Communication Model in Blended Learning Using Telegram Applications

Kawakibul Qamar

Universitas Kanjuruhan Malang, Indonesia ikings94@gmail.com

Erik Teguh Prakoso

Universitas Tunas Pembangunan Surakarta, Indonesia erikprakoso3123@gmail.com

Veronika Nugraheni Sri Lestari

Universitas Dr. Soetomo, Surabaya, Indonesia <u>venugra@unitomo.ac.id</u>,

Ifit Novita Sari

Universitas Islam Malang, Indonesia inovsari@unisma.ac.id

Abstract

The purpose of this research to know the type of communication in Blended Learning on Basic Mathematics lectures. The population of this research is students of Kanjuruhan University who take the subjects of Basic Mathematics course of academic year 2016/2017. This type of research is descriptive explanatory by retrieving data from the transcription of online learning conversations. The result of data analysis shows that 1) the types of communication in Blended Learning occurs in informative, persuasive and instruction communication, 2) there is an interaction between members in the group that actively making it possible to happen learning process in lecture Mathematics.

Keywords

Communication Model, Blended Learning, Telegram Application.

1. Introduction

Lectures at the University of Kanjuruhan Malang always follow the technological institutionalization. One of the lecture models is e-learning. Lectures with e-learning adapt to the DARING program implemented by the Directorate. The one strategy used is Blended learning. Blended Learning is a flexible lecture approach, utilizing emerging technologies that combined learning both face-to-face and online (Garrison and Kanuka 2004; Graham 2012).

One of the obstacles in the implementation of Blended Learning lectures is the use of laptops by students where in general not all students have laptops (Sung, Chang, and Liu 2015). As a result, some students are still joining other students to do online lectures. To anticipate online lectures that should be done individually by each student is to use a smartphone owned by most students. Utilization of smartphones in Blended Learning can accommodate the online lectures (Alden 2013; Lum, Bradley, and Rasheed 2011).

Selection of applications in smartphone must be appropriate because with the appropriate application also has an influence on the implementation of Blended Learning. The text-based application is one application that can be used in Blended Learning (Qamar and Riyadi 2016; Fattah 2015). Some text-based applications on smartphones are messenger apps like Whatsapp, BlackBerry Messenger, Line, and Telegram. To be able to reach all the good students who have laptops and smartphone then Blended Learning using Telegram applications. Telegram applications have the advantage of being able to use a laptop without a smartphone or use a smartphone without a laptop (Iksan and Saufian 2017; Nizam et al. 2016). So that, all students can follows Blended Learning.

Blended Learning lectures using Telegram application is a new way, so it still needs to be investigated further. So in this research will be revealed in the form of communication in Blended Learning. By showing transcripts of online lectures, it can be determined the occurrences of learning in this lecture process.

1.1 Communication in Learning

Learning activities is a process of transforming educational messages in the form of learning materials from learning resources to learners. Communication that occurs in the learning process is the delivery of messages from educators to learners with the aim that the message can be received correctly which then affects the understanding and changes in the behavior of learners (Gecer 2013; Sari 2016). Thus the effectiveness of the communication process that occurs in learning affects the success of learning activities. Learning can be viewed as a process of interaction among all individuals that exist in the environment. Learning process is meant to achieve goals through various experiences. Learning activities are conducted by two principals, teachers and students (Binti Mistar and Embi 2016). Teacher behavior is to teach and students are learning.

Teaching and learning process is a types of communication where the communication between students with educators, between students with lecturers, between students with teachers (Qamar, Purwanto, and Karim 2013). In the communication, there is the transform and transfer knowledge, skills or attitudes and values of communicators (educators, lecturers, and teachers) to the communicant (students) in accordance with the goals set. The focus of communication is message, where generally, text as message, so that types of communication that could be occur consists of:

- 1. Informative communication. An informative that wants to advise or tell someone about something. A message delivered to a person or a number of people about new things he or she knows
- 2. Persuasive communication. A communication that really wants someone to do something. The process of influencing one's attitude, outlook or behavior in the form of persuasion, invites so that he performs with his own consciousness.
- 3. Instructive communication. Instructs or tells someone how to do something. This communications containing threats, sanctions and other coercive, so that the targeted people do something forced, for fear of the consequences.
- 4. Descriptive Communication. A communication that wants someone to picture what they are describing, to imagine or to describe the characters and see them in their mind

1.2 Blended Learning with Telegram Applications

Blended Learning is a learning that combines offline learning (face to face) with online learning (internet). The goal of mixing offline and online learning is to support a student's unique interpretation and use it as a more varied learning resource. In this study, offline learning is done while in class or when learning takes place and online sessions when students and lecturers use Telegram Applications outside the classroom. Telegram application is used as a medium to stimulate student motivation used in learning. This research will explore the role of Telegram application as a medium of discussion in Blended Learning.

