

The Role of Social Media in Learning Process

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Abstract

Social media is commonly used everywhere and consists of various user-driven channels. Social media is a group that is connected with the internet and allows people to create, share and post their opinions. Indonesia is one of the biggest social media users. A research done by Alexa.com has found that facebook.com, google.com, google.co.id, blogspot.com and youtube.com are the top five social media in Indonesia. In further trends, social media can be used to improve learning process. Students and teachers are able to use social media to interact with others. The purpose of this study is to identify and to reveal the role of social media in learning process.

The respondents for this research are 326 Widyatama University students who take a summer course in the academic year 2011/2012. F-test is used to compare the different groups. Based on the research, the social media implicate role in learning process.

Key Words: *Social Media, Learning Process*

Introduction

Since the internet was invented, it seems that people nowadays cannot live without the internet. The internet makes users' life easier. Before the invention of the internet, people mostly got information from books, television, radio, magazines and newspapers. All these sources of information were shared in the physical format. The limitation is that the physical form takes a big and bulky space to carry and to store it. As a consequence, people could not carry and easily update it. After people use the internet, they can now update and get information anytime and anywhere.

The internet contains a lot of information. People can find information and even build friendships on the internet. The most popular use is that people can trade on the internet. Indonesia is one of the biggest internet users in the world. It is very common to see people searching for information, building

friendships, and trading on the internet. Seeing this phenomenon, can the internet and the information provided by it be learning sources? Therefore, learning is not only from the classroom and the physical format, but people can also learn from the digital format.

Students are more creative day by day. They are more critical; moreover, they discern information and compare it with the knowledge that they obtain from school. Information provided by sciences, social or natural, is unlimited and it will always be. Especially in the recent dynamic development of social sciences, what students see and feel in their daily life can become a kind of learning process.

Students are now very familiar with the internet and social media. This behavior has positive and negative sides. If students cannot manage their time well, they will not be able to study effectively. Teachers who see this phenomenon must be sensitive to this issue. Social media in students' life is not a threat, but it is a good opportunity to improve learning process because students can find the most suitable way of learning. That means that the teachers' role is to guide and to direct their students in finding their learning methods.

This opportunity has not been taken as an advantage by most students and teachers since many students still believe that a teacher is the best source of information whereas social media is only for informal information. Adding to that, some teachers who are not familiar with social media think that it is a threat.

Nevertheless, this phenomenon is too good to be taken lightly. Thus, can social media improve learning process? Are there roles in social media for Widyatama students in their learning process?

1. Literature review

1.1 Social Media

Social media is digital communities that can connect a person to another and let people share anything they want with other people. There are 23 types of social medias, in which those types are blogs, social networking sites, social news, social measuring, micro blogging, social bookmarking, social Q&A, video sharing, photo sharing, social search or search engines, professional networks, niche communities, social email, comment communities, regional social media sites, podcasting communities, blog networks, blogging communities, presentation-sharing sites, content-driven communities, product-based communities, review& recommendation sites, and social media sites that defy definition.

1.2 Most Visited Social Media in Indonesia

Indonesians are now more familiar with social media. The kinds of the most visited social media are different from country to country. For Indonesia, based on the finding by Alexa.com released on May 2012, the most visited social media in Indonesia are listed below.

1. *Facebook.com*, a social utility that enables people stay connected with their friends, upload photos, and share links and videos. In Indonesia, more than 43 million people are Facebook.com users. Facebook.com is also the most searched site in the world.
2. *Google.co.id*, a search engine site that is customized by Google for the Indonesian market.

3. *Google.com*, a very popular search engine, second after Facebook.com, that enables users to search for information, web-pages, images, and videos. It offers unique features and search technology.
4. *Blogspot.com*, free web-logs (blogs) provided from Google. People can make their own website and share it to other people.
5. *Youtube.com*, a social utility that can be used to store and share videos. It currently stays in the top three after facebook.com and google.com.
6. *Yahoo.com*, a major internet portal and service provider that offers search results, customizable content, chat rooms, free e-mail, clubs, and pager. Yahoo.com stands in the fourth place after facebook.com, google.com, and youtube.com.
7. *Kaskus.com* or *kaskus.co.id*, the largest Indonesian on-line community that people use to share information or interest, to buy and to sell things.
8. *Wordpress.com*, free blogs that are managed by the developers of the Word Press software. The blogs include custom design templates, integrated statistics, automatic spam protection and other features.
9. *Twitter.com*, a social networking and micro blogging service that provide instant messaging, SMS, and a web interface.
10. *Detik.com*, a website contains the latest news, articles and online facilities. Alexa.com estimates that 93% of the site's visitors are in Indonesia.

