Teacher's Community Building Website to Facilitate Networking and Life-Long Learning

Arlinah Imam Rahadjo	Yulia	Silvia Rostianingsih
Petra Christian University	Petra Christian University	Petra Christian University
Siwalankerto 121-131	Siwalankerto 121-131	Siwalankerto 121-131
Surabaya , Indonesia	Surabaya , Indonesia	Surabaya , Indonesia
+62312983456	+62312983451	+62312983455
arlinah@petra.ac.id	yulia@petra.ac.id	silvia@petra.ac.id

ABSTRACT

Vision and Mission Educational Foundation (YPVM) Teacher's Community Building Website is expected to motivate and empower teachers to keep updating their expertise and professionalism. YPVM, as an educational foundation, has been providing teachers' trainings for years throughout East Java, Indonesia. It has also been aware of the needs of building teachers' community. However no communication media have been available for them yet. By conducting an analysis of the existing system and problems, a web-based Community Building website for teachers is developed. This application is equipped with a Content Management System (CMS) to allow customization of the design and content of the *web*site. The website also includes features on individual spaces for users, discussion forum and online member and seminar registration. An online library and project management tool are also integrated into the system to encourage self-learning and help YPVM to manage its activities. But these two features are not discussed at this paper. The responses of YPVM staff to the system testing are quite satisfactory on the completeness and appropriateness of the application. However further developments should be considered for maximum efforts.

Keywords

Community Building (CB), Content Management System (CMS), Teachers' Training, Web-based Library System, Individual Space, networking

1. INTRODUCTION

Education or human resource development is vital for building the nation. The formal institutions most responsible with this issue are educational institutions. Schools from the level of kindergarten up to high school play important roles in preparing the foundation of education. Teachers, which in this paper also include members of the board and school head-masters, are the main actors in playing their roles as educators.

If we take a look at the data from the Indonesian Department of Education as of March 8, 2008, there have been 243.327 schools in Indonesia (**http://npsn.jardiknas.org/cont/ data_statistik/index.php**), with 1.293.758 teachers covering those of the elementary up to senior schools (**http://nign.jardiknas.org/cont/data_statistik/index.php**).

Besides the necessity of going through formal education in teachers' training, quantitatively there have been quite big efforts in informal teachers' trainings in Indonesia for those big numbers of schools and teachers. Seminars and workshops have been set up for the above actors of education by various government or non government institutions to allow them to be kept updated. However the quality of most schools including the actors involved are still in doubt.

The expertise and professionalism of most Indonesian teachers cannot keep up with the growing and changing needs of human resource development to face the national and global challenges. The geographical condition of Indonesia as an archipelago contributes to the problems faced. Most teachers' trainings are held in Java. Limited funds and time from schools and teachers, especially from out of town or outside java, have kept away those educators from updating their knowledge on continuing basis. Specific problems faced by each school or each actor of education from time to time cannot be answered by once and a while seminars and workshops. Limited infrastructure on communication and facilities also contribute to the problems for the educators to share and update knowledge among them or to find references for self development and life-long learning

The building of a community of teachers across the country is an alternative way to facilitate continual sharing of knowledge and experiences among teachers. Building such community is expected to be able to motivate and empower the teachers to keep updating their expertise and professionalism to face the challenges in human resources development of the country. There have been such teachers' communities in Indonesia, though not the online ones. However, again problems of infrastructure on communication leave those existing community not working at their maximum capacity.

At the same time, internet as a powerful means of communication has been growing fast in its utilization in Indonesia. Internet with its capacity of closing the gaps on space and time has the potentiality to bridge the gaps among educators across the country to do networking. Despites of some individual school websites or the government official website for educators providing information on education, up to now there seem to have no online networking media among educators in Indonesia.

Being aware of the needs of developing the expertise and professionalism of teachers, YPVM (Vision and Mission Educational Foundation), a non-profit organization was established in 1999. This organization actively takes part in preparing educators to be servant leaders by holding seminars or workshops for teachers, members of the school boards and head-masters especially on the subject of *Educational Leadership & Management*. There have been efforts to facilitate networking

among those participants for seminars to keep updating their knowledge by giving them opportunities for them to communicate with each other or even with the resource persons of seminars and trainings held through mails and emails on individual basis, but these efforts haven't been working well as expected. They seem to face the problems of coordination and facilitation in motivating the teachers to interact and build a community.

