



Workshop and Motivation for Improving Student Skills through the Information and Communications Technology

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Abstract: In the digital age, the role of information technology is needed to face competition in the community. Information and communication technology is an important element in contributing to changes that are fundamental to the structure of operations and management of organizations, education, transportation, health, and research. The internet is like two sides of a coin, the content offered is positive and negative, both are very dependent on the behavior of its users. The ease of access to the internet is increasingly being felt by the public with increasingly cheap hardware such as tablets and laptops as well as wider connection support. Various efforts to stem negative information continue to be pursued by various elements of society, but it is not effective if the user behavior is not changed. Teenagers are among the most vulnerable in the misuse of advances in internet technology, so it needs serious efforts to provide the right knowledge and skills in utilizing these advancements. By conducting workshops and motivation to improve the abilities and skills of Girimarto 1 High School students, it is hoped that school students can face the development of the digital era more readily. The results of this training gained a high level of satisfaction with the material that had been carried out.

Keywords: digital, education, internet, workshops

INTRODUCTION

Advances in information and communication technology with the various facilities and services available have become the needs of most people. The ease of information obtained makes information and communication technology especially internet services a source of information. One of the most visited services is the search engine. Up-to-date engines provide ease of information needed in seconds. The internet also offers a variety of academic information to the public, so that without being limited by space and time, at any time you can learn and study various knowledge and information. E-learning, open journal system, virtual campus, and various other educational sites, offer a variety of knowledge and skills that anyone can learn as long as there is an internet connection (Wiwin Hartanto, 2016). In addition to the positive content offered by the internet, internet advancements are also like two sides of a coin. The amount of negative content is very much and almost every time it increases. Pornographic sites, provocative content, hate speech, online gambling, even online games if not restricted will cause addiction for its users.

The utilization of technological advances depends on the community, users are free to choose because the internet is open. Even though there is an effort from the government to block negative content, but it is difficult and will not be destroyed. As the saying goes, one lost grows a thousand.

The use of technology in teaching and learning activities has changed the system of learning media from conventional patterns to more modern patterns. One form of change is computer media which produces electronic learning (Bakri et al., 2018). The ability of lecturers in interpersonal



communication also increases with classroom collaboration. Through training can make changes in cognitive abilities, motor skills, values of affection, emotional values, and spiritual values (Liantoni et al., 2019). The first step is to create your own web application to support your own online activities. The second option is to use the open-source software that is already available. Open-source software for creating websites generally uses a Content Management System (CMS) so that ordinary users more easily enter the content they want through the administrator page. Through this CMS, users can explore the designs and concepts of systems created. Each CMS has advantages and disadvantages of each. CMS for making online websites at this time there is no one that is specialized. Therefore, we need a CMS that can support teaching and learning activities owned by teachers and schools according to the characteristics of teachers and schools in Indonesia today.

The results of a survey conducted by the Indonesian Internet Service Providers Association (APJII) recorded 91% of internet users were young people in the age range of 15-19 and 88.5% aged 20-24 years. 88.3% access social media accounts when using the internet such as Facebook, Instagram, and YouTube. In addition, an indication of the dominance of young age can be seen from the activity of watching movies online, playing games, and playing music online as the primary choice of internet users as a source of entertainment (APJII, 2018).

A researcher from Setara Institut, Aminuddin Syarif explained the results of research conducted by Setara Institut regarding adolescent activities in internet usage. The survey, conducted at the high school (SMA) students in Jakarta and Bandung, notes that 41 percent of teenagers spend five hours a day on the internet, while 16 percent of teens use the internet for four hours and 15 percent use the internet for two hours per day. The results of this study also noted 90.8 percent of teenagers who use the internet to play on social media, such as Facebook, Twitter, and others. Researchers also added, these teenagers often use the internet to access entertainment. However, there are also some teenagers who access the internet for technological needs (Syarif, 2016).

Content Management System (CMS) is a system used to manage and facilitate the process of creating, updating, and publishing content together (Patel et al., 2012). What is meant by content in CMS is modifying the type of information in textual form, graphics, images, and in other formats. The term Content Management System (CMS) itself is actually very much, including among other software applications, database systems, data archives, workflows, and other capable processing tools that are part of the global information communication mechanism (Bianco & Michelino, 2010; Khaerunnisa et al., 2019).

