

Major Problems Associated with the Use of ICT in Institution

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Abstract— *In many countries, information and communication technology (ICT) has a clear impact on the development of educational curricula. The absence of a formal and established ICT curriculum leads to an ambiguous situation, because there is nevertheless an observable policy towards the adoption of ICT in education. This policy fosters the integration of ICT in teaching and learning processes, but builds on the professional attitude and willingness of the individuals. However, it has never been examined whether teachers are using ICT in accordance with the competencies proposed by the UGC and AICTE. In order to answer this question, a survey was conducted among the colleges in sangli city. Results show that teachers mainly focus on the development of technical ICT skills, whereas the ICT curriculum centres on the integrated use of ICT within the learning and teaching process. This indicates the existence of a gap between the proposed and the implemented curriculum for ICT. The present study investigates how and to what extent colleges implement the new expectations arising from the national authorities. In particular, it examines which ICT competencies teachers actually adopt (actual use) and which competencies they intend to adopt in the future (preferred use).*

Index Terms — ICT, Security concerns,

I. INTRODUCTION

Information and communication technology (ICT) is one of the most important powerful forces promoting economic growth in the economy. During the last two decades countries have invested heavily in ICT. Indeed, the use of ICT in education and training has been a key priority in the last decade, although progress has been irregular. ICT has had a major impact on the education sector, on organization and on teaching and learning methods. One bamboozling question concerns the effective impact of these technologies on educational outcomes. As ICTs are being progressively used in education. Indicators are required to show the associations between technology use and educational performance. There is also a need to show that education should be seen as using technology not only as an end in itself, but as a means to promote creativity, empowerment and equality and produce

efficient learners and problem solvers. Many academic researchers have tried to answer this question.

They have faced main difficulty, ICT entails evolving technologies and their effects are difficult to separate from their environment. As a result, the relationship between the use of ICT and educational performance is unclear (Youssef and Dahmani, 2008).

Following are the major problems associated with the use of ICT

1. Long dial-up OR connection time : Dial-up Internet access is a form of Internet access that uses the facilities of the public switched telephone network (PSTN) to establish a dialed connection to an Internet service provider (ISP) via telephone lines. The user's computer or router uses an attached modem to encode and decode Internet Protocol packets and control information into and from analogue

2. Security concerns : Information security is the biggest challenge for network and security administrators. The security of a given network highly depends on the software used and the administrative practices followed for operating systems, perimeter security, antivirus protection, intrusion detection, software development, systems and network monitoring, corporate mail, office productivity and so on

3. Poor quality of connection : These conditions include *poor network connectivity, low-bandwidth network connections.*

4. High Internet service charges: computers, mobile devices, and local area networks are connected to the global Internet. Internet access is usually sold by Internet Service Providers (ISPs) that use many different technologies offering a wide range of data rates to the end user. Consumer use first became popular through dial-up connections in the 1980s and 1990s. By the first decade of the 21st century, many consumers had switched away from dial-up to dedicated connections, most Internet access products were being marketed using the term broadband.

5. Low capacity of the server/poor state of technology: These are servers that consistently use nearly all of their configured capacity. For a given amount of time, if the average CPU or Memory utilization of a server are very high, the resources allotted to the server is undersized. The server needs to be right-sized so that workloads running within the virtual machine can get sufficient resource capacity.

6. Absence of ICT plan:

Departments have been tied in to inflexible and costly ICT solutions which together have created a fragmented ICT estate that impedes the efficiencies created by sharing and re-use. This is not just a plan to reduce the cost and inefficiency of departmental ICT.

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II. METHOD AND DATA SOURCES

The survey model was used for this research. Questionnaire is a widely used and useful instrument for collecting survey information, providing structured data being able to administrate by researcher and being comparatively straightforward to analyze. For this survey 12 teachers and 8 administration staff of same institution has been selected as a sample, is as shown in Table 1.