1.3 Learning Process

In learning process, students actually take the greater portion of the whole process; moreover, those who want to graduate from schools or universities have to meet certain requirements embedded within the learning process. In this paper, we want to investigate the general requirements or criteria set in the process. Those criteria consist of eight indicators that we take from an excerpt by Beau Fly Jones, Gilbert Valdez, Jeri Nowakowski, and Claudette Rasmussen in “Designing Learning and Technology for Educational Reform” provided by NCREL –a laboratory focusing in education and learning. The indicators are listed as follow.

1. Vision of Engaged Learning

- *Responsible for Learning*. Students take charge of their own learning and are self-regulated. They define learning goals and problems that are meaningful to them; understand how specific activities relate to those goals; and, use standards of excellence, evaluate how well they have achieved the goals.
- *Energized by Learning*. Engaged learners find excitement and pleasure in learning. They possess a lifelong passion for solving problems and understanding ideas or concepts.

- *Strategic.* Engaged learners continually develop and refine learning and problem-solving strategies. This capacity for learning how to learn includes constructing effective mental models of knowledge and resources.
- *Collaborative.* Engaged learners have the ability to identify the strengths and intelligences of themselves and others.

2. Tasks for Engaged Learning

- *Challenging.* Challenging tasks are typically complex and required sustained amounts of time.
- *Authentic.* Authentic tasks correspond to tasks in the home and workplace.
- *Integrative/interdisciplinary.* Challenging and authentic tasks often require integrated instruction, which blends disciplines into thematic or problem-based pursuits, and instruction that incorporates problem-based learning and curriculum by project.

3. Assessment of Engaged Learning

- *Performance-Based.* Students construct knowledge and create artifacts to represent their learning.
- *Generative.* The overriding purpose of assessment is to improve learning. To that end, assessment should closely match the goals of the curriculum; represent significant knowledge and enduring skills, content, and themes; and provide authentic contexts for performance.
- *Interwoven with Curriculum and Instruction.* Assessment should include all meaningful aspects of performance.
- *Equitable Standards.* Parents and students should be familiar with the standards that apply to all students and be able to evaluate the performance of an individual or group using those standards.

4. Instructional Models and Strategies for Engaged Learning

- *Interactive.* Instruction actively engages the learner.
- *Generative.* Generative instruction encourages learners to construct and produce knowledge in meaningful ways by providing experiences and learning environments that promote deep, engaged learning. Generative instruction also encourages learners to solve problems actively, conduct meaningful inquiry, engage in reflection, and build a repertoire of effective strategies for learning in diverse social contexts.

5. Learning Context for Engaged Learning

- *Knowledge-Building Learning Community.* The learning community resists fragmentation and competition and enables students to learn more collaboratively.
- *Collaborative.* In learning communities, intelligence is assumed to be distributed among all members.

- *Empathetic.* Learning communities search for strategies to build on the strengths of all members. These strategies are especially important for learning situations in which members have very different prior knowledge.

6. Grouping for Engaged Learning

- *Heterogeneous.* Heterogeneous groups include males and females and a mix of cultures, learning styles, abilities, socioeconomic status, and ages. This mixture brings a wealth of background knowledge and differing perspectives to authentic, challenging tasks.
- *Flexible.* Flexible groups are configured and reconfigured according to the purposes of instruction. This flexibility enables educators to make frequent use of heterogeneous groups and to form groups, usually for short periods of time, based on common interests or needs.
- *Equitable.* The use of both flexible and heterogeneous groups is one of the most equitable means of grouping. It ensures increased opportunities to learn for all students.

