Teachers’ Portal: An Impact Study including TCV Analysis

December 2017
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<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>a2i</td>
<td>Access to Information</td>
</tr>
<tr>
<td>BBS</td>
<td>Bangladesh Bureau of Statistic</td>
</tr>
<tr>
<td>IDI</td>
<td>In-Depth Interview</td>
</tr>
<tr>
<td>KII</td>
<td>Key Informant Interview</td>
</tr>
<tr>
<td>MMC</td>
<td>Multimedia Classroom</td>
</tr>
<tr>
<td>RM</td>
<td>Results Management Team</td>
</tr>
<tr>
<td>SPSS</td>
<td>Statistical Package for Social Science</td>
</tr>
<tr>
<td>TCV</td>
<td>Time, Cost and Visit</td>
</tr>
<tr>
<td>TP</td>
<td>Teachers’ Portal</td>
</tr>
<tr>
<td>UNDP</td>
<td>United Nations Development Program</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
</tr>
</tbody>
</table>
IV. Acknowledgement

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V. Executive Summary

In this modern technology based era, teaching is becoming one of the most challenging jobs and also demand the integration of ICT in the education system for professional development as well as to improve the education system. Teachers' Portal is an online based platform for the teachers. A study entitled “Teachers Portal an impact Study” was conducted to evaluate the effectiveness of the Teachers' Portal. The study was conducted at whole Bangladesh as the Teachers’ Portal is open to all the teachers but need to be registered in TP. The purpose of the study to see the tendency of using TP actively & also identify the teachers’ interest in TP contents in MMC.

Findings showed that Teachers’ Portal is one kind of teachers’ community where the main purpose of the community people is to professional development as well as to improve learning method. Here, most of the teachers (52%) collect content from Teachers’ Portal. Teachers preferred to downloading (85%) the content compare to uploading (58%) the content in TP. Moreover, teachers positively accept the other teacher’s comment and also update (61%) their content based on other teachers comment. Due to the attractive and interesting content of TP the ratio of student’s attendance (62%) have increased in the class. It is also observed that now students can understand the complex topics easily (63%) and actively participate in class (40%).

There are some hard to reach the area where it is very difficult to ensure internet facilities, in that case, it is one of the main challenges using TP. It is seen that there are a huge amount of content in TP but ensure the quality of content needs to form an expert panel among the teachers. One of the best recognition of TP is that to select the teacher as the best teacher on a weekly basis. Some teachers opined that if the criteria for selecting best teacher is shared with the teachers, they can improve themselves on basis of this criteria before final selection.
Chapter: 1 Introduction and Background

1.1 Introduction and Background:

The era of technology has led to an increased use of ICTs in all sectors, especially education sector. The government of Bangladesh is keeping pace toward building a digital Bangladesh; it is a national dream that especially emphasizes on the application of digital technologies. To build a digital Bangladesh the government of Bangladesh implemented a large number of the project relating to digital technologies and also a number of projects are underway. a2i is a development programme under prime minister’s office working to e-Governance and one of the important initiatives of a2i is Teachers Portal. UNDP and USAID supported Access to Information (a2i) Programme of the Prime Minister’s Office of Bangladesh, in collaboration with the Ministry of Education and the British Council, designed and developed an online platform named ‘Teachers Portal’ (www.teachers.gov.bd) as an alternative to the traditional form of teacher training.\(^1\) With the objective of devising a modern, far-reaching supplementary tool to traditional teacher training methods that is more time efficient and able to make greater use of peer-to-peer learning opportunities, a2i designed and developed an online social platform for school and college teachers called the Teachers’ Portal (www.teachers.gov.bd) in 2013.

The specific goals of the Teachers’ Portal are to:

- Establish an online training and professional development platform for all school and college teachers
- Develop an online repository where quality, multimedia educational contents can be stored, accessed and shared freely
- Create an idea generation and problem-solving platform that facilitates teachers to share opinions and suggestions regarding education pedagogy, use of ICT in education delivery and discuss issues related to the country’s education system in general
- Develop a peer-to-peer, collaborative environment for lifelong learning support and to close the rural-urban knowledge gap in the process\(^2\)

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\(^2\) Source Link (Last Access 09-11-17) [http://a2i.pmo.gov.bd/resources/brief/](http://a2i.pmo.gov.bd/resources/brief/)
Teachers portals is an online platform for the teachers of general, madrassa & vocational education system of Bangladesh that lap together accesses to multimedia-based content, peer-mentoring, self-paced learning. Teachers’ Portal is an enabling potential tool to enable traditional classroom of desk, notebook, pencil, and blackboard into online.

