Computer Usage among Secondary School Teachers of Aizawl District with Respect to Gender and Location of School

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Abstract:
The purpose of the present study is to find out the usage of different ICT devices among secondary school teachers of Aizawl district, Mizoram in relation to gender and location of schools. The sample consisted of 800 secondary school teachers. The present study revealed that 95.18% of male and 77.33% of female had use computer. The study also revealed that 53.95% to 64.04% and 43.90% to 58.43% of male and female respectively used computer for preparing themselves for teaching. It is also found that only 21.39% of rural teachers and 34.36% of urban teachers used ICT during classroom teaching.

Key words: Usage, ICT

I. INTRODUCTION
Growth of ICT brought in rapid changes in various fields. It had also made entry into school education because of its appropriateness, applicability and versatility in use for classroom teaching. It is well recognized that ICT has great potential for improving the teaching learning process. It facilitates individualized learning and develops problem solving skills. Its interactive nature motivates students to learn. Educationists and teachers believe that with the help of ICT, quality of education given to the students can be significantly improved

II. RATIONALE OF THE STUDY
Usage of ICT is one of the way by which India’s large population base can be effectively reached. In Indian scenario, ICT can be utilized for better teaching learning process and improving quality of education. Realising this, the Government of India has announced 2010-2020 as decade of innovation as such programme like National Programme of Technology Enhanced Learning (NPTEL) and Multimedia Educational Resource for Learning and Online Teaching (MERLOT) which create quality digital content for different levels of Education has been introduced. Knowledge of ICT and use of ICT skills in teaching and learning have become imperative for today’s teachers. ICT integration in institutions is being perceived as a necessity and is growing exponentially. The pervasive use of technology in all spheres of life, the knowledge economy and the paradigm shift together, generate demands on the institutions to adopt ways that help inculcate 21st century skills amongst students It is of utmost need to find out the usage of the modern technology in the field of education so that the teachers as well as the students may be on par with the latest development of the world, as the NPE 1986 has stated that the quality of education depend on the quality of its teachers. Hence, emerge the present Study.

III. STATEMENT OF THE PROBLEM
The statement of the problem is, ‘A Study of the usage of Information and Communication Technology among the Secondary School Teachers of Aizawl District, Mizoram with respect to gender and location of school’.

OBJECTIVES OF THE STUDY
1. To study the availability of Information and Communication Technologies (ICT) among Secondary school teachers of Aizawl district, Mizoram with respect to gender and location of school.
2. To study the purpose of usage of computer for activities among secondary school teachers of Aizawl district, Mizoram with respect to gender and location of school.
3. To study the used of Information and Communication Technologies (ICT) during classroom teaching by secondary school teachers of Aizawl district, Mizoram with respect to gender and location of school.

METHODOLOGY AND PROCEDURE
RESEARCH DESIGN
The present study is a descriptive survey technique which involves the collection of primary data about subjects, by selecting a representative sample of the population or universe under study, through the use of a questionnaire.

POPULATION AND SAMPLE
The population consisted of all the Secondary School teachers of Aizawl Districts, Mizoram. The sample consisted of 800 secondary school teachers out of which 456 are males and 344 are females, 346 are from rural areas and 454 are from urban areas.
TOOL USED
Questionnaire on Usage of Information and Communication Technology (Adapt): Organization for Economic Co-operation and Development (OECD) was used for the collection of data.

DATA COLLECTION
The investigators personally visited different schools in Aizawl district, Mizoram and administered the questionnaire to the selected Secondary School teachers. After a brief description of the purpose of their work and the type of the study where the facts were needed for them, the investigators conducted the questionnaire.

IV. REVIEW OF RELATED STUDY IN RELATION TO USAGE OF ICT
Ruthven, K. & Hennessy, S. (2003) revealed that teachers who used of ICT could help to focus the attention of pupils on overarching issues, and to accentuate important features of situations under consideration. Morrisa, (2011) study revealed that the difficulties in the use of ICT are related to the weakness of a teacher’s knowledge about what technologies are available and how they can be used in the educational process in the classroom. In addition, teachers should know how to use ICT in relevant ways to help them in the delivery of the curriculum.