7. Teacher Roles for Engaged Learning

- *Facilitator.* The teacher provides rich environments, experiences, and activities for learning by incorporating opportunities for collaborative work, problem solving, authentic tasks, and shared knowledge and responsibility.
- *Guide.* In a collaborative classroom, the teacher must act as a guide - a complex and varied role that incorporates mediation, modeling, and coaching. When mediating student learning, the teacher frequently adjusts the level of information and support based on students' needs and helps students to link new information to prior knowledge, refine their problem-solving strategies, and learn how to learn.
- *Co-Learner and Co-Investigator.* Teachers and students participate in investigations with practicing professionals. Using this model, students explore new frontiers and become producers of knowledge in knowledge- building communities. Indeed, with the help of technology, students may become the teachers as teachers become the learners.

8. Student Roles for Engaged Learning

- *Explorer.* Students discover concepts and connections and apply skills by interacting with the physical world, materials, technology, and other people.
- *Cognitive Apprentice.* Students become cognitive apprentices when they observe, apply, and refine through practice the thinking processes used by real-world practitioners. In this model, students reflect on their practice in diverse situations and across a range of tasks, and they articulate the common elements of their experiences.
- *Producers of Knowledge.* Students generate products for themselves and their community that synthesize and integrate knowledge and skills. Through the use of technology, students increasingly are able to make significant contributions to the world's knowledge.

2. Research objectives and design

2.1 Research Objective

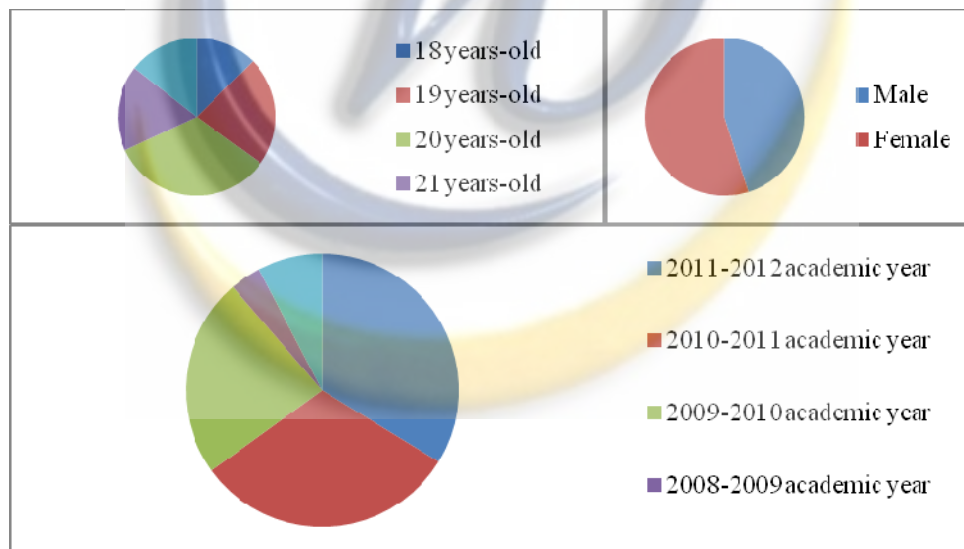
The objective in this research is to examine and to explain the role of social media in learning process. Our research is to find if Indonesia's most popular social media can be used to improve and to make learning process better.

2.2 Instruments

The first section of this questionnaire is demographic information which consists of sex, age and academic year. The second section contains 40 questions about social media and learning process. Questions for social media are 22 questions and questions for learning process are 18 questions. Each construction is rated on 4-point ranges, ranging from strongly disagree to strongly agree.

3. Result and Discussion

3.1 Respondent Profile



The respondents of this study consist of 326 business and management Widyatama University students. The composition of respondents is 45% male and 55% female. The age of the respondents is categorized as follows: 13% are 18 years old, 22% are 19 years old, 33% are 20 years old, 17% are 21 years old and 14% are above 21 years old. The student academic year indicates on what year these students enroll to and start studying at Widyatama University. Based on his or her academic year, the respondents can be classified as follows: 34% are from the 2011-2012 academic year, 31% are from the 2010-2011 academic year, 23% are from the 2009-2010 academic year, 4% are from the 2008-2009 academic year, and 9% are from 2008-2009 and older academic year.

3.2 Validity and Reliability of Measures

Measurement tools are verified by a validity measurement tool in that the tools verified are the questionnaires used in this research. Reliability measurement tools indicate whether the measurement output can be trusted or not. Cronbach's alpha is a common measurement tool to measure the reliability or internal consistency.

