# The Use of Teachers Communication Forum Through an Open Educational Resource in Indonesia

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An effort to improve the quality of teachers in Indonesia was in line with the emergence of new challenges based on the need of the nation and an educational policy. In accordance with a regulation of a ministry of national education of Indonesia in 2007, the standards of academic qualifications and competencies of teachers in Indonesia should be up-graded. As Universitas Terbuka (UT) was appointed by the Indonesian government to up-grade primary teacher qualification, the study program of Primary School Teacher Training (for classroom teachers) has been the biggest program with a total student body of almost 434 thousand students (76.95% of the total UT's student body) in 2012. With a large number of student body in the Primary School Teacher Trainings program, UT developed a portal (website) which dedicated to teachers in Indonesia called Guru Pintar Online (Smart Teacher Online) in 2010. This website was designed as an open and free access for teachers in getting information related to teaching activities that would increase their competencies in a teaching-learning process. The website was considered as a pioneer in providing a wellorganized open educational resource for teachers in Indonesia. In 2011 – 2012, the website was formally introduced and socialized to teachers in 12 cities in Indonesia namely Samarinda, Surakarta, Pontianak, Jakarta, Bandung, Palu, Tangerang, Batam, Kendari, Magetan, Makassar and Medan. In 2012, we conducted a study on how elementary's teachers use and take advantages of the Guru Pintar Online website. The purpose of this study was to examine the use of discussion or communication forum for teachers as one of the features provided in the Guru Pintar Online website. The study focused on the communication or discussion forum that allows teachers to discuss and share their experiences, problems, or successes in their teaching-learning process. There were 240 respondents participated in the study. The instrument in the study was consisted of a list of questions related to the use of the communication forum. In addition to the questionnaire, this study used a focus group discussion to collect information on the use of the communication forum in depth. The results showed that the majority of respondents (94%) use the Guru Pintar Online in order to increase their knowledge on learning materials and teaching strategies. The results also indicated that 97% respondents enjoy communicating with colleagues on learning issues and 88% of participants agreed that the forum becoming a tool to seek help from colleagues and peers. In general, the result showed a positive attitude towards the use of the Internet, and the majority of respondents were intent to use the website continuously. The use of Guru Pintar Online website has given an excellent result as a means of providing clinical services to teachers. In particular, the existence of the website could encourage teachers to use the website as discussion or communication forum among teachers as well as had benefited in improving teacher's professionalism both in rural and urban areas.

Keywords: Teacher Communication Forum, open educational resources, teacher up grading.

#### **Open Educational Resources: Global Trends in Education**

In the last decade, development of information and communication technology (ICT) is remarkable, dissemination of information and knowledge and the search becomes easier. The sophistication of information on Internet search engines like Google helps in finding information needed easily. Within seconds, we will be able to obtain information about certain things. This condition also triggers various global movements (global movement) that significantly affect the open as open education

movement. Global movement that is currently growing rapidly covers the movement of open-source software, open content, open license, and open educational resources. Atkins, Brown and Hammond (2004) define OER as:"... teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property license that permits their free use or repurposing by others. Open educational resources include full courses, course materials, modules, textbooks, streaming videos, tests, software, and any other tools, materials, or techniques used to support access to knowledge." (p. 4)

With these definitions then all forms of learning materials and software that can be used freely has opened more opportunities for everyone to get better learning. There are many open educational resources (OER) that can be searched in the Internet. One of specialized websites is MERLOT which stands for Multimedia Education resource for Learning and Online Teaching. Through MERLOT site, we can find a variety of learning materials from a variety of disciplines. The Open University also provide learning materials that can be obtained for free (open educational resources) by the public through Internet access, such as material enrichment lectures (www.ut.ac.id.) There are number of very good learning materials on the Internet which not fully utilizing the capability of the technology. The Internet is only used as a tool to distribute learning materials. There are a lot of materials do not include or provide a facility of communication between learners or between learners with tutors / instructors. However, Allen (2003) states that the quality of learning materials using technology cannot be judged only by the used of the advanced technology but it will also depend on the quality of its content.

# **Open Eductional Resources in Indonesia**

The potential use of the Internet for educational purposes has been explored around the world. In some countries, the existence and impact of the Internet is very visible. The use of the Internet in developed countries clearly far beyond compared to developing countries. Over the last five years Internet usage in Indonesia has improved, although still limited to a few major cities.