CMS can also be defined as a combination of three different concepts, namely: content, process, and technology in this case software. Content is text, graphics, animation, audio, video, and all other media that form the basis of the system. A process is defined as a collection of activities that take one or more inputs and take actions to produce outputs. A process refers to a way that is integrated into the system so that users can carry out learning tasks. Technology or software is needed to carry out the process of controlling learning content via the internet (Altun et al., 2008).

METHOD

The training method used is the problem-based learning approach, which is by approaching the participants as people who are directly related to the problem. In order for the material to be understood properly, an appropriate delivery method must be chosen, for this reason, learning methods are used with case solving and question and answer. This method will stimulate participants to be interested in and actively participate in this training activity.

Based on the problems faced by these students, the solutions offered are as follows: Training in understanding and skills regarding the use of information and communication technology properly. Improving the ability of the students with training in the use of CMS as a learning media.

The implementation of community service activities took place in the Hall V Campus FKIP UNS Pabelan Surakarta. This activity was attended by students of SMAN 1 Girimarto, Wonogiri.

The community service activity that was held as a form of collaboration between the Informatics and Computer Engineering Education Study Program, FKIP Sebelas Maret University, and SMA Negeri 1 Girimarto with an MOU that had been signed by both parties since 2017.

Community service is carried out with workshops and motivational activities through the website aimed at providing hardskill and soft skill skills to students of SMAN 1 Girimarto so they have additional capabilities in terms of information and communication technology and are useful when graduating later.

The implementation method uses the following approach:

- 1) The preliminary survey approach explores the initial information on the problems of SMAN 1 Girimarto, Wonogiri, which resulted in an MOU from both parties.
- 2) Approach counseling through lecture forms.
- 3) An interactive dialogue approach that intends to find a way out of problems and obstacles that occur so that they have soft skills in resolving their experiences.
- 4) The CMS training approach as a learning media

RESULTS

The results Community service activities in the form of motivation and training in the use of CMS were carried out at Hall of Campus V FKIP UNS Pabelan Surakarta. The participants of the training were students of SMAN 1 Girimarto Wonogiri. The training method is implemented to facilitate the achievement of objectives in accordance with the training material presented. In this training, the method used is the Simulation / Practice Method.

In the first stage, counseling is given in the form of motivation regarding understanding and skills regarding the use of information and communication technology properly. Next, several problems were experienced, such as:

- 1) How to respond to the increase in internet technology that allows students to obtain various kinds of information.
- 2) How to utilize technology to support educational needs in schools.
- 3) How to deal with competition in tertiary institutions.



Figure 1. Lecture on the benefits of information and communication technology



Figure 1 lecturer giving material about the benefits of information and communication technology. The material provided in the form of ways to use the internet properly so that students do not access gambling content, pornography, violence and other criminal acts. Next about the benefits that can be obtained from technological developments such as the use of blogs as learning media for students.

In addition, motivational material is also given guidance in the face of competition in the world of higher education. This material is given so that students know the problems that will be faced when they have graduated from high school.

In the second stage, training on the use of CMS as a learning medium is carried out. The material chosen is using CMS-Wordpress. The instructional training model used in community service is the Dick and Carey instructional development model (Dick, W Lou, C, Carey, 2005). Utilization of WordPress CMS technology that will be realized to students includes the Presentation layer, Business layer, and Database layer. Database layer functions to store all data and information needed. Whereas the business layer provides the functions of the CMS and the presentation layer provides functions for the user interface for system users.

Here are the steps to use cms-WordPress and how to optimize cms-WordPress:

- 1) The first step is to prepare a WordPress file or can be downloaded directly on the official website of wordpress.org.
- 2) Open windows explorer, then type C:\xampp\htdocs in the address folder.
- 3) If the WordPress file is in zip form, then extract it first. The default extracted folder is usually called "wordpress". In this case we replace the folder with the name "my blog".
- 4) Now open your favorite browser. To run this offline WordPress, we can access it with the address http://localhost/folder_name. Type in the address bar. Then click on Create a Configuration File.
- 5) Fill in the database name, user name, and password that will be created. In the Database Host section, enter only the localhost. Click Submit.
- 6) Then fill in the data in the form of Site Title, Username, Password, and Email. After that click install WordPress.
- 7) Enter the username and password that was created in the previous step to be able to login to the WordPress Dashboard. Another method can be to type the address directly in the browser http://localhost/folder_name/wp-admin.
- 8) The next step is the display WordPress dashboard post, where the admin user can make new posts both in the form of text, audio, visual, and video content.
- 9) Then the dashboard display adds a new page on the website that will be created. Admin users can add new pages and can add text, audio, visual, polling, location, etc.