A research has been conducted to try to answer the above problems. The purpose of this reseach is to help YPVM to realize its vision on facilitating networking among the members to motivate and empower teachers to keep updating their expertise and professionalism.

2. BASIC CONCEPTS

The development of this website for teachers is based on the concept of Community Building which, if related to information technology, is called Community Networking (Odazby, 2005). According to Odazby, Community Networking functions as an online media for a community of people with similar objectives, to share in order to develop the community formed. The facilities provided for this media included features such as forums and chatting among members as open communication channels and private chatting between certain number of people and emails as a closed communication channel.(Schuler, n.d). Odazby and Schuler pointed out that community networking which was the online version of community building. It had the power to facilitate communication among members without any limitation of space and had the potentiality to be developed to a large scale of networking up to an international scope, although still only limited to those who had access to internet.

The teacher's community building website is developed using a CMS (Content Management System). CMS itself is software to facilitate the content, design and publishing management of a web (Robertson, 2005). The CMS is used to allow flexibility and customization in managing and developing the website for future purposes. This flexibility prevents the administrator not to depend on the programmers to update the design of the website. It also helps the administrator to keep updating the website not only with new contents but also with various designs.

3. SYSTEM AND PROBLEM ANALYSIS

YPVM, as a non-profit organization, has had no promotion media to introduce its existence to the society at large. YPVM is using invitation letters and registration forms as media of promotion. These basic media of promotion were sent to schools and school foundations, limited to East Java. This condition has prevented YPVM to be widely recognized. Consequently the number of participants was also limited. Up to now there have been 30 schools in Surabaya and 25 Boards outside Surabaya involving around 150 teachers taking part in the seminars and workshops held by YPVM. As it had no system on memberships, YPVM had no information on the exact number of members. Informally teachers who have participated on the seminars or workshops have been automatically regarded as members. Registration for the trainings have also been conducted manually through phones or returning the registration forms.

The facilities as members have been limited to information on trainings conducted monthly. YPVM still had no media for communication among members or between members and YPVM. Consequently no significant networking was created among the members. It was also difficult for YPVM to contact the members if they changed addresses. Not so much feedbacks were gathered from the members to develop the organization. The members communicated individually with other participants or YPVM staff or resource persons through emails.

4. SYSTEM DESIGN

Through an intensive surveys and interviews on user requirements, a teachers' community building website (**http://www.ypvm.org**) has been designed and developed for YPVM to facilitate networking and life-long learning among teachers. The definition of the teachers is limited to teachers, members of school boards and school head-masters from kindergarten up to high school actors of education who become members of YPVM. MySQL Server was used to build the database, while PHP, MySQL, Javascript dan OS Windows were used to build the application

This Teachers' Community Building Website serves as a website for YPVM, is used as a promotion media to introduce its activities and provides online registration for members and participation to the trainings conducted. It also serves as a media for networking, equipped with modules on Community Building developed using Content Management System. The features of the website are as follows:

a.   Community Building

Community Building is a media provided for its members to communicate and share. Thus a network of people with the same interest is created. Each member can share his/her profile. The members can also send messages or post comments to other members. Alerts to members' birthday are also provided. Adopting some features of Friendster, the community building system allows each member to have a personal space to write his/her profile or to view his/her participation on the activities conducted by YPVM. This system allows the member to be located, contacted and commented by other members. Thus a community will be built among the members. As papers of seminars and trainings conducted by YPVM can be downloaded from this system, members who are not able to participate in those activities can still download and learn from the e-materials.

b.   Forum

Forums for sharing information, ideas and experiences are also provided to facilitate discussion with other members. Members can create their own groups with specific topics for the forum. These forums serve as a media for networking and learning.

Forums can also facilitate further discussion among the resource persons of seminars and trainings held by YPVM and the members after the seminars or trainings are over.