The application of ICTs as a tool for effective enhancement of learning, teaching and education management covers the entire spectrum of education from primary, secondary, tertiary, basic education and further education and training. Teachers’ Portal can be the model for other developing countries towards achieving 21st-century education goal. For developing countries like Bangladesh, the Teachers’ Portal promises to open access to knowledge in ways unimaginable not long ago (Sarkar 2012). It is a platform where the teacher can upload & download contents of all subject, can comment other teachers content and also update their own content according to the other teachers’ opinion. Since its launch in 2013, more than 271,216 teachers from all over Bangladesh have registered on the Teachers’ Portal and can access more than 128388 contents developed and uploaded by registered teachers and among these contents, 944 contents are model contents. Every week a teacher is selected as a best according to the quality contents. Teachers can share ideas and exchange multimedia contents in this portal.

1.2 Literature Review

In one of the study Mikre, F. (2011) pointed that ICT provides a lot of advantages in the delivery of equitable quality education. The need to use new technologies to raise the quality and efficiency of education cannot be overemphasized. It is imperative to ensure e-Readiness to improve the quality of education and technical proficiency of our human resources, thus leading to increased productivity and accelerated development.

ICT has a positive impact on development educational curriculum. A student can perform well throughout the usage of ICT. ICT helps the students to enhance their knowledge skills as well as to improve their learning skill (Wasif, M. N., el.al. 2012).

The use of ICT in education lends itself to more student-centred learning settings and often this creates some tensions for some teachers and students. But with the world moving rapidly into digital media and information, the role of ICT in education is becoming more and more important and this importance will continue to grow and develop in the 21st century (Sarkar,S., 2012).

3 Source Link (Last access 19-12-17) https://www.teachers.gov.bd/
Noor-Ul-Amin, S. (2013) one of his study mentioned that ICTs in education has a positive impact on teaching, learning, and research. ICT can affect the delivery of education as well as enable wider access to education. Moreover, it will increase flexibility considering the time and geographical barriers. It can influence the way students are taught and how they learn. It motivates for teaching learning process which seems to have a profound impact on the process of learning in education by offering new possibilities for learners and teachers. These possibilities can have an impact on student performance and achievement.

Some teachers do not like to use ICTs, especially computers, and the internet due to some reasons. Some of the reasons for this reluctance include poor software design, skepticism about the effectiveness of computers in improving learning outcomes, lack of administrative support, increased time and effort needed to learn the technology and how to use it for teaching, and the fear of losing their authority in the classroom as it becomes more learner-centered (Meenakshi, 2013).

Adeoye, Y. M., et.al. (2013) in one of his study pointed out that the moving of the world to digital media and information has increased the growing need of ICT that will continue to grow and develop in the 21st century. Information and communication technology (ICT) is a vital part of the contemporary world. In fact, culture and society have to be adjusted to meet the challenges of the knowledge age. Undoubtedly ICT has impacted on the quality and quantity of teaching, learning, and research. There are some constraints to ICT utilization as a change agent for higher education.

1.3 Objective of the Study

**General Objective:** The main objective of the study was to assess the impact of Teachers’ Portal as e-Learning platform in education system

**Specific Objectives of the Study:**

- Identify the status of uploading & downloading contents from TP
- Measure the effectiveness of TP for quality education
- To measure the level of satisfaction of the user
- To identify the challenges & way out to improve the Teachers’ Portal
- Provide a strategic guideline for strengthening & sustainability of TP
Chapter 2: Methodology of the Study

2.1 Methodology: The study has adopted several methods to collect qualitative and quantitative information to reach its ultimate goal. It provides an accurate portrayal and account of the characteristics, for example behaviors, opinions, abilities, beliefs and knowledge of a particular individual, situation, group etc.

2.2 Study Nature: The study is both qualitative and quantitative in nature. The basic method has been used to conduct the study is sample survey. Other methods have also been used such as observation, key informant interview (KII), In-depth interview etc. for getting the accurate information regarding the Teachers’ Portal.