After that, some WordPress settings can be done such as changing the display theme, changing the web identity profile, and changing the favicon. The students conduct the training guided by the lecturer. The material in the form of training in the use of CMS as learning media.



Figure 2. Submission of CMS-WordPress training.

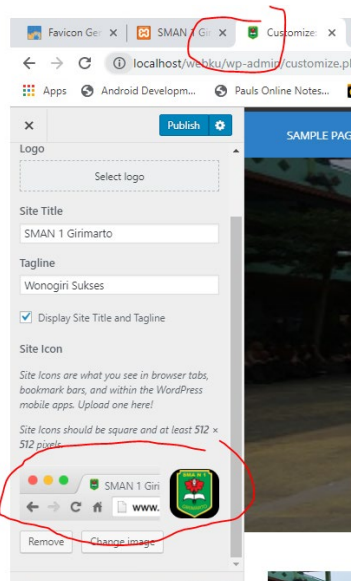


Figure 3. Editing favicon CMS WordPress

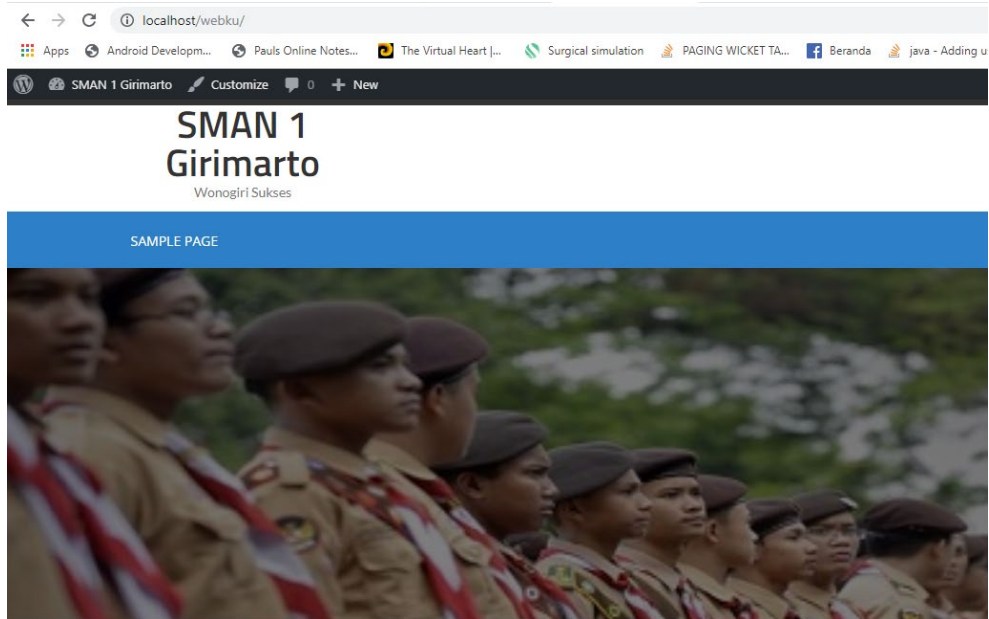


Figure 4. CMS Wordpress training results

The results of community service activities are to provide knowledge about internet technology that makes it easy for students to obtain various kinds of information. In addition, it provides additional insights and provisions on the use of CMS-based online websites as learning media. This shows that the training activities are as expected and right on target. With this activity, hopefully in the future students can make the most use of CMS-based online websites and make it easier for students to learn in school.

CONCLUSION

The conclusions that can be drawn from the implementation of this activity are as follows:

- 1) In the current digital era, there has been a paradigm shift in the world of education, there are challenges that require a change of view of the way of learning itself and the advancement of information and communication technology that provides many conveniences in the learning process.
- 2) An increase in understanding of students of SMAN 1 Girimarto in dealing with the development of the digital age and can understand the benefits of information and communication technology to support learning activities in schools.
- 3) Improving students' abilities in using CMS WordPress as learning media.

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