To participate in the discussion of certain topics, the members have to join the specific group of the forum they are interested in. The registered members have the rights to suggest topics of discussion in the specific group they are registered. The unregistered members are not allowed to read and participate in the discussion belonged to the specific group. This forum is

expected to document all postings among members, YPVM and the speakers of the seminars held to be access later as resources for self development.

c. Member Registration

YPVM website allows any non-members to do online registration and join as members. Most of the members are school teachers who have access to internet. For those who have no access to internet yet, YPVM provides an opportunity to register at the office of YPVM by providing registration form in hardcopy. The member registration is conducted by letting each member to write his/her personal data manually such as: name, address, job, position, phone, and e-mail. YPVM has a plan to conduct trainings on the use of internet for its members. These trainings are expected to let this research product contribute maximum benefits for the members of YPVM. This feature on online registration is expected to help YPVM to have complete information on members, process and maintain the data of its members efficiently and effectively.

d. Online Seminar Registration and Promotion.

An online seminar registration is also provided for members and non-members who are interested to participate in the trainings held by YPVM. This online registration is expected to attract teachers and people in the educational fields to join YPVM. This feature cut the process of invitation letters as media of promotion, as the members get used to access this website regularly. Regular updated news on the availability of seminars is provided and accessible for those who have access to internet.

e. Book Review

Another feature provided is Book Review on collection posted by YPVM, allowing members to give comments. This feature is equipped by Download Feature used as a media for file sharing among members. Those files are mostly slide presentations and other materials from the seminars held by YPVM.

5. SYSTEM TESTING AND RESULTS

The YPVM *Web*site can be accessed by members as well as non members. However the non-members can only do the online registration and view the front page only. The members have to login to start using the features of this Community Building website. The system was tested by entering the name of Silvia as a username to login the system. The login page can be viewed at Figure 1.
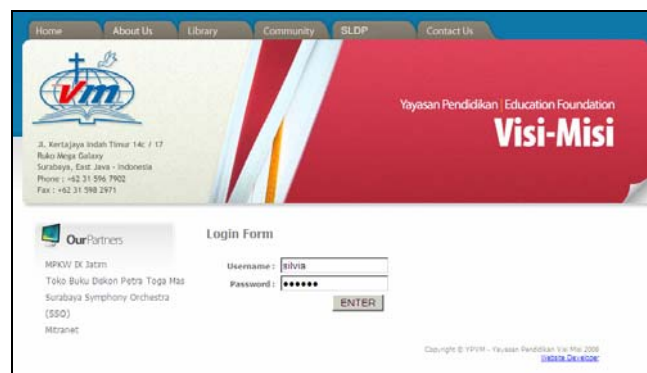

Figure 1. Login Page

After Silvia has been successfully login, Silvia has the right to access the community building and discussion forums. Figure 2 is an interface for Silvia's profile.

Figure 2. Member Profile

As Silvia enters the system, she is allowed to edit her profile, customize her interface, change password, view other members' profiles, send and receive messages, view birthdays, download files, join discussion forums, post messages and view book reviews. Figure 3 shows the interface of updating profiles of Silvia as a member.
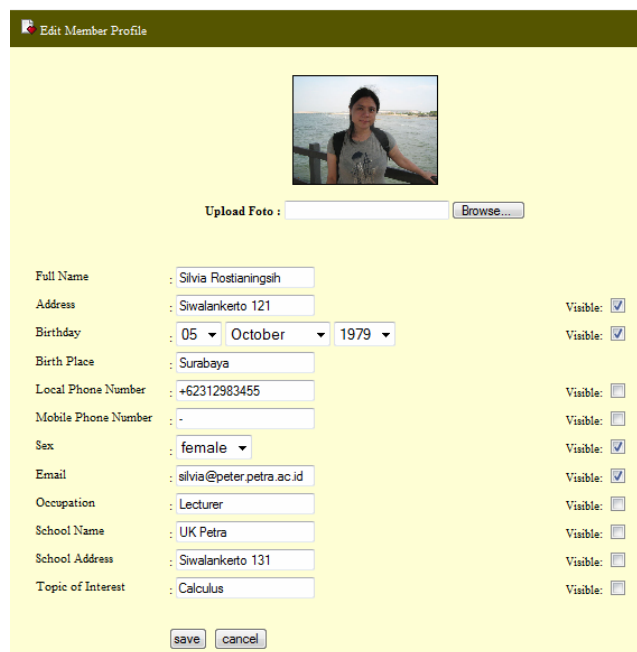