2.3 Source of Data: Data has been collected from both source such as;

2.3.1 Primary Source: Primary source of data includes face to face interview using semi-structure questionnaire with the teachers who use Teachers’ Portal. Secondary data has also been collected from the teachers by using field notes through observation. Key informants interview has also conducted with District and Upazila education officers. Along with this In-depth interview has conducted with headmasters.

2.3.2 Secondary Source: This component has focused mainly on an interdisciplinary review of secondary sources related to Teachers’ Portal. For this, research document review has helped much. Secondary data has been collected from online based report, different books, documents, research papers, policy documents etc. to supplement primary data.

2.4 Sampling Technique and Sample Size: The study area has been selected using cluster sampling. The 8 divisions of Bangladesh have been divided into 12 clusters based on the ratio of using Teachers’ Portal. From each cluster, 32 units of data have been collected. The Study use the following formula to calculate sample size;
Where assumptions are

Population Size = N

Margin of error = “e” is percentage (for example, 5% = 0.05).

Z-score = z is the number of standard deviations a given proportion is away from the mean. ( in this case 1.96)

Probability = “p” and normal distribution (50%)

Using this formula total sample size is determined 384.

2.5 Data Collection Technique: The major technique for data collection is sample survey.

The following techniques of data collection have been used to conduct the study:

<table>
<thead>
<tr>
<th>Technique</th>
<th>Tools</th>
<th>Target group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Survey</td>
<td>Semi-structure questionnaire</td>
<td>TP Beneficiaries</td>
</tr>
<tr>
<td>KII (Key Informant Interview)</td>
<td>Guideline</td>
<td>Education Officers</td>
</tr>
<tr>
<td>IDI (In-Depth interview)</td>
<td>Guideline</td>
<td>Headmasters</td>
</tr>
<tr>
<td>Observation</td>
<td>Open</td>
<td></td>
</tr>
</tbody>
</table>

2.6 Study Area: As the teachers from all over Bangladesh use Teachers’ Portal therefore whole Bangladesh was considered as a study area. The users of Teachers’ Portal are the study population. The Division based clusters are follows;
<table>
<thead>
<tr>
<th>Division</th>
<th>Cluster</th>
<th>Teachers’ Portal</th>
<th>Both (online &amp; Traditional)</th>
<th>Male</th>
<th>Female</th>
<th>Urban</th>
<th>Rural</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barishal</td>
<td>1</td>
<td>22</td>
<td>10</td>
<td>19</td>
<td>13</td>
<td>19</td>
<td>13</td>
<td>32</td>
</tr>
<tr>
<td>Chittagong</td>
<td>2</td>
<td>45</td>
<td>19</td>
<td>38</td>
<td>26</td>
<td>38</td>
<td>26</td>
<td>64</td>
</tr>
<tr>
<td>Dhaka</td>
<td>2</td>
<td>45</td>
<td>19</td>
<td>38</td>
<td>26</td>
<td>38</td>
<td>26</td>
<td>64</td>
</tr>
<tr>
<td>Khulna</td>
<td>2</td>
<td>45</td>
<td>19</td>
<td>38</td>
<td>26</td>
<td>38</td>
<td>26</td>
<td>64</td>
</tr>
<tr>
<td>Sylhet</td>
<td>1</td>
<td>22</td>
<td>10</td>
<td>19</td>
<td>13</td>
<td>19</td>
<td>13</td>
<td>32</td>
</tr>
<tr>
<td>Mymenshing</td>
<td>1</td>
<td>22</td>
<td>10</td>
<td>19</td>
<td>13</td>
<td>19</td>
<td>13</td>
<td>32</td>
</tr>
<tr>
<td>Rajshahi</td>
<td>2</td>
<td>45</td>
<td>19</td>
<td>38</td>
<td>26</td>
<td>38</td>
<td>26</td>
<td>64</td>
</tr>
<tr>
<td>Rangpur</td>
<td>1</td>
<td>22</td>
<td>10</td>
<td>19</td>
<td>13</td>
<td>19</td>
<td>13</td>
<td>32</td>
</tr>
<tr>
<td>Total</td>
<td>12</td>
<td>269</td>
<td>115</td>
<td>230</td>
<td>154</td>
<td>230</td>
<td>154</td>
<td>384</td>
</tr>
</tbody>
</table>

2.7 Data Processing and analysis: After finishing off the research, the materials have been screened and preliminary cleaned. Then the data has been entered, processed and analyzed on statistical software SPSS. Collected data from the survey has also been correlated with research objectives and interpreted descriptively.