It is interesting to note that the growth of Internet users in Indonesia is probably mostly the result of the high mobile phone penetration, which is very high (110%) with the number of subscribers passing 260 million by early 2012, up by almost 200 million from just five years earlier (Evans, 2012). The wide use on mobile devices has also made Indonesia as one of the top three countries with highest Facebook users at 47,539,220 (Internet World Stat, 2012). As shown in Tabel 1, the Internet user in Indonesia during period 2008 to 2012 increased significantly.

Table 1. The Internet User 2008 - 2012.

Year	Internet User (in million)		
2008	20		
2009	25		
2010	30		
2011	55		
2012	61		

(Source: Indonesia Internet Service Provider Association, 2012)

Gradually, the Indonesian government is also building the Internet infrastructure in the outermost, farthest, and left behind regions, through the Ministry of

Communication with its "Internet Service Plans Circumference (PLIK)" and "Mobile Internet Service Plans Circumference (MPLIK)" Programs. With these initiatives, especially with the "District Internet Car Service Center" at all districts in Indonesia, it is expected that by 2014, the Internet user in Indonesia will reach 80 million (Detik.com, 2012).

In the education sector, the use of the Internet for educational purposes increase as a result of greater awareness on the Internet capability to connect education professionals throughout Indonesia, as well as to enhance teaching and learning process. There are many websites for educational purposes have been developed by the government, schools, organizations, and by the individual who concerned. For examples: School 2000, edukasi.net, One School One Lab, and the Internet Goes to School (Daryono & Belawati, 2013). Many websites are intended primarily as an information clearinghouse to disseminate information; others are designed to function as an Internet discussion forum for community education, especially teachers and students.

Compared to the population of teachers in Indonesia, there are only a few numbers of teachers who deliberately use the Internet to improve their teaching and learning process. Most of them use the Internet to seek general information such as news or hobbies. This fact is not only due to a limited-access Internet but also lack of awareness, attitudes and motivations to take advantages of the advanced technology. An effort to encourage teachers to use the Internet is still incidental and individuals. In some schools which provide innovative technology, teachers usually have a better opportunity to use various forms of technology, including computers for the Internet. Even though the Indonesian government has a clear objective to promote the use of the Internet in schools but due to a huge number of schools in Indonesia, it will take a few years to really make a real impact.

Another thing that should be taken into consideration is teacher competencies. A study conducted by the Ministry of Education showed a large percentage of teachers who are not competent to carry out the teaching role and their responsibilities appropriately and optimally. A study showed that out of the 2.7 million teachers (employed by the government), the number of qualified teachers at the basic education level was 50.7%, 64.1% at secondary education, and 67.1% at a senior secondary level (Directorate of Labour Education, 2008).

Related with efforts to improve the competence of teachers in Indonesia, Universitas Terbuka (UT) which has a biggest teacher education program in Indonesia has developed a dedicated portal for teachers ("Guru Pintar Online" at http://gurupintar.ut.ac.id) to further serve teachers in Indonesia, which aims at facilitating continuous learning of teachers. The website was considered as a pioneer in providing a well-organized open educational resource for teachers in Indonesia. The portal contains a forum where teachers can interact with each other, an instructional teaching clinic where teachers can learn from other teachers through video-based real cases, as well as numerous materials developed by both UT and other educational open sources. This portal has already been used for two years so that it is important to conduct a study on how teachers are using the portal for teachers "Guru Pintar Online." The website was formally introduced and socialized to teachers in 12 cities in Indonesia namely Samarinda, Surakarta, Pontianak, Jakarta, Bandung, Palu, Tangerang, Batam, Kendari, Magetan, Makassar and Medan.

## **Research Purposes**

The study intended to collect information on the Internet usage patterns by teachers, mainly refers to online information on learning and teaching and education in general. Specifically, this study examined the use of portal for teacher "Guru Pintar Online" as a medium for interaction among the teachers's community. The study investigated the user's goal, perception on cost and benefit in using the Internet as well as the intensity of using it. The information gathered was used to discuss the implications for policy development and program implementation of any effort to provide the internet-based open source programs for teachers.

# Methodology

The data was collected using a questionnaire, out of the 257 questionnaires filled out there were 240 questionnaires could analyze properly. Data collection was conducted through interviews as well. The interviews' data included in interpreting the results. Respondents were selected from public and private school teachers from all educational levels (kindergarten / early childhood, elementary, junior and senior high). The respondents were from 12 cities in Indonesia that representing the urban and the rural areas. Those cities were: Samarinda, Surakarta, Pontianak, Jakarta, Bandung, Palu, Tangerang, Batam, Kendari, Magetan, Makassar and Medan.

