

## Social Media Diffusion of *Google Classroom* in Teaching and Learning

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**Abstract:** This study introduces the media of social diffusion through Google classroom as an alternative innovation media for teachers in instructional activities. It used qualitative approach with a development research design. Participants of the study are teachers at Senior High School UM Malang Indonesia. Data were collected using interviews and documents, and analyzed employing descriptive technique. Results indicate that the diffusion of information through social media as well as using Google classroom application can be used effectively for instructional activities inside and outside classroom.

**Keywords:** diffusion, innovation, social media, teaching learning

### I. INTRODUCTION

The development of science and technology influence various parties in dealing with many sectors as well as higher education. The presence of science and technology is very important in improving human resources' capacities and fostering expected personal characters. Education, thus, is valued as necessary in following the trend of science and technology today and tomorrow. This can be started from educational organizations which have responsibilities and duties to manage education system in Indonesia. These institutions, thus, have to renew their approaches in delivering information as well as knowledge to their students and people. They should take the benefits of new developed technologies deployed in their organizations.

This phenomenon is expected to be considered by educational policy makers in the country, in order to improve the education delivery system. Schools and other education organizations are necessary to update their information on the advancing global science and technology. This is important to support the implementation of education development programs, and have positive impacts from the expansion and growth and of science and technology. Research team had a partner of social diffusion media program with Senior High School UM Malang East Java Indonesia. This school needs attention from university team members because the school encountered some problems that have to be solved.

Based on an initial study, the school organization experienced more serious issues compared with other schools within Malang City administration. The main problem relates with the use of social media as the tool of teaching and learning. The system is not well structured and organized, and moved slowly. In referring to the situation explained above, among the problems found at this school are that teachers felt being disturbed by the use of social media by students during instructional activities. Such a condition interrupts student attention and influenced

class room condition. On the other hand, in the managerial perspective, the use of social media within the school building is not so popular. Schools, thus, are reluctant to use that kind of media as an alternative in teaching delivery.

Setiawan (2015) in his study found that students had quite positive perceptions on the extent of social media. This implies most students understand how to operate this media. Teachers were also reported as being familiar with this, and some of them have used it for teaching activities in the classroom. Based on results of justification performed both by research team members and the school teachers, the priority issues that have to be addressed are: the implementation of social media for instructional delivery in the classrooms.

### II. METHODS

This study used qualitative approach with development research design. Teachers at Laboratory Senior High School - State University of Malang were involved as participants. The study was systematically conducted through several steps including an initial study, location and target visit and survey, program socialization, workshop, supervision, controlling, and monitoring of the progress. The workshop was carried out to introduce teachers and other members about social media as the tool of teaching and learning in the classroom. This is relevant with the research development model suggested by Akker et. al. (1999) and Richey et. al. (2004). Data were then gathered employing interviews and documents.

Mentoring was performed during the implementation of social media in teaching and learning activities. This was done through several stages:

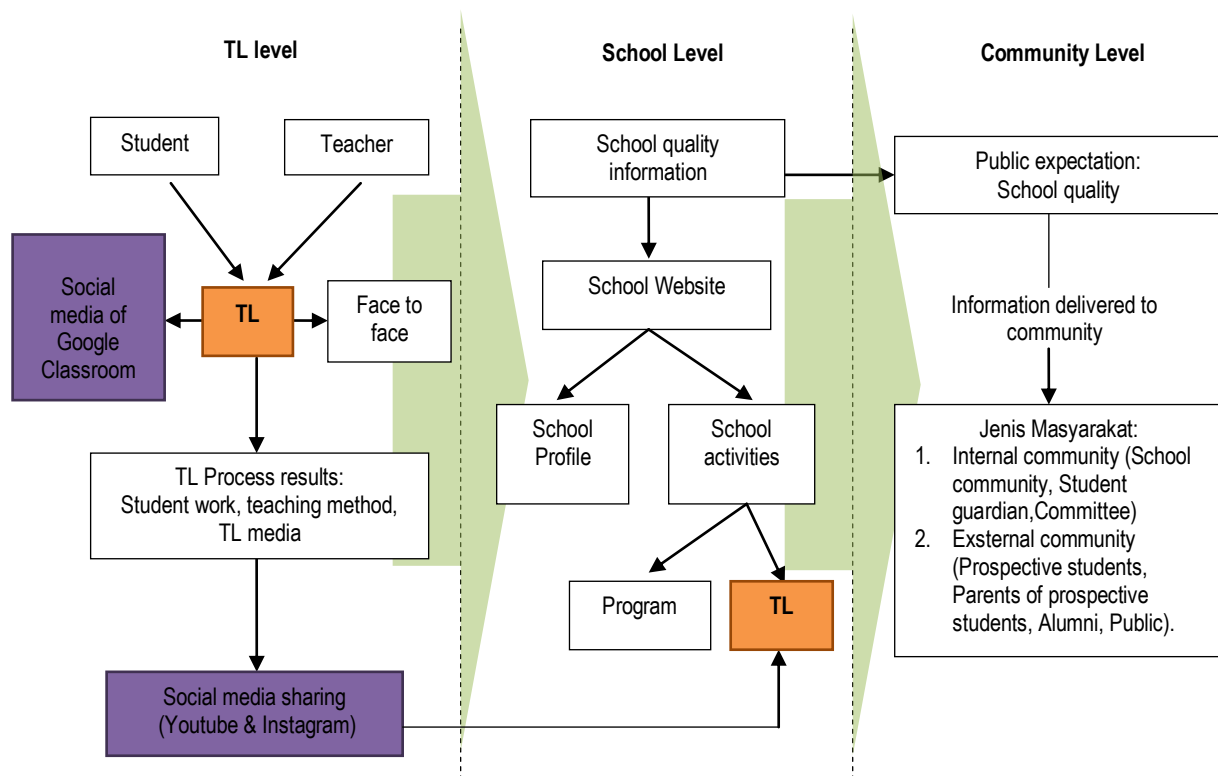
1. Solutions explorations based on the identified problems in relation with: (a) Social, that involves interactions and dialogues with the target participants of social media program and partnering stakeholders, focusing on the urgent

