 2:. Communication interaction as transaction, multi direction

Interactive communication that lecturers and students interact into two directions. In that case is also not free of media assistance in the delivery of learning. According to Brigs, quoted by Pawit M. Yusuf from the book entitled instructional communication that "media means physical means to deliver teaching materials (message content) such as books, films, videos, slides, and computers. The media is very able to assist lecturers in the delivery of materials to students so that communication is more interactive[15].

So interactives communication is the process of delivering messages conducted by two or more actively assisted media in which interaction occurs between communicator and communicant so that it can directly provide feedback. The process of interactive communication in teaching and learning activities is illustrated by two-way communication, lecturers deliver materials and students receive materials and provide feedback or direct feedback, so that students can feel comfortable and not feel afraid if you want to ask and argue.

According to Yuliandre Darwis that Two-way communication is a reciprocal communication from the communicator to the communicant. Communicant is given the opportunity to give reaction or response news or message given to communicator. In other words communicators get feedback or feedback directly from the communicant, so that intertwined mutual understanding between the two sides[16].

It can be concluded that interaction communication is the process of delivering messages or information from the communicator to the communicant between two or more people by means of direct interaction that can through the media. So that the communicator directly receives feedback or feedback from the communicant.

Interactive communication is supported by the media, among others, OHP, LCD, books, sample letters, slides, computers and other media that help in the learning process. Characteristics of interactive communication include communication participants who actively interact in two directions because the media assisted in the delivery of information (subject matter) so that feedback or feedback is more dominating as learning takes place.

The lecture process will always be a process of interaction between two human elements, the students as the learning party and the lecturer as the teaching party, with the students as the main subject. In the process of interaction between students and lecturers, required supporting components are mentioned in the characteristics of educational interaction. Educational interaction is specifically a process or lecture interaction and has distinctive features that distinguish it from other forms of interaction.

2. Discussion

Implement interactive communication can be seen from the elements of learning, faculty, students, media, messages/information, feedback. Lecturer as a communicator plays an important role in

communication activities with students. Communication lecturers in the classroom can be said to be optimal if the style is democratic, while the style of interaction dictator make the implementation of communication in the lecture hall to be chaotic so that the learning objectives are achieved less than optimal. One of the lecturers' success in communication in the lecture hall can be seen from his interaction style with the students.

Creating interactive learning so that students feel comfortable in learning something so that learning is no longer a burden so that students dare to continue to explore and experiment on the knowledge he learned. Along with the rapid development of information technology, the spread of science becomes faster. Transfer knowledge activities (knowledge transfer) began to feel not enough just to rely on face to face between educators and students. Learning system with e-learning method is needed to be applied to complement conventional method (face-to-face) to cultivate student's learning motivation.

The e-learning method (Online course content) provides the ease and smoothness of lecturing process for both educators and students. With e-learning method, educators can increase the intensity of interactive communication with students outside the official study hours. The e-learning method gives the educators the flexibility to give students access to scientific references related to those subjects that may not be available during the study hours or practicum. These references may include scientific papers, popular articles or electronic journals. This will be very useful for students, because in addition to strengthening the students' understanding of each subject matter, the references of international articles will greatly help broaden students' horizons while improving students' English skills. So hopefully in the future, the students will have a high competitiveness, deep in knowledge learned and certainly have good achievement or value.

3. Research Methods

The development of e-learning based online learning method is intended for the Cavities in IAIMNU Metro Lampung environment. The system analysis stage is the decomposition stage of a complete system into its component parts with a view to identifying and evaluating the problems, opportunities, constraints and expected needs so that a new system design can be created as needed.

The use of internet technology provides a new concept to work together to combine various human resources, infrastructure, capital so as to enable to create a culture of unlimited possibility. The merging of various disciplines provides the possibility to make new discoveries. The right technology will increase the value of a product, a good product will increase customer loyalty, loyal consumer will be one effective advertising media by telling the benefits of the product.

E-learning opens access to collaborate, E-learning opens access to communicate, E-learning also opens access to learning fun, if access is open then it will be an opportunity to become the greatest problem solving. Opportunities to discover new discoveries, opportunities to learn from each other, opportunities to make life better, opportunities to complement each other.

E-learning also makes it possible to study with a collaborative learning model not limited only as a student center learning or teacher center learning. Collaborative learning model allows experts or masters to participate to give opinions or opinions related to a particular problem so that students are expected to have the ability problem solving equivalent experts or masters.

In the application of collaborative learning, there is a shift in the learning role Barbara Leigh Smith and Jean T. McGregor [17].

1)
rom listeners, observers and recorders become active problem solvers, input givers and likes discussion.