Telegram Application features such as Reply, Mention, and Forwards can provide opportunities to build collaborative learning environments, which will create flexibility in student learning. Blended Learning's simple model is "integration of offline learning experience (face-to-face) with online learning experience" aimed at taking advantage of text-based asynchronous and face-to-face situations (Cuesta Medina 2017). This leads to face-to-face lectures with additional materials and online learning tasks, using different learning management systems. In order to provides a more sophisticated way of utilizing Blended Learning ideas by connecting face-to-face with online either simultaneously or not.

2. Method

The approach used in this study is a qualitative approach. While the explanatory descriptive technique is used to enable students to express their ideas, experiences about communication process in Blended Learning realistically and holistically in accordance with the purpose of research. Participants of this study consisted of 30 volunteers who are students of the Department of Information Systems University Kanjuruhan Malang in academic year 2016-2017 and take Basic Mathematics course. These participants have attended lectures with Blended Learning.

A literature review is conducted to determine the problems stated in the research objectives. After that phase, the recording instrument of conversations in Telegram applications is used as a tool to analyze the forms of communication that occur in Blended Learning. After data was obtained from transcription, then it encoded by using content analysis that used in qualitative research. Furthermore, the data was classified based on the code that has been determined. As a result of content analysis conducted by researchers, the results were compared with the similarity 80% of the acquisition classification.

3. Results and Discussion

The implementation of Blended Learning in Basic Mathematics course is done at the beginning of the lecture. Lecture Plan (LP) presented to the students so that they know that lectures will be conducted 3 face to face (offline) and 3 online. The implementation of face-to-face session was in accordance with SAP, but for the implementation of online session adjusted by using Telegram Applications. The condition of students whether using laptops and smartphone are also conditioned to be able to follow online lectures. Subsequently, the result of the transcription analysis of the conversation is described in accordance with the advantage of the types of communication.

Based on message transcript as a types of communication in Blended Learning grouped into several sections as follows.

3.1 Giving knowledge about learning objectives

At the beginning of learning, students are informed of the knowledge they will acquire and what is expected and which can be done to show that the student has mastered the material. Thus it can be a model of behavior that was expected to be demonstrated at the end of the lesson. Transcriptions of the message as shown in figure 1 below,



Figure 1: Transcription of giving knowledge about learning objectives

In the transcription of giving knowledge about learning objectives show the types of communication as Informative, where the message tells the student about the course.

3.2 Motivating students

Attempts to motivate students are often done by describing as clearly as possible future circumstances and the relevance of learning to their future needs. Transcriptions of the message as shown in figure 2 below,



Figure 2: Transcription of motivating students

In the transcription of motivating students show the types of communication as Informative, where the message advises the student in order to solve their problems.

3.3 Presenting the explanation

There are three types of information presentation variations, namely Basic presentation (first introduction to instructional material, followed by discussion, student activity or review), Companion Presentation (additional sources into the classroom, doing what cannot be done in the class in any way), The presentation of enrichment (information that is not part of the learning objectives, is omitted because it has a motivational value and can attain a change of attitude within the student). Transcriptions of the message as shown in figure 3 below,

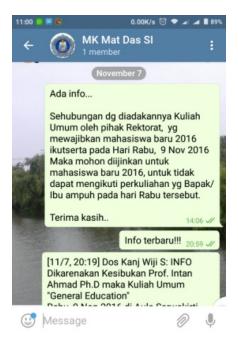


Figure 3: Transcription of presenting the explanation

In the transcription of presenting the explanation show the types of communication as Influence, where the message makes the students in order to get their own consciousness.