# **Findings and Analysis**

# **Demography**

Demographic data showed that the age of the participants ranged from 20 years to 51 years; 36.8% were male and 63.2 were female. The participants were teachers from all educational levels which were: early-childhood teachers / kindergarten teacher (26%), elementary school teacher (43.4%), junior high school teachers (14.6%), and senior high school teachers (16%).

#### Frequency of the Internet Usage

The majority (74.1%) respondents indicated that they were using and familiar with the Internet. The rest of the respondents who did not use the Internet were excluded from the analysis. The intensity of those who use the Internet was varied; once a week (24%), once in a month (47%), and the rests were using the Internet less than once in a month. In fact, the use of the Internet for only one or twice in a week considered low. There is an expectation that if the teachers use the Internet intensively, they will get more resources and information related to their activities as teachers. In terms of where the participants access the Internet, the data showed that 45% accessed the Internet from working place (school), from home 23.6 %, from an Internet cafe 18.9 %, and from mobile devices were 12.3%.

# The use of the teacher communication forum (FKG) through Internet

One of the purposes of the study was to investigate the use of teacher's communication forum through the Internet which is provided in the portal dedicated for teachers called "Guru Pintar Online". This forum is classified under three categories. The first category relates to improvement to the learning process; the

second relates to communication between teachers, and the third relates to professional development.

Regarding to the used of teacher communication forum, Table 2 shows that 86% of the participants reported using the Internet for enrichment material. The Internet able to provide alternative enrichment materials both from local sources and international sources. Before the Internet, technology existed, teaching-learning materials have been limited to textbooks and therefore, there were few teachers provided supplementary materials for the students. In Indonesia, it is not easy for teachers to get a variety of textbooks. Some teachers who want to use more illustrations or enrichment for their subject should get it from elsewhere. Thus, it was not surprising when the data showed that most of the teachers use the Internet to get an enrichment material for their teaching and learning process.

The enrichment materials that were provided on the website for teachers "Guru Pintar Online" were developed in Indonesian language. The policy to develop the content in Indonesian language was due to lack of adequate material or information in Indonesian language. Therefore, teachers were encouraged to share and upload their experiences on the website. So that there will be more information or materials available on the website to share to others..

Purposes of Using the Website	Once (%)	Sometimes (%)	Often (%)
Enrich student learning materials	14.6	22.5	62.9
Learning new strategies in learning	19.1	47.2	33.7
Student Evaluation	53.9	34.8	11.2
Encourage students to use Internet	27.0	46.1	27.0
Encourage students to collaborate using the Internet	42.7	36.0	21.3
Train students to use Internet	56.2	30.3	45

Table 2. Purposes of Using the Communication Forum through Internet

The dedicated portal for teachers "Guru Pintar Online" (GPO) was specifically designed to help teachers learning new approaches and methods in teaching process. The data shows that there were 80.9% using the Internet to get information on new teaching strategies. The data shows that there were some teachers also use the Internet to engage students and assigning them to search for information. However, these activities were not used intensively, only 28.1% of teachers often assigned students to use the Internet, while 33.7% of teachers assigned students to search information. It seems that the difference was related to the school where they are working with.

It is interesting to note that more than 56.2 percent of the respondents trained their students on how to use the Internet. By helping their student to use the Internet in the early stages, the teachers expected that their student would be able to use the Internet intensively. The teachers believed that once the students are familiar with and interested in using the Internet, they can be expected to explore their own and fostered continued curiosity.

The data shows that the participants did not use of the Internet for communication purposes, either to students, to other teachers or the student's parents. The finding was understandable because most of the participants used the Internet when they were in the school. From the total respondents who use the Internet, there was 50.6 % use it at school, and 40.4 % of them were public schools' teachers. In some areas, there are public schools known for their quality and their

efforts continuesly to improve their school's curriculum and teaching and learning process.