Lallianzuali Fanai (2014) found that mobile phone and television are possessed by 92% - 100%. Teachers using ICT in classroom teaching is extremely low in all the groups with 16% in the PG-Urban group and nil (0%) in all the other groups. The major reason for not using computer in teaching in all the groups is due to unavailability of computer facilities. It is also found that 74% (urban) and 62% (rural) of PG teachers can write and send email.

Philomina, M. J. and Anutha, S. (2015) found that the M.Ed. Teacher educators’ use of ICT in teaching, personal, recreational and research is 86%, 83%, 80%, and 82% respectively. Regarding M.Phil. teacher educators the use of ICT in teaching is 87%, personal 78%, recreational 71% and in research is 76

Pelgrum and Plomp (1993) in their research found only a small number of teachers were using ICT as an integral part of teaching process.

ICT USAGE AMONG SECONDARY SCHOOL TEACHERS OF AIZAWL DISTRICT, MIZORAM WITH RESPECT TO GENDER
1.1 AVAILABILITY OF ICT

Table 1.1 Availability of ICT

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>ITEM</th>
<th>YES,%</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Availability of</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A Computer at home</td>
<td>81.80</td>
<td>84.88</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B Computer at school</td>
<td>91.01</td>
<td>86.05</td>
<td></td>
</tr>
<tr>
<td></td>
<td>C Internet at home</td>
<td>53.95</td>
<td>66.86</td>
<td></td>
</tr>
<tr>
<td></td>
<td>D Internet at school</td>
<td>39.69</td>
<td>47.97</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E Mobile phone</td>
<td>99.78</td>
<td>88.66</td>
<td></td>
</tr>
<tr>
<td></td>
<td>F Television</td>
<td>92.11</td>
<td>91.28</td>
<td></td>
</tr>
<tr>
<td></td>
<td>G Radio</td>
<td>59.87</td>
<td>62.79</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Have you ever used a computer</td>
<td></td>
<td>95.18</td>
<td>77.33</td>
</tr>
</tbody>
</table>

As per Table 1.1 it is found that on 81.80% and 91.01%, 84.88% and 86.05% of Male and Female respectively had computer in their home and school. With regard to possession of mobile phone and television the study reveals that the percentage of Male teachers in these were higher than those female teachers. The study also reflected that 95.18% of male and 77.33% of female had use computer.
Table 1.2 Purpose of usage of computer

Table 1.2 reveals that 86.62% and 87.79% of male and female respectively used computer for playing games. The table also reveals that 53.95% to 64.04% and 43.90% to 58.43% of male and female respectively used computer for preparing themselves for teaching, make spreadsheet and browse internet for school work. Less than half the of male and female teachers were found to use computer for drawing, painting, programming etc. and E-mail for communicating with colleagues about school work.

Table 1.3 Usage of ICT in teaching

Table 5.2.4 indicated that only 16.65% of male and 41.84% of female used ICT during classroom teaching. Among those who do not use ICT for classroom teaching 18.86% and 8.43% of Male and female respectively declared that lack of computer skill is the reason for them not to use ICT in class room teaching.

Table 1.4 Availability of ICT

As per Table 1.4, it is found that 74.28% and 87.57%, 89.87% of rural and urban teachers respectively had computer at their home and school, 45.09% and 30.64%, 71.15% and 52.86% of rural and urban teachers respectively had internet at home and school. The study also reflected that 86.99% of rural teachers and 93.39% of urban teachers had used computer.

### ABILITY TO PERFORM ACTIVITIES ON A COMPUTER

**Purpose of usage of computers**

Table 1.5 showed that more than 60% of the rural teachers used computer for word processing (MS word, page maker), make spreadsheet and download software, music, games etc from internet. It can also be seen that more than 70% of the rural teachers used computer for word processing (MS word, page maker), browse internet for activities, social networking (Facebook, Google etc), download software, music, games etc from internet and e-mail for communicating with colleagues about school work.