2)
rom the preparation of the lecture hall with low or moderate expectations being to the preparation of the lecture hall with high expectations.

3)
rom a personal or individual presence with little risk or problem becomes a public presence with many risks and problems.

4)
rom personal choice to choice in accordance with the expectations of the community.

5)
rom competition among peers to collaboration among peers.

6)
rom responsibility and independent learning, be group responsibility and learn interdependence.

7)
ormerly seeing lecturers and texts as the main source who has the authority and source of knowledge now lecturers and texts are not the only source of learning. Many other learning resources can be extracted from the group's community.

From the above description, we can know the things emphasized in collaborative learning is how to make the students in group learning activities occur the cooperation, interaction, and exchange of information.

The design of the system to be created requires some input data requirements, output data requirements, interface requirements and infrastructure. The purpose of needs analysis is to determine the function specifications, capabilities and facilities of the program. Needs analysis is also useful as a basis for evaluation after the program is completed.

1.
nput Data Requirement
Making this E-Learning Media requires some input data such as Tutorial data relating to the use of E-learning, User data (members and administrators), critical data and suggestions or comments from members

2.
utput Data Requirement
The output data is data generated from the input data that has been processed. The resulting output such as: exam questions, test scores, test reviews.

3.
nterface Needs
Based on the observations, the desired interface should be as good as possible, so user-friendly means the user can use the software made as comfortable as possible and reduce errors in entering data, process or output.

4.
nfrastructure
Infrastructure in the manufacture of E-learning media includes E-learning software, Server Hosting, Domain and computer network devices.

Problem Analysis

A problem will not happen by itself, but there must be a cause, E-Learning system is made based on the problems that arise including:

1.
he difficulties of students in learning the learning materials from the media books or other media.

2.
he existence of student difficulties to repeat the subject matter in a fun way.

3.
pdate problem data or material that does not take place quickly

4.
ifficulty to use various alternative learning models

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F

4. Results and Discussion

The Google Classroom app is Google's service for an unlimitedly useful field of education for colleges, faculty and students.



1. Support Paperless Learning System

Through a special design for lecturers and students, Google Classroom provides support tools, from Gmail, Drive, and Docs. However, Google Classroom is only available to Google Apps for Education users. The existence of various devices needed for working and doing tasks without using paper. Later, lecturers can create Drive folders for each task and for students so that everything is more organized and easy to do Google Docs automatically for every student.

2. Should not Be in the Same Room

There is a feature called Class Stream that allows students to debate, discuss, and question and answer (Q & A) with other fellow students or lecturers. Lecturers can send questions to the class, then students can discuss to answer the question. Not only in the form of text, lecturers can also send questions in the form of videos or articles and then ask students to write a summary.

This feature allows students and lecturers to keep learning while not in the same class or room. This is of course very practical and time saving for lecturers who have busy or students who are in different locations.

3. Improving Student Learning Outcomes

Reported by the page forbes.com, a research conducted content provider institutions named Front Row Education has found a 10% increase for the use of technology in 2016 this year. From what was originally only used in computer labs, technological functions are now maximized in the learning curriculum. Even reports from the OECD (Organization for Economic Co-operation and Development) show that students who use computers with sufficient intensity on campus tend to have better learning outcomes than those who rarely use computers.

4. Practical for Lecturers and Students

Using Goggle Classroom directly can provide great benefits to lecturers and students. As an example, when the task is in the form of multiple choices, the lecturer no longer needs to correct one by one in a sheet of paper, with Google Classroom the value will automatically exit on the spot. It also helps to analyze which discussion is not understood by the majority of students so that the majority of the lessons can be replicated in a better way.

While the benefits for students are the students can still attend the class even though the student is unable to attend due to illness or not allow come to campus for some reason. Of course this provides a wide opportunity for students to keep learning anywhere.

1. Interactive Class

One of the strengths of technology lies in its interactive aspect. This is what improves user engagement, which in this case refers to the student. Thanks to the concept of digital classroom, students no longer just sit passively in the classroom because they are interested in themselves to explore the things offered by technology.

One simple example of this advantage is the use of LCD touch screens in the classroom. In addition to the whiteboard, the tool allows you to display a slide show of the presentation of the material to be delivered or to set up videos related to a particular lesson. This will certainly minimize the boredom that may be felt by students during the learning process in the classroom.

2. Student Participation Can Achieve 100%

This one point is still related to the previous one. Because the existing interactive able to increase engagement, then the participation of students will go up and even can reach 100%. Digital learning can also be done online. This will make it easier for students who usually tend to stay in the classroom to participate nonverbally.

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