issue which need to be solved, followed by a workshop to introduce the use of social media in teaching and learning; (b) culture, concerning on the adjustment of the proposed model with partner culture; (c) religious values, that its implementation must address the religious values practiced in the workplace; (d) service quality, which put priority on the quality of services provided to clients;

2. Workshop as an educational approach in solving the problems. This was conducted involving several techniques: lecturing, question and answer, discussion, brainstorming, recitation, practices, experience sharing, improvement and mentoring;
3. Workshop agenda was set up following the specified needs. The agenda was designed including: (a) introducing social media; (b) implementation at the school level; (c) problems and its solutions; (d) practices/exercises of using the social media for teaching and learning in the classroom; (e) mentoring; (f) evaluation; and (g) follow-up program;
4. Partner involvements include: (a) the partner is ready to provide required data; (b) venue for the activities; (c) organize participants; (d) invite the participants to join the programs; and (e) synergizing activities to implement the social media project from the beginning to the end as well as the follow up programs.
5. Evaluation stage was carried out addressing the process and result achievements. Process

evaluation was conducted during the on-going program concerning the readiness of the school organization, disciplinary, participation, and commitment to participate in the program. Instrument format was prepared that capture individual identification of the participants, and scoring. Portfolio was employed to evaluate final achievements of each participant. This technique had several aspects to be measured including product quality and individual presentation performance. The program was followed up through a continuity project that had some activities such as periodical supervisions. The next programs were also designed involving the previous and new participants. Workshop was offered as a solution to the problems encountered in the implementing the system. This was carried out to improve capacities in using the innovative technique of the teaching and learning activities in the classroom. Beside this approach, the school was advised to establish a team for the implementation of the social media technology for every teaching learning program that will be applied in the class rooms;

6. Agenda of workshop includes: (a) introduction of the social media to the participants; (b) media implementation at the school; (c) media problems and its solutions; (d) practices/exercises in producing Youtube dan Instagram as social media to support the teaching and learning activities; (e) mentoring; (f) evaluation; and (g) follow-up plans. This system is illustrated on Figure 1.



**Figure 1**  
**System of Social Media Innovation Diffusion**

### III. RESULT AND DISCUSSION

This study was carried out involving 30 teachers and 6 administrative staff members. At the first stage, social media (Google Classroom) workshop was implemented as the techniques to generate data in this development research. Research activities were held at the School Computer laboratory, Senior High School State University of Malang East Java Indonesia. Those activities were divided into three sessions or cycles including:

The first session is opening/introduction. This session was conducted by introducing research team to the school members. Followed by information about the Google classroom through social media technology. Such information was delivered by the chairman of the research program. The second session was the information on the concept, system, and benefits of social media delivered by the team members for about 15 minutes. The third session was conducted to invite participants (teacher and administrative staff members) to practice and do the exercises in implementing the model of social media technology of the Google Classroom in teaching students in the class room.

Results of the workshop can be explained in terms of the comprehension of the participants upon the use of media and their attitude changes towards the conceptions on the implementation of the social media technology in the teaching learning program in the class rooms. All the participants enthusiastically asked many questions about this media and its features, and they regard this as the appropriate model of teaching practices in the modern class rooms. In terms of the content, this study successfully built simulation class room or model to implement the innovative teaching media. The following is the product of the workshop program used in the development study.