Figure 3. Edit Member Profile

By using CMS, the system provides features for the members to customize the interfaces of their web pages to their own choices. Using the Customized Interface Feature, the members can change the background color, or put pictures at the background. As shown at Figure 4, a member uses pictures of Love as the interface background of his page.
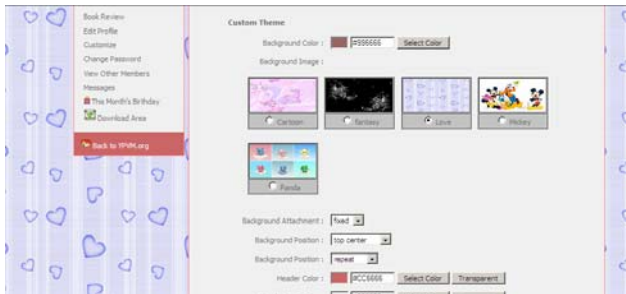
Figure 4. Customized Interface Feature

The user can also view the profiles of other members as viewed at Figure 5. Using this menu, the user can search other members by writing the name of the member searched.
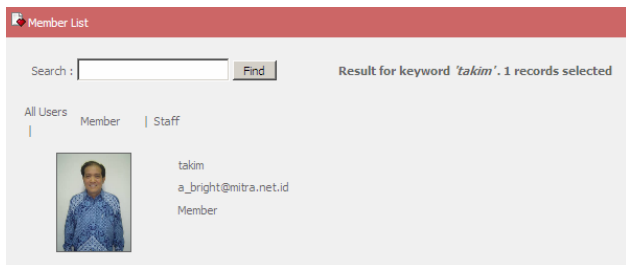

Figure 5. Search Other Member

The User can access the profile of a member by clicking the intended photo. The user can send messages, post comments or invite the intended member to chat as viewed at Figure 6.
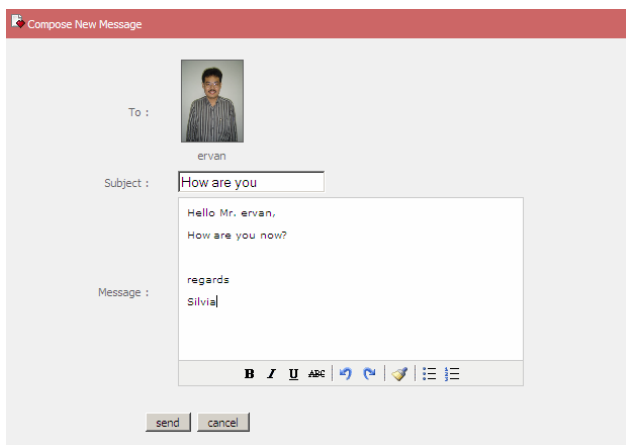

Figure 6. Compose New Message to Other Member

The members have an Inbox and Outbox to keep messages from and to other members.

Figure 7. Forum

To join a group discussion, a member has to register to the specific group. Figure 7 shows that Silvia has not yet joined the "*Pelatihan Teknologi Dasar (PTD)*" Group. So Silvia cannot access the discussion topics posted in this specific group. On the other hand Silvia has joined the group on "Info Kegiatan Sekolah". So she can access this group, post new topics or give comments. Figure 7 shows how Silvia as a member of YPVM is making use or the Forum provided at this system.

Another feature provided is Book Review on collection posted by YPVM, allowing them to give comments as viewed at Figure 8.