3.4 Directing student activities

Briefing of activities is an activity to direct the learning in step-by-step. Both from simple learning homework assignments to step-by-step directions for solving problems. Transcriptions of the message as shown in figure 4 below,

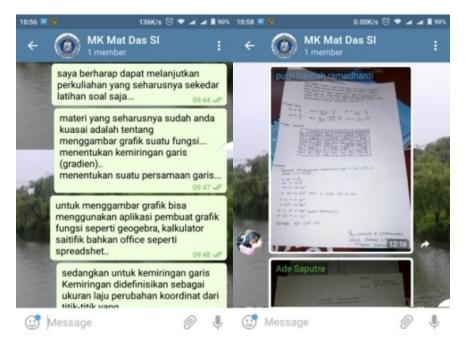


Figure 4: Transcription of directing student activities

In the transcription of directing student activities show the types of communication as Instruction, where the message drive the students get their target in the course.

3.5 Stimulate discussion

Presentation of questions or questions, open-end, no conclusions or troubleshooting suggestions. So the conclusion or answer is expected to appear individually, or interaction with the leader or with each other. This presentation is expected to stimulate thinking, open issues, present background information and provide focus of discussion. Transcriptions of the message as shown in figure 5 below,

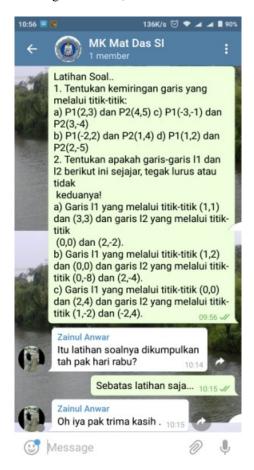


Figure 5: Transcription of stimulate discussion

In the transcription of stimulate discussion show the types of communication as Influence, where the message make the students get their behavior to read and discuss.

3.6 Strengthen learning

Reinforcement is an increased likelihood of students responding to expected behavior as soon as possible. Using emoticon. In the transcription of strengthen learning show the types of communication as Persuasive, where the message make the students get their behavior to read and discuss. Transcriptions of the message as shown in figure 6 below,

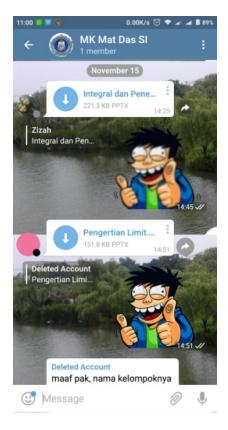


Figure 6: Transcription of strengthen learning

4. Conclusions

Based on discussion, it shows that the types of communication in Blended Learning occurs in informative, persuasive and instruction communication. Besides that, there is an interaction between members in the group that actively making it possible to happen learning process in lecture Mathematics.

References

Alden, Jay. 2013. "Accommodating Mobile Learning in College Programs." *Journal of Asynchronous Learning Network* 17 (1):109–22.

Binti Mistar, Izyani, and Mohamed Amin Embi. 2016. "Students' Perception on the Use of Whatsapp As a Learning Tool in Esl Classroom." *Journal of Education and Social Sciences* 4:96–104.

Cuesta Medina, Liliana. 2017. "Blended Learning: Deficits and Prospects in Higher Education." Australasian Journal of Educational Technology 34 (1):42–56.

Fattah, Said Fathy El Said Abdul. 2015. "The Effectiveness of Using WhatsApp Messenger as One of Mobile Learning Techniques to Develop Students' Writing Skills." *Journal of Education and Practice* 6 (32):115–27. https://doi.org/10.1111/j.1365-2729.2005.00129.x.

Garrison, D. Randy, and Heather Kanuka. 2004. "Blended Learning: Uncovering Its Transformative Potential in Higher Education." *Internet and Higher Education* 7 (2):95–105. https://doi.org/10.1016/j.iheduc.2004.02.001.

Gecer, Aynur. 2013. "Lecturer-Student Communication in Blended Learning Environments." Educational Consultancy and Research Center 13 (1):362–67.

Graham, Charles R. 2012. "Emerging Practice and Research in Blended Learning." In *Handbook of Distance Education*, 333–50. https://doi.org/10.1348/000709905X2699.