2.8 Quality Control: Data quality has been ensured through multiple procedures of review and cross-checking. Researchers reviewed all questionnaires on the same day of completion so that any error or inconsistency that is identified could be minimized instantly.

2.9 Ethical Issues: All the respondents at all times were aware that the survey was voluntary and participants could choose to quit anytime they wanted. Respondents also had the liberty not to answer any question; in addition, researchers were committed to respondents’ secrecy.

Chapter 3: Contextual Analysis of TP

3.1 Teachers’ Portal (TP): Teachers’ Portal is an online and open learning platform for teachers of general, madrassa & vocational education system of Bangladesh.

3.2 Multimedia Classroom (MMC): a2i has followed a 3-pronged approach in its efforts to remodel education: establishing Multimedia Classrooms in secondary schools, training teachers on making ICT aided educational content on hard-to-grasp topics and make electronic versions of text books available in primary and secondary levels including technical, vocational and madrasha education.4

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3.3 Model Content: Model content is highly quality content covering all core subjects which is verified by best teachers and expert panel. If necessary any teachers can modify the model content according to their purpose.

3.4 Best Teachers: Every member-teacher of TP is now connected with ‘teacher-educators’ and mentors who are accessible all 7 days a week compared to traditional ‘trainers’ whose support was available only during training sessions once every few years. They provide feedback to teachers who upload new contents thereby continuously developing their skills and the learning materials themselves. Besides mentoring, these experts also provide rating on the basis of which 3 teachers are systematically highlighted as ‘content champions’ every week.5

Chapter 3: Findings of the Study

3.1 General Findings

![Gender of the Respondents](http://a2i.pmo.gov.bd/wp-content/uploads/2017/12/11-Teachers-portal.pdf)

**Figure 1: Gender of the Respondents**

*Figure-1* depicts the gender-wise distribution of the service recipients and also gender wise status of using TP. Considering the study population, about 59% male and 41% female service recipients have been interviewed from the study area. Among them, male service recipients use TP more than that of female service recipients.

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Figure 2: Age of the Beneficiaries

Figure 2 provides the information about the age of the service recipients. Findings show that about more than half of the respondents (52%) are from age group 31 to 40 years while 34% of the respondents are from 41 to 50 years age group. It can be observed that maximum of the service recipients (86%) are from age group 31 to 50 years. On the contrary, 8% of the beneficiaries belong to 20 to 30 years age group and the rest 5% are from above 50 years. However, it can be observed that comparatively young teachers are using the TP more.

Figure 3: Educational qualification and status of using TP

From the above figure 3, it can be seen that there is a reverse relationship between educational qualification and status of using TP. As the beneficiaries are teachers, the majority of the teachers
(70%) are completed the post-graduation who also use TP most whereas other 30% are from graduation level who use the TP less (30%) than that of other teachers.

### Table 1: First source of Knowing about TP

<table>
<thead>
<tr>
<th>First source of Knowing about TP</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational institutions</td>
<td>53%</td>
</tr>
<tr>
<td>Training from a2i</td>
<td>18%</td>
</tr>
<tr>
<td>Teacher Training Centre</td>
<td>12%</td>
</tr>
<tr>
<td>Education Office</td>
<td>8%</td>
</tr>
<tr>
<td>PTI</td>
<td>3%</td>
</tr>
<tr>
<td>Meeting/Seminar</td>
<td>3%</td>
</tr>
<tr>
<td>Internet</td>
<td>2%</td>
</tr>
<tr>
<td>Social media</td>
<td>1%</td>
</tr>
<tr>
<td>DC Office</td>
<td>1%</td>
</tr>
</tbody>
</table>

Findings reveal different sources of knowledge about TP. Among many sources, most of the teachers (53%) have informed about TP by concerned educational institution whereas 18% teachers have informed through attending training arranged by a2i. There are some other sources from where teachers are informed about TP. These sources are teacher training center (12%), education office (8%), PTI (3%) and so on.