Figure 8. Book Review

Download Feature is used as a media for file sharing among members as viewed at Figure 9. Those files are mostly slide presentations and other materials from the seminars held by YPVM.
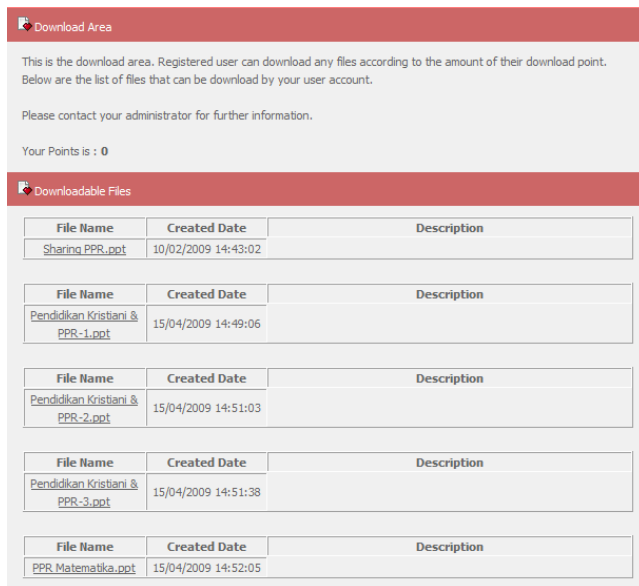
Figure 9. Download Area

6. CONCLUSION

The application developed has been tested by the staff of YPVM. Questionnaires have also been distributed to gather responses towards the appropriateness of the application against the user requirements. The responses of the staff were quite satisfactory towards both the completeness and appropriateness of the features against the requirements (83,33 %).

As this application has just been developed, a test to the real members has not been conducted yet at this time of writing this paper. However this application has also been tested against some representatives of users, including the distribution of questionnaires for them to respond. They also gave quite satisfactory responses on the completeness (75%) and appropriateness of the features against the requirements (80 %), but they gave better responses towards advantages of the website for networking (90 %).

Based on the responses of the respondents and self evaluation on the application, there should be improvement on the features provided. More powerful use of CMS has yet to be designed in allowing more flexibility in expanding menu and template designs, both for administrators as well as for members in managing its own personal space. Inclusion of digital library collection to be provided for the members will give opportunities for members who live far to be able to do the self-learning by access to full-texts. There should also be a facility to upload papers from the resource persons and writers for YPVM magazine. Those papers and online magazine can also be an automatic entry for the digital collection of the library.

Of course the real indicator of success of this website in encouraging networking among members and life-long learning lies in the growing number of members over the years who do the real online networking activities. In due time the indicator of success also lies on the increase quality of members and the schools where they are associated. It still has to be proven yet. There should be another research on this issue.

Another proof of success of this community building website in growing the expertise and professionalism of teachers can also be indicated by the knowledge production of each member in any form of publication. However this objective has to be accommodated by further development of features in the ability to upload, share files among the members and integrate those publication into the digital library collection of the library. There should also be a feature on providing online collaborative writings among teachers.

7. ACKNOWLEDGMENT

8. REFERENCES

Departemen Pendidikan Nasional. (2008). Nomor Pokok Sekolah Nasional : Rekap Data. 08 Maret 2008. http://npsn.jardiknas.org/cont/data_statistik/index.php

Departemen Pendidikan Nasional. Direktorat PMPTK DEPDIKNAS (2008). Nomor Unit Pendidik dan Tenaga kependidikan : Data Statistik 2007. 08 Maret 2008. http://nign.jardiknas.org/cont/data_statistik/index.php

Odazby, F. and Frank Odasz. (18 Maret 2008). What is a Community Network? And why you should care? Community Technology Review. 2005. http://www.comtechreview.org/fall-2005/000347.html

Robertson, J. (18 Maret 2008). So, What is a Content Management System? KM Column(03 Juni 2003). http://www.steptwo.com.au/papers/kmc_what/index.html

Schuler, D.(18 Maret 2008). Community Networking: A Network of Sustainable Communities. Heise Zeitschriften Verlag. (n.d.) .http://www.heise.de/tp/r4/artikel/8/8024/1.html