<table>
<thead>
<tr>
<th>Sl. no</th>
<th>ITEM</th>
<th>YES, %</th>
<th>Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Usage of computer for activities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>Play games</td>
<td>87.86</td>
<td>87.00</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>Preparing themselves for teaching</td>
<td>58.96</td>
<td>63.66</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>Word processing (MS Word, PageMaker etc.)</td>
<td>74.28</td>
<td>77.97</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>Make spreadsheet</td>
<td>75.63</td>
<td>53.96</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>Drawing, painting, programming etc.</td>
<td>40.75</td>
<td>47.80</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>Browse internet for activities</td>
<td>58.96</td>
<td>77.31</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>Download software, music, games etc from internet</td>
<td>61.56</td>
<td>76.65</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>Browse internet for school work</td>
<td>44.22</td>
<td>62.11</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>Email for communicating with colleagues about school work</td>
<td>5.60</td>
<td>70.70</td>
<td></td>
</tr>
</tbody>
</table>

Table 1.5 indicated that only 21.39% of rural Teachers and 34.36% of urban teachers used ICT during classroom teaching. Among those who do not used ICT for classroom teaching, 18.50% and 9.69% of the rural teachers and urban teachers reported that lack of computer skill is the reason for them not to use ICT in classroom teaching.

### V. MAJOR FINDINGS OF THE STUDY

1. Higher percentage of male teachers possessed computer and internet in their home than their female counterpart.

2. It is found that 95.18% of male and 77.33% of female teachers had used computer.

3. The study revealed that 53.95% to 64.04% of the male and 43.90% to 58.43% of female teachers used computer for preparing themselves for teaching and browse internet for school work.

4. Only 16.65% of male and 41.84% of female teachers used ICT during classroom teaching.

5. Urban teachers possessed more of mobile phone, television and radio.

6. The study also reflected that only 5.60% of the rural teachers used computer for e-mail for communicating with colleagues about school work.
7. Among the urban teachers 34.36% of them used ICT during classroom teaching.
8. The highest percentage on the reason for not using ICT during classroom teaching among the rural and urban teachers is unavailability of ICT facilities.

**VI. DISCUSSION**

It is found in the present study that that 16.65% of male, 41.84% of female, 21.39% of rural and 34.36% of urban teachers used ICT during classroom teaching. Supporting the present finding Pelgrum and Plomp (1993) found that only a small number of teachers were using ICT as an integral part of teaching process. In the present highest percentage of teachers declared that the reason for not using ICT during classroom teaching is of unavailability of facilities. Lallianzuali fanai (2014) also found that the major reason for not using computer in teaching among the teachers is unavailability of computer facilities. This is in tune with the finding of Ruthven, K. & Hennessy, S. (2003) whose study revealed that teachers who used ICT could help to focus the attention of pupils on overarching issues, and to accentuate important features of situations under consideration. Relating with the present findings Morrisa (2011) revealed that the difficulties in the use of ICT are related to the weakness of a teacher’s knowledge about what technologies and how they can be used in the educational process in the classroom.

**VII. CONCLUSION**

ICT is expected to facilitate accessibility, empowerment, sustainability and to contribute much to teaching learning environment as well as methodologies. The new role of teachers should be engineered accommodating the revolution ICT has brought in the field of teaching. The use of ICT will enhance the learning experience for children, helping them to think and communicate creatively and thus be part of the global learning community. Teachers must know basic hardware and software operations, as well as productivity applications software a web browser, communications software, presentation software and management applications. This however needs the teachers to become not only computer literate but digitally proficient. Such transformation would require substantial investments in software and hardware acquisition redesigning of infrastructure, training and development, technical support, research and innovation. More intensive and coordinated effort is essential to realize this very important goal.

**VIII. REFERENCE**