![Uses of Teachers' Portal](image)

**Figure 4: Uses of Teachers’ Portal**

Figure 4 provides the information about either teacher use Teachers Portal or not. It is encouraging that most of the teachers (89%) use Teachers Portal while 11% teachers do not use
The teachers who do not use TP have claimed that it is a difficult process; forgetting password and internet problem are another problems with using TP.

<table>
<thead>
<tr>
<th>Medium of Using TP</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational institution laptop or desktop</td>
<td>63</td>
</tr>
<tr>
<td>Own laptop or desktop</td>
<td>36</td>
</tr>
<tr>
<td>Cyber Cafe</td>
<td>1</td>
</tr>
</tbody>
</table>

**Table 2: Medium of Using TP**

Teachers Portal is online based service so to use TP need to online supportive tools. It can be observed from above table 2 that most of the teachers (63%) depend on concerned educational institution laptop or desktop whereas 36% teachers use own laptop or desktop when they do not get access to educational institution laptop or desktop due to lack of equipment or internet problem. Besides another medium, if necessary teachers go to cyber café to use TP. It indicates their interest in using TP.

<table>
<thead>
<tr>
<th>Purpose of Using TP</th>
<th>Percentages (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collection of class content</td>
<td>100</td>
</tr>
<tr>
<td>Upload class contents</td>
<td>84</td>
</tr>
<tr>
<td>For blogging</td>
<td>5</td>
</tr>
</tbody>
</table>

**Table 3: Purpose of Using TP (Multiple Response)**

Teachers use TP for a different purpose. For many purposes, teachers use TP mainly for collecting class content (100%) those are uploaded by other teachers. On the other hand, 84% teachers use TP for uploading contents those are downloaded by other teachers. Some teachers use TP for blogging. Finding shows that mainly teachers are using TP for uploading and downloading contents.
Figure 5: Year-wise number of registration

The above figure 5 illustrates the status of year wise number of registration in TP. It can be observed that from 2011 to 2014 the number of registration was jumped; after that, it was a downtrend. All the teacher may be got registered in TP during this time frame.

Figure 6: Source of collecting Contents

Teachers collect the contents from different sources. Most of the teachers (52%) collect the contents from TP while 12% teachers collect the contents from other sources like Text Book, Library, Other Teacher, Notebook, and Group Discussion. In contrast, 36% teachers collect the contents from both processes. As collect the contents from TP is convenient most of the teachers preferred TP for collects the content.
3.2 Status of Uploading and downloading contents from TP:

**Figure 7: Status of Uploading and downloading contents from TP**

The above figure 7 indicates that more than half of the teachers (58%) upload the content in TP whereas 42% teachers do not upload content in TP. Some teachers who do not upload content in TP could mention that as all contents are available in the textbook so it is not necessary to upload content in TP and also it is time-consuming and difficult to upload content in TP. On the other hand, in case of downloading content from TP most of the teachers (85%) download the content from TP while a few of teachers (15%) do not download content from TP who have mentioned some reasons for not downloading the content such as slow internet speed, lose own creativity and load shedding. It can be observed that teachers would preferred downloading contents than uploading contents at TP.

*Teachers can easily download the qualitative contents from TP if necessary can edit the contents. It increases the confidence of the teacher & also the quality of education.*

Monika Torafder  
Zankabazr High School, Mymensingh
Figure 8: Gender wise status of uploading and downloading content

According to the figure 8, it can be observed that there is a similarity in both gender wise uploading and downloading status. It is seen that male teachers (65%) upload the contents more in TP than that of female teachers (35%). Similarly, in downloading contents, male teachers are ahead of female teachers. One thing is noticeable that male teachers upload more than download whereas female teachers download more than upload.

Figure 9: Updating contents & providing comment on other teachers content

TP provides an opportunity to the teachers that they can update their contents on basis of other teachers comment as well as they can give comment to other teachers content. According to the figure 9, it can be observed that 61% teachers have updated their content on basis of other
teachers comment whereas 39% teachers do not update their contents. On the other hand, 55% teachers have given comment to other teachers' contents while 45% have opposite position. Receiving and giving comment increase the quality of the content.