#### **Teacher's communication Forum**

Based on data collected, there were 240 teachers have accessed to the teacher communication forum (FKG) from the 12 areas of FKG's activities. There were 41% Learning Model (), Learning Method (22%), Learning Approach (15%), Learning Media (11%), Classroom Management (7%), and other topics (4%). The following table describes the topics that have accessed the FKG. The data shows that there was a small percentage of the participants also accessed much other information from the website. The topics or information that had been accessed by the participant included several topics such as: test, assessment, attitudes, skills Assessment, curriculum Issues, child development, counseling, and so forth. The interesting finding from the study on the teacher communications forum as a medium of interaction. There were 94% (225) of participants found that the content discussed in the teacher communication forum was relatively easy to understand. Eighty-three percent (199) of the participants stated that teacher's communication forums helped them to have new experiences. In addition, 83% of the participants stated that they tried to connect the content that they read in the teacher communication forum with their daily teaching and learning activities.

The finding shows that 72% of the participants expressed that the teacher communication forum was important as a medium of interaction between peers. Meanwhile, efforts to obtain information from teachers in the GPO communication forum for linking content with the reality of the issues presented in study 218 respondents stated by the teacher. Forum's teacher communication as a tool to seek help from colleagues and peers when they got a problem by 212 people (88%) of respondents, only 22 people (28%) said no. In that regard, the respondents 235 teachers (97%) also stated that they enjoyed communicating with colleagues around issues of learning through these forums. The following graphic describes the data.

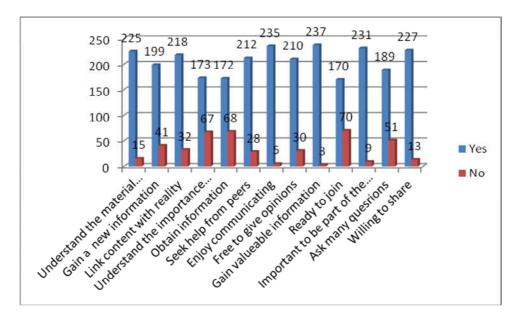


Figure 1. Teacher communication forum as an interaction medium

From the table above we can also see that 210 teachers (87%) feel free to give and receive information from the peers through communication forums. Meanwhile, 94% of teachers (237 orang) stated that they got valuable information from teachers as well as the communication forum 170 teachers (70%) stated that they were ready to join in the discussion in the forums of communication. All teacher respondents (96%) felt that it is important for teachers to be part with the group of teachers in the GPO communication forum. The data shows that there were 227 participants (94%) were willing to share information with colleagues through forum communication at the GPO. However, there were 51 respondents (21%) stated that they did not ask many questions about the school learning problems in the forum. This might be related to the teachers' skills and expertise in using the Internet. Thus, they can be categorized as a passive user in the teacher communication forum.

Another important finding related with the use of media communication forums GPO was the access point of the participants. The data shows that there were 167 respondents were regularly use the teacher communication forum to interact with fellow peers, while 73 participants stated they were only a passive user. Regarding the access point communication forum GPO, 97 participants (44%) could access the communication forum from their home, while 142 others got access to it from school.

In terms on how the participants used the portal/website "Guru Pintar Online" the following graphic presents the data for the purposes of utilizing the communication forum GPO.

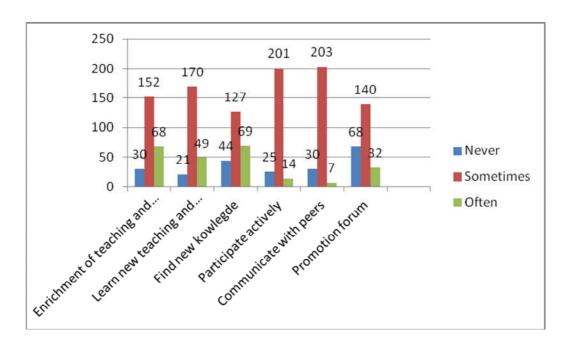


Figure 2. The utilization of the "Guru Pintar Online" website

Regarding the utilization of the teacher communication forum "Guru Pintar Online", 152 teachers (61%) stated that they occasionally utilized the communication forum to enrich the learning material. Meanwhile, there were 58 participants often use the forum to enrich the learning materials, and there were 30 participants said that they never utilized. In terms of getting new teaching strategies through forum communication teachers, there were 170 respondents (67%) stated that they sometimes used this forum for the purpose. While 49 others states frequently and