From the measurement test, R-table is 0.091. If R-count is less than R-table, then the variable is not valid. We can conclude that for all 40 questions the R-count are bigger than R-table (0.091), so all variables are valid.

If the value of alpha is less than 0.5, the variable used is unacceptable or not reliable. The Cronbach's alpha value for variable X is 0.829 and for variable Y is 0.816, so we can conclude that both variable X and Y are reliable.

3.3 The Role of Social Media and Learning Process

Hypotheses with F-test are used to determine whether there is a correlation between social media and learning indicators. The hypotheses are:

Ho : $\beta \leq 0$, there is no correlation between social media and learning process.

H1 : $\beta > 0$, there is a correlation between social media and learning process.

This research uses standard error $\alpha = 0.05$. If T-count value is bigger than or is the same as T-table value, then H0 is rejected and H1 is accepted. Another way to count correlation is by comparing significant value with the standard error. If significant value is less than 0.05, then H0 is rejected and H1 is accepted. This means that there is a correlation between social media and learning process.

From the result of this research, significant value is 0.000. Significant value (0.000) is less than the alpha value (0.05). The conclusion is there is a correlation between social media and learning process.

The correlation co-efficient of social media and learning indicators is 0.538. This shows that correlation between social media and learning indicators is categorized as average correlation (0.40-0.59).

Usually, we can explain R-square with determination co-efficient. The R-square value is 28.9%. That means that learning indicators are influenced by social media 28.9%, the rest of them (71.1%) are influenced by other factors.

3.4 Student's Responses on the Role of Social Media in Learning Process Questionnaires

3.4.1 Social Media

Table 1: Student Responses in Social Media

Statement	Average Total	Average %	Ideal Score
facebook.com	854	65.49%	1304
google.co.id	1,164	89.26%	1304
google.com	1,147	87.96%	1304
blogspot.com	810	62.12%	1304
youtube.com	929	71.24%	1304
yahoo.com	1,016	77.91%	1304
wordpress.com	730	55.98%	1304
detik.com	913	70.02%	1304
twitter.com	962	73.77%	1304
kaskus.com/kaskus.co.id	887	68.02%	1304

As we can see in table above, the majority of Widyatama University students use social media in their daily life. Almost all students use google.co.id and only 55.98% of the respondents use wordpress.com.

3.4.2 Learning Indicators

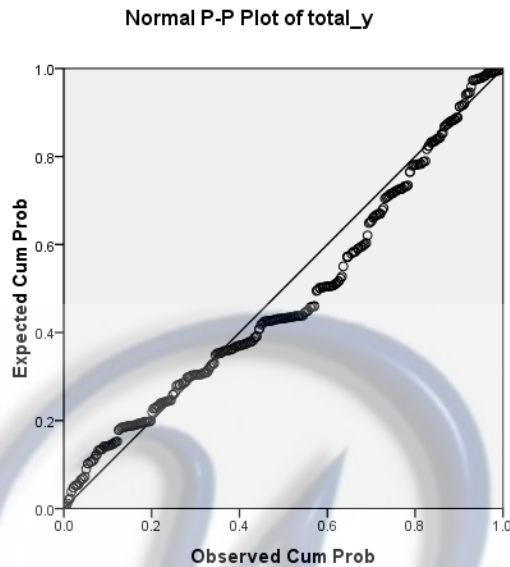
Table 2: Student Responses in Learning Process

Statement	Average Total	Average %	Ideal Score
Vision of Engaged Learning	983	75.38%	1304
Tasks for Engaged Learning	600	46.01%	1304
Assessment of Engaged Learning	912	69.94%	1304
Instructional Models and Strategies for Engaged Learning	899	68.94%	1304
Learning Context for Engaged Learning	956	73.31%	1304
Grouping for Engaged Learning	937	71.86%	1304
Teacher Roles for Engaged Learning	1,000	76.69%	1304
Student Roles for Engaged Learning	1,029	78.91%	1304

As we can see in table above, the majority of Widyatama University students are at the average learning process position. They are almost at the ideal score in the learning process. They tend to have good learning process except in “task for engaged learning” categories. They tend to be deficient in challenging learning, authentic learning, and integrative or interdisciplinary learning.

3.5 Normality Test

Figure 1: Normality Test



From picture above we can see that it is in normal distribution. It means that parametric statistics can be used. Data spread tends to be in the line equation.