_I had technology phobia. I had no idea of basic computer functioning. After getting the training on basic computer & content development, now my technology phobia has reduced. At the beginning, when I upload my content it was not up to the mark. Gradually I have improved my contents based on the other teacher's comment. Now I give comment on other teachers' contents._

Salina Akter
Charta Girls’ High School, Rangpur

3.3 Multimedia Classroom (MMC)

**Figure 10: Status of using and not using of TP contents in MMC**

Figure 10 illustrates the status of using TP contents in MMC as well as reasons for not using TP contents in MMC. It can be observed that 77% teachers have used TP content in multimedia class whereas 23% teachers do not use TP content in multimedia class. The teachers who do not use TP content in the multimedia class have mentioned some causes not for using TP content. Most of the teachers (34%) have mentioned that lack of requirement is one of the main problems in not to using TP content in MMC while 31% teachers have mentioned about the mismatch of content to the syllabus. On the contrary, some teachers do not use TP content because they do not have enough knowledge about MMC (11%).
Figure 11: Subjects studied in multimedia classroom

Figure 11 exposes the name of the subjects that are studied in multimedia class. It can be seen that mainly English (33%), Mathematics (27%) and Bangla (27%) class are taken in MMC. In case of taking MMC class General Science and Bangladesh and Global Studies are in the same position that is 18%. It can be observed that all most all subjects are studied in MMC.

Some teachers have informed that it is not possible to take all the classes in MMC due to insufficiency of equipment & infrastructural development.

Figure 12: PSC, JSC and SSC result from 2013 to 2016

Findings reveal the information about the PSC, JSC, and SSC result from 2013 to 2016. It is seen that there is an increasing tendency of good result among this three education tier but it is
remarkable in terms of PSC. In 2013 the passing rate of PSC was 72% whereas JSC and SSC passing rates were 47% and 29%. In contrast, in 2016 passing rate of PSC, JSC and SSC were 92% 66% and 55%. Teachers think that due to using TP contents in MMC students’ attendance rate is increasing and the dropout rate is decreasing which have a positive impact on the result.

“A picture tells a thousand words”

Students learn to see the picture by which they can easily understand any complex topic as well as they participate in the class actively. Moreover, their attendance is also high due to attractive contents of MMC which have a positive impact on students’ examination results.

(Education Officer, Mymensingh)

Figure 13: Benefit of using TP’s content in MMC

There are many benefits of using TP contents in MMC 97% teachers have opined that whereas 3% teachers have opposite opinion. About 73% teachers have mentioned that students are attentive in the class due to attractive contents whereas the same percentage of teachers have mentioned that due to TP it has been possible to get quality content easily. In contrast, content can be created within a short time (62%) in TP and can use in TP.
3.4 Benefits and challenges of Using TP

There are many benefits of using TP. According to the figure, about 98% teachers have cited that they are getting benefited due to using TP while only 2% have opposite opinion. Availability of quality content (72%) and availability of content (72%) for the multimedia class room are the major benefits of using TP. In contrast, about 54% teachers have mentioned that it is possible to collect content within a short time (54%) and also possible to collect content staying at home (51%).
“Teachers’ Portal Lessen Burden of Women’s Dual Role”

Moslema Ferdousi (35)
Teachers’ Portal user
Assistant Teacher
Chotobongram Secondary Model Girl’s School, Rajshahi

Moslema Ferdousi is an Assistant Teacher of General Science at Chotobongram Secondary Model Girl's School. He lives in Rajshahi with his family. She has one daughter. Before leaving school, leave the girl to other family members, those who live near her home. Her husband works in a government organization. He said that "the teacher’s portal made her life much easier". Prior to teaching at the school, he had to prepare for a long time; she has no time for her family due to which many problems were created in his family. His problems with the use of the teacher’s portal are very less now. After going to training he got to know about the teacher’s portal. Then she registered there and saw the entire portal. She noticed that "the majority of her chapters of teaching were highlighted there and she could collect them from there in a short time". "She has been saving a lot of time and uses it for other purposes". she said, "Having a lot of content together, she knows the quality of the content and can use the good content" she also said that "the presentation of the portal, the modem content, important pictures, and important videos are very effective for the students to teach, thereby increasing the quality of the student learning, increasing their interest in learning, and he can also know and learn new things for them". Thus, the quality of his work is increasing. He further said that "Other teachers are showing interest in the teacher’s portal and they also download the content from the teacher’s portal according to their needs". In this way, they can use their extra time in other school activities. She also said, "Due to appear the best content creator of the week in the portal, he is also encouraged to create good quality content". Lastly, he said, "Life was difficult before, it was not possible to find extra time for myself by adjusting the school, the child, and the family, but now it is possible to find time for myself".
There are some challenges of using TP. 59% of teachers have opined that whereas 41% teachers have mentioned there is no challenge of using TP. Slow internet problem (62%) is one of the major problems at using TP. Some of the teachers have complained that though there is a huge amount of content in TP still there is a lack of quality content (53%). On the other hand, if anyone forgets password it becomes very difficult to recover the password (46%).