only 21 participants said at no time to utilize the communication forum to learn new teaching strategies. There were 127 teachers (61%) occasionally utilize these forms of communication media for this purpose, while 69 participants used the forum frequently, and 44 participants said never to use this forum for professional development purposes. As described earlier, the respondents are more likely to passive in communication teacher at GPO forum. It is seen from the data there were 25 participants (45%) stated they never actively participated in professional discussions on the GPO, while 201 respondents (87%) stated they occasionally participated actively in professional discussions, and 14 participants stated they were actively participating in the forum. In order to get a new colleague, 203 respondents (83%) occasionally utilized the communication forum, and seven other participants (28%) stated that they often used the forum. The number of respondents who never used the forum to make new friends were 30 participants (39%). In order to promote and schools and school programs, 68 participants (67%) said never to utilize the communication forum to promote their schools and their programs. A total of 140 participants (77%) stated that there occasionally use the forum for a promotion activity, while 32 others stated that they often utilized the GPO communication forum for promotion activities.

Related to experiencing of the participants in utilizing the communication forum "Guru Pintar Online", there were 15 participants (33%) stated that they had difficulty in opening access to communication, 32 others said they had difficulty in becoming members of the forum. Most difficulties experienced by teachers is when they want to give us your feedback in the enrichment of the material in the GPO. This was experienced by 193 people (82%) of teachers. The following figure shows the difficulties experienced by the respondent teachers.

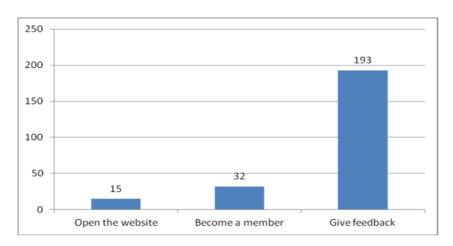


Figure 3. The difficulities in utilizing the "Guru Pintar Online" website

Data on the difficulties experienced by the participants in using GPO as mentioned above was important to note as inputs and follow up by the Development in order to improve "Guru Pintar Online" website. In regard to costs, all respondents (100%) did not feel the cost as a burden. All of them mentioned that although they have to pay for the Internet, they would like to use the communication forums to interact with other teachers. This suggests that the cost is not an issue for them.

## Perception on the use of the Internet

Despite the difficulties faced by teachers, the data shows a positive attitude towards the use of the Internet. Given the difficulties that they experienced, the participant who did not interest to use the Internet was 13.2 percent, while 86.8 percent of respondents indicated that they were ready to continue using the Internet, and they were willing to pay for the access.

Based on the reflections of the respondents who did not willing to use the Internet because their income was not enough to cover the cost of using the Internet. This situation faced by teachers who live in rural areas. This case becomes worse for teachers who were employed in a part-time basis. On the other hand, for teachers who were teaching in the cities, they earn higher incomes than those who teach in districts and rural areas, so that they could pay for the internet access.

# Closing

Although the Internet access in Indonesia is a problem, but the government of Indonesia continues to improve the accessibility of the Internet in the outermost regions, territories, and the furthest behind regions. In more specific effort, Universitas Terbuka which has the biggest teacher education program dedicated the "Guru Pintar Online" to support teachers all over Indonesia by providing useful information for teachers through the Internet.

The data shows that most of the participants who were teachers use the Internet to improve the teaching and learning process. This was dominated by the need to seek materials as supplement learning materials in a teaching-learning process. This fact seems to be an interesting finding and meet the purpose of development of the "Guru Pintar Online" website. Another finding which is not surprising was the fact that the participants did not use the "Guru Pintar Online" website for communication with their peers. This fact was mainly due to the habit of the participants who prefer having a face to face communication. It is expected that the habit will gradually change.

In order to maximize the use of the website, it seems that a provision of online help at the "Guru Pintar Online" portal should be enhanced. This will help for those who are not ready in using the Internet. This service must be maintained constantly and consistently to motivate teachers to use it.

In the next couple of years the use of the Internet by teachers will increase so that is expected more teachers will have more access and need more information from the open educational resources; one of them will be the "Guru Pintar Online" website. This condition will be no doubt contribute to the transformation of teaching and learning in the current year and future years. In conclusion, it is apparent that:

- The implementation of the "Guru Pintar Online" website should pay attention to teachers' characteristics and ICT infrastructure so that the learning process can be implemented effectively
- The implementation of the "Guru Pintar Online" website requires a better preparation considering a change in habits of teachers from face-to-face teaching and learning process into teaching and learning through the Internet.

 The development of the "Guru Pintar Online" website strongly supports the learning process through the Internet. However, the management of the "Guru Pintar Online" website is not merely mechanistic and technical. There are aspects of management that require the non-technical, manual, and individual approaches.

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