Based on the mentoring program, the results of this study are relevant with a study conducted by Setiawan (2015) suggesting in general that student perceptions and attitude towards the use of social media were quite good. Most students have used several social media for their learning activities. This was supported by similar perceptions of teachers and their attitude in using and adopting such media in teaching the students within the class rooms (Setiawan, 2017). The implementation of this media, thus, can be perceived as effective in building productive learning environments for students.

Nugraheni (2013) found that there was a relationship between principal attitude toward information technology and its adoption for instructional management innovation. On the other hand, research by Chen & Chen (2006) indicated significant correlation between student perceptions on e-learning effectiveness and other three dimensions of development for attitude toward e-learning, e-learning characteristics, and its related conditions. Followed by Research by Gorder (2008) that concluded that there was significant different between the use of technology and integration based on school level or class. But, in terms teachers perceptions on the use of technology in teaching and learning programs, there is no different.

Other studies such as Sacks and Graves (2012) indicated that students learnt well how to measure the networks and evaluate its quality, social distance, network diffusion, and the complexity of social media which is not only used for social programs, but also for professional purposes. Students also implement the social media concept in delivering and improving working networking plans. Warner, *et al.* (2014) reported the benefits of using „blog“ as a social media in teaching students. This was found effective in strengthening learning environment. Students learnt through group sessions where they can analyze their own performance in completing the works, tasks or assignments.

Blog was accepted both by teachers and students as the effective media for learning activities and fostering student capacities in making decision independently. The important of teachers“ attitude toward the use social media in teaching learning programs can be observed in the dialogues among them concerning the necessity of school learning environment. This can be concluded that the use of social media had positive effects on the creation of learning environment and its empowerment. In particular towards the empowerment of student to learn through innovative ways, and unleashing the power of students to take any actions.

Mourlam (2014) also found that the use of *Facebook Group* as regarded positively by students in supporting their learning activities to be more productive compared to conventional models. However, to make it works properly, this should be facilitated by school organization and its management. Research by Gok (2016) showed that the digital technology in using the social media had positive impacts on the achievement of learning for students. This was also supported by other study by Yeo (2014) reporting the used of „YouTube“ and „Facebook“ in improving student achievements of the teaching learning projects.

Those results include “students“ preference in using the social media through „YouTube“ video and „Facebook“ to find new friends in producing learning networks. This can be expanded to facilitate the cooperative learning program among the students and they may define the programs and learning schedules based on their own preferences. They also willingly learn through informal sessions as well as postings broadcasted in video *YouTube* programs and face book media. The reasons are that information provided in conventional media such as the books or printed material is so limited”.

Further, the results indicate that the use of such a media had positive impacts on the development of media alternative and innovations in delivering teaching and learning material to students, and built learning networks among students. Based on previous studies, teachers also learnt how the features of social media employed in developing the development concept and its evaluations for student achievements. So, the use of social media in diffusing the information for teaching and learning activities must be supported by the mastery of material (content), understanding the

subject or material, values, and benefits of the media. The results, thus, are relevant with the previous studies. School community especially teachers claimed that the use of such a sophisticated media help their works in delivering knowledge without face to face contacts. They are ready to implement this system for regular teaching learning activities as long as the school policy supports their programs.

#### IV. CONCLUSION AND SUGGESTION

General problems encountered by the school system relate to the development of social media currently. These intervene education sector as well as influencing teaching learning process for students. One of the specific problems is the unpreparedness of teachers in dealing with this new issue appropriately. Students also have the media only for disturbing teaching activities in the classrooms. The use the social media, thus, must be well organized at the school level addressing school objectives or educational purposes. The development project conducted through this study is assumed as a strategic alternative in employing the media of teaching activities for teachers, to make the teaching learning model in more variations.

School members or the community especially teachers value this new technology as important media in improving teaching learning quality. It also becomes a model for remedial teaching program for certain students. The remedial sessions are carried out without face to-face. It also helps teachers to discuss their issues with their students. So, teachers could assist students with difficulties. The school of this study site is advised to try and implement the proposed model regularly under the supporting policies to start the innovative model.

Principals are suggested to provide policies in supporting the model of teaching learning delivery system using such Google class room. He/she also need to improve the quality of class room facility especially the online-system or diffusion media technology. This is necessary to help students to access learning experiences, freely, and independently. School management must be performed professionally to improve the quality of learning environment for students. Teachers are advised to employ various models of teaching techniques and the use of social media in teaching and learning activities within and outside class room. Students are expected to access the internet services only for educational purposes, not for inadequate uses. Finally, parents have to monitor their children to ensure that their social media is used only for positive matters.

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