Figure 16 reveals the comparative scenario of the level of satisfaction on collecting content from TP as well as the manual process. According to the figure, most of the teachers are satisfied (39%) for collecting content from TP whereas most of the teachers are moderately satisfied (43%)
for collecting content through a manual process. In contrast, about 25% teachers are very satisfied with collecting from TP while only 2% teachers are satisfied with collecting content through a manual process. Therefore it is clear that the satisfaction of the teachers on TP is higher than that of a manual process.

Figure 17: Reasons behind the satisfaction on TP & manual process

There are some reasons for satisfaction. According to the figure 17, teachers are satisfied on TP due to the availability of content in one platform (85%), TP increases creativity among the teachers (79%), quality content (71%) and so on. On the other hand, some teachers have mentioned some reasons of satisfaction on collecting content through a manual process such as easy to teach (56%), cooperation from other teachers (26%), sufficient book (16%) and so on.

Some teachers opined that to collect content from other teachers or library is time consuming & costly. Hence we deliver the lecture based on text books where students don’t get interested in the class as these lectures are available in a text book.
Figure 18: Level of Satisfaction of both user (in score)

Findings reveal the level of satisfaction of the TP user in the score at the same time the level of satisfaction of the teachers who have collected the contents manually. Here 1 is the lowest score and 10 is the highest score. It is observed that a large portion of the user has marked 8 out of 10 as they are satisfied using TP whereas manually it is 5 out of 10. On the contrary, collecting content from TP no one does not give the score among 1 to 4 whereas in the manual process some teachers have scored among 1 to 4. Considering the score it is seen that teachers are more satisfied using TP than that of a manual process.

3.5 TCV Analysis

Figure 19: Comparative analysis of required time

Figure 19 illustrates the time required in using TP as well as other processes for collecting content. About 96% teachers have opined that they have spent zero time for using TP as they have used personal or institution’s laptop or desktop while that is 78% in except Teachers’ Portal. This time indicates the visiting time for getting the desired service. In contrast, 9% teachers have cited that
it is required above 30 minutes in collecting content through the manual process while in using TP it is not required more than 30 minutes. Therefore it can be observed that TP is less time consuming.

Figure 20: Comparative analysis of required cost

According to the figure 20, it can be observed that about 93% teachers have cited that no cost required to use TP whereas it is 82% except Teachers’ Portal. Here, cost means traveling cost, not service cost. On the other hand, 13% teachers who have collected content from another medium except for Teachers’ Portal while this is only 1% in case of TP. It can be observed that it is required less cost using TP than that of another medium.

Figure 21: Comparative analysis of required visit

Findings reveal the comparative analysis of required visit for the desired service. As most of the teachers use institution’s or own laptop so no visit required (92%) at using TP whereas it is 78% except Teachers’ Portal as contents are available at a text book. If necessary some of the teachers go to the cyber cafe or other teachers’ house to use TP, in that case, it is required more than 2 visits while it is 3% in case of using another medium except Teachers’ Portal.
Figure 22: Comparative analysis of Time, Cost and number of Visit in both procedures

Figure 22 shows the comparative analysis of time, cost, and a number of visit of using TP as well as another medium except for TP. It can be observed that for using TP average time required 1 minute while for other medium average time is 7 minutes. Hence, TP reduces service time by 84% and saves 6 minutes on an average. In case of cost, the average cost required BDT 94 for using TP whereas for another medium it is BDT 5. Thus TP reduces cost 95% and saves the cost on an average BDT 89. In terms of visit, TP reduces average 30% of the visit than that of another medium.