3.6 Multi Correlation Test

$VIF = \frac{1}{1-R^2} = \frac{1}{1-0.289} = 1.406$, VIF value is under 10, it means that there is no multi correlation relation.

3.7 Auto Correlation Test

The auto correlation test value can be seen from Durbin Watson value. From SPSS we can see that Durbin Watson statistics is 1.792. It is between -2 to +2, so there is no auto correlation relation.

3.8 Regression Analysis

Regression analysis compares whether two variables have a causal or functional relation. Simple linear regression is used to compare one dependent variable and one independent variable. Regression analysis is used to examine the correlation between social media and learning process. Simple linear regression has common formula $Y = a + bx$. From computation using SPSS16, we can have that $Y = 1.716 + 0.553X$. If social media do not influence learning process, there are still 1.716 other factors that influence learning process. Every single addition of a social media indicator will add learning process by 0.553.

4. Discussion and Limitation

4.1 Discussion of Results

The correlation co-efficient between social media and learning process is 0.538. This shows an average correlation (0.40-0.59) between social media and learning process. The R-square value is 28.9; that means that learning process are influenced by social media by 28.9%, the rest of them (71.1%) are influenced by other factors. If social media does not influence learning process, there are still 1.716 other factors that influence learning process in that every additional social media indicator will give additional 0.553 for learning process.

Based on the probability value, significant value is 0.000 or less than 0.05. That means that H0 is rejected. Social media has an influence or a role in students' learning process.

Learning process using computer is teaching and studying using computer as the main source. The computer is not only about processing with personal computers and or notebooks, but it includes its supporting devices. These supporting devices are, for example, recording devices, earphones, projectors, cameras, internet connection devices, pointers, speakers, et cetera. Students think that studying with the computer can help them to learn faster; furthermore, it also helps both students and teachers. With computer and its supporting devices, reports, tasks, assignments, teaching processes, et cetera can be conceived only in one device and it is much easier. Therefore, teachers can focus on their responsibility besides teaching, such as doing research and community service.

There are 23 types of blogs, and based on alexa.com, the most searched social media in Indonesia can be divided into social networking sites, social search or search engines, blogs, video sharing, regional social media sites, micro-blogging and product based communities. From the top 10 social media in Indonesia, search engines or social search is the most searched sites in Indonesia. There are 3 social searches or search engines that are always searched; these sites are google.co.id, google.com and yahoo.com. Facebook.com is categorized as social networking sites, blogspot.com and wordpress.com as blogs, youtube.com as video sharing, kaskus.co.id or kaskus.com as product-based communities, twitter.com as micro blogging, and detik.com as regional social media sites.

4.2 Limitations of the Study

As with any other studies, there are also some limitations in this study. First, variables used are only two variables, social media and learning process. Based on research, there are 71.1% (100%-28.9%) other factor influence learning process. The second limitation is specific sample; not only the sample size but also the source of the sample might have weaknesses. Even though we provided the rationale for our choice of the sample, we had 326 responses, and all of them were from a single faculty. Considering these weaknesses, we have to be careful in interpreting and generalizing the results. For instance, our generalizations are therefore limited only to business and management students in Widyatama University.

Furthermore, it is worthwhile to mention that in designing the questionnaire, we focused on the respondent's ability to answer the questions. Since this study asked them about social media and learning process, they had to have enough experiences in various social media such as facebook, twitter, yahoo,

Google, et cetera. Nevertheless, there is no clear criterion to judge the degree of experience; some of the respondents in the survey might not have had enough experience in some social media.

Lastly, it is possible that the questionnaire might not have expressed the phenomenon enough. Based on the reliability and validity test, however, we feel that there is no cause for concerns about this issue.

Conclusion

Social media can be an alternative in learning process. Not every student uses social media to learn, but using social media for learning purposes can be a fun alternative in learning process. Even when students do not attend classes like the conventional classes, students can find sources for their learning in different ways. Learning with social media can be interesting because students do something that they like and they learn without being forced to learn.

Teachers can assign homework using social media such as giving task through facebook.com, twitter.com, blogspot.com, and wordpress.com. Students now are familiar with google.com, google.co.id and yahoo.com in helping them searching the given tasks. This habit should not be wasted because social media has been an indispensable part of students' and teachers' daily life.

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