Iksan, Zanaton H., and Sumaiyah Mohd. Saufian. 2017. "Mobile Learning: Innovation in Teaching and Learning Using Telegram." International Journal of Pedagogy and Teacher Education (IJPTE) 11 (1):19–26. https://doi.org/10.20961/ijpte.v1i1.5120.

Lum, Lillie, Pat Bradley, and Nikhat Rasheed. 2011. "Accommodating Learning Styles in International Bridging Education Programs." *Higher Education, Skills and Work - Based Learning* 1 (2):147–68. https://doi.org/10.1108/20423891111128917.

Nizam, Mohammad, Bin Ibrahim, Emilia Binti Norsaal, Mohd Hanapiah, Bin Abdullah, Zainal Hisham Bin, Che Soh, and Ali Bin Othman. 2016. "Teaching and Learning Enhancement Based on Telegram Social Media Tool." *Jurnal Intelek* 11 (1):7–11.

Qamar, Kawakibul, Purwanto Purwanto, and Muchtar Abdul Karim. 2013. "Pemanfaatan Short Message Service (SMS) Dalam Remedial Teaching Dengan Menggunakan Scaffolding Pada Materi Peluang Di SMK PGRI 3 Malang." Malang State

University.

Qamar, Kawakibul, and Selamet Riyadi. 2016. "Bentuk Scaffolding Dalam Pembelajaran Matematika Menggunakan Aplikasi Berbasis Teks." In *Prosiding SEMNASDIKMAT*, 1:301–5.

Sari, Ifit Novita. 2016. "The Influence of Motivation and Learning, Teaching Methods and Means of Education Student Achievement." Sinergi 6 (2):1–13. https://doi.org/10.25139/sng.v6i2.78.

Sung, Yao-Ting, Kuo-En Chang, and Tzu-Chien Liu. 2015. "The Effects of Integrating Mobile Devices with Teaching and Learning on Students' Learning Performance: A Meta-Analysis and Research Synthesis." *Computers & Education* 94:252–75. https://doi.org/10.1016/j.compedu.2015.11.008.

Biographies

Kawakibul Qamar is a lecturer in program studi Sistem Informasi, Fakultas Sains dan Teknologi at Universitas Kanjuruhan Malang, Indonesia. He earned Master of Arts in Mathematics Education from Malang State University, Malang Indonesia. He has published journal and conference papers. His research interests include mathematics, education, learning technology using text-based. His project focus in developing learning using technology.

Erik Teguh Prakoso is a lecturer in program studi Bimbingan dan Konseling at Universitas Tunas Pembangunan Surakarta, Indonesia. He obtained a Master's degree in Pendidikan Bimbingan dan Konseling from Universitas Negeri Semarang, Indonesia. He has published journal and conference papers. His research interests include the study of educational psychology and counselling, individual behavior learning approaches. The focus of the project is to develop Biblio Counselling and Cyber Counselling based learning.

Veronika Nugraheni Sri Lestari is a lecturer at the Fakultas Ekonomi dan Bisnis, Universitas Dr. Soetomo, Surabaya since 1998 until now. She graduated Economics (1990-1995) and post-graduation Management (2000-2002) at Universitas Dr. Soetomo Surabaya. Currently, she is continuing her doctoral in Management Science Doctoral Program at the College of Economics (STIESIA) Surabaya. She has served as Head of Ekonomi Pembangunan Program. She also received the Ristek Dikti Grant / Brin-Scheme PTUPT (Penelitian Terapan Unggulan Perguruan Tinggi) in 2018, 2019 and 2020, and has 4 patents. Her research is in the field of Economics.

Ifit Novita Sari is lecturer at program studi Pendidikan Bahasa dan Sastra Indonesia, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Islam Malang. She graduated Public Relations, post-graduate in Social Studies Education, and doctoral studies in Educational Management. Her field of expertise is education management, while other subfields of science include research-based learning, educational leadership, character education, and school management. Currently she is also working as a practitioner in the field of Multiple Intelligences-based Educational Consultants and Independent Evaluator of the 2020 Ministry of Education and Culture's Organizational Program Mobilizing Organizations. Her scientific publications can be read in various journals and seminar proceedings both nationally and internationally. She also published reference books, scientific articles and have 3 IPR records.