Figure 23: Utilization of Surplus Time & Money

In figure 22 it is seen that TP saves the time, cost and number of visit of the teachers. Figure 23 shows the utilization of surplus time and money. It is seen that most of the teachers use their surplus time (61%) and money (63%) for family purpose. In contrast, 42% teachers have used
the surplus time for job sector while 27% teachers have utilized surplus money (27%) for job sector. It is noticeable that teachers utilize their surplus time and money in the common sector.

*I can spend my free time with my family as well as I can give more time to prepare better contents taking the help of other teacher’s contents*

Khandoker Muslim Uddin
Korisha High School (Assistant Teacher), Rajshahi

“Story of a Change Maker”

Kazi Monira (40)
Assistant Teacher (Bangla)
Muktagacha, Mymensingh

Kazi Monira is an assistant teacher at Muktagacha High school. At first, she had heard about TP from one of her colleagues. At that time she did not have any idea about basic computer functioning. With the help of her colleague, she became the member of TP in 2014.

Kazi Monira said ‘I had a dream to select as the best teacher but I was frustrated because I had technology phobia’. After becoming the member of TP, she has learnt basic computer functioning. Moreover, she has started to upload the content in TP but at the beginning, the contents were not up to the mark. Gradually, she has improved herself by updating her content on basis of other teachers’ feedback. She continuously communicates another teacher for making quality content.

Finally, in 2017 Kazi Monira has selected best teacher to depend on quality content. Now she gives comment on other teachers content. She mentioned that “Now I am a familiar face in TP, many teachers know me and also receive my comment to update their content. TP has changed my life and also increased my self-confident”.
Chapter 4: Discussion

Teacher portal is an online learning platform for the teachers. Findings show that most of the teachers are familiar with TP. Most of the teachers have informed about TP through an educational institution. They have mentioned that may be 1 or 2 teachers of their institution get the training on TP then they have informed about the benefit of TP and also how to get registered in TP. Most of the teachers have registered on TP in 2014.

There is an opportunity to upload and download the content on TP. The teachers who upload the content in TP they have opined that it increases their capacity because when they upload the content, other teachers give comment on that contents. According to the comment teacher can update their content; sometimes it creates an opportunity to select as the best teachers.

Some of the teachers have cited that now it is easy for them to take MMC because they get ready content on TP. It saves their time, cost and number of visit. No need to spend extra time on preparing content. Teachers also have mentioned that due to using the attractive content of TP in MMC, students’ attendance has increased and also they are participating in the class actively.

One of the positive sides of TP is that it has created a network among the teachers and due to this networking teachers can share their ideas, opinion with one another. It helps to their professional development. TP also creates positive competition among the teachers. Some of the teachers have mentioned selecting as a good teacher increaser their popularity among the teachers.

Ensuring internet facilities in the remote area is one of the main challenges of using TP. On the other hand, due to lack of equipment, it is not possible to take all the class in MMC. In that case, group studies can be a way forward to overcome this challenge. Using one laptop or desktop many teachers can get the benefit.
Chapter 5: Recommendation & Conclusion

5.1 Recommendation

- Among the teachers form an expert panel to ensure quality content & also align the content with syllabus

- Introduce e-Learning Platform like Muktopaath where there will be tutorial about different computer functioning & content development for teachers’ capacity development

- Minimizing the lack of equipment group study can be an effective way. In this circle using one laptop or desktop, many teachers can get the opportunity to learn basic computer functioning & quality content development

- Some criteria can be developed for selecting best teacher & shared with the teachers’ so that on basis of these criteria teachers’ can improve themselves regularly before final selection.

- Internet speed should be increased as well as necessary to ensure internet facility in remote area especially hill tracts area in terms of bandwidth & capacity

5.2 Conclusion:

Teachers’ Portal is an open platform for the teachers. For sustainability of any service, it is necessary to see the impact of this service. Through this study, have tried to identify the impact of Teachers’ Portal. It is seen that teachers are very much active in Teachers’ Portal. Teachers’ Portal has changed the traditional teaching method by ensuring multimedia contents. Though Teachers’ Portal is for the teacher, students also have benefited from this portal; teachers use TP content in MMC and due to attractive content student participate in the class actively and it sustains the learning. From field observation report it is seen that teachers own the Teachers' Portal. TP has reduced the gap between rural and urban teacher; now they can easily communicate with each other which have help to professional development.
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