Table 1: Sampling Unit. (N=20)

Detail	Numbers	Percents (%)
Teachers	12	60
Administrators	8	40

Structured questionnaire was used to collect primary data. It contains data about the major problems associated with the use of ICT in institution. 10 questions of 5 different problems are as follows:

- Q1). Long dial-up OR connection time.
- Q2). Security concerns
- Q3). Poor quality of connection.
- Q4). High Internet service charges.
- Q5). Low capacity of the server/poor state of technology.
- Q6). Lack of the necessary equipments.
- Q7). Absence of ICT plan.
- Q8). Administrative problems inherent to your institution.
- Q9). Shortage of trained manpower.
- Q10). No network administrator

III. ANALYSIS

Data is classified and presented in tables and analysis is done by calculating percentage. Data is processed and analyzed using MS-Excel software

N=20 Table 2: Teachers responses about the major problems associated with the use of ICT in institution.

Q	Not a problem	Minor problem	Moderate problem	Major problem	Serious problem
1	5	11	2	1	1
2	8	9	2	1	0
3	6	9	2	1	2
4	5	8	2	4	1
5	4	5	5	5	1
6	1	3	3	4	9
7	0	1	4	8	7
8	11	6	2	1	0
9	5	6	3	4	2
10	2	3	2	8	5

N=20 Table 3: Teachers responses in percentage (%) .

Q	Not a problem	Minor problem	Moderate problem	Major problem	Serious problem
1	25	55	10	5	5
2	40	45	10	5	0
3	30	45	10	5	10
4	25	40	10	20	5
5	20	25	25	25	5
6	5	15	15	20	45
7	0	5	20	40	35
8	55	30	10	5	0

9	25	30	15	20	10
10	10	15	10	40	25

- Q1) Researcher found that 25 % teachers seen no problem, 55% teachers seen minor problem, 10% teachers seen moderate problem, 5 % teachers seen major problem and only 5% teachers seen serious problem of long dial-up OR connection time associated with internet connection.
- Q2) Researcher found that 40 % teachers seen no problem, 45% teachers seen minor problem, 10% teachers seen moderate problem, 5 % teachers seen major problem and 0% teachers seen serious problem of security concerns in the use of ICT in institution.
- Q3) Researcher found that 30 % teachers seen no problem, 45% teachers seen minor problem, 10% teachers seen moderate problem, 5 % teachers seen major problem and 10% teachers seen serious problem of poor quality of connection of network(Internet).
- Q4) Researcher found that 25 % teachers seen no problem, 40% teachers seen minor problem, 10% teachers seen moderate problem, 20 % teachers seen major problem and 5% teachers seen serious problem of high Internet service charges.
- Q5) Researcher found that 20 % teachers seen no problem, 25% teachers seen minor problem, 25% teachers seen moderate problem, 25% teachers seen major problem and 5% teachers seen serious problem of low capacity of the server or poor state of technology in institution.
- Q6) Researcher found that 5 % teachers seen no problem, 15% teachers seen minor problem, 15% teachers seen moderate problem, 20% teachers seen major problem and 45% teachers seen serious problem of lack of the necessary equipments associated with the use of ICT in institution.
- Q7) Researcher found that 0 % teachers seen no problem, 5% teachers seen minor problem, 20% teachers seen moderate problem, 40% teachers seen major problem and 35% teachers seen serious problem of absence of ICT plan regarding to the teaching, learning and administration.
- Q8) Researcher found that 55 % teachers seen no problem, 30% teachers seen minor problem, 10% teachers seen moderate problem, 5% teachers seen major problem and 0% teachers seen serious administrative problems inherent to the institution associated with the use of ICT in institution.
- Q9) Researcher found that 25 % teachers seen no problem, 30% teachers seen minor problem, 15% teachers seen moderate problem, 20 % teachers seen major problem and only 10% teachers seen serious problem of shortage of trained manpower in institution.
- Q10) Researcher found that 10 % teachers seen no problem, 15% teachers seen minor problem, 10% teachers seen moderate problem, 40 % teachers seen major problem and only 25% teachers seen serious problem of no network administrator is appointed in institution.

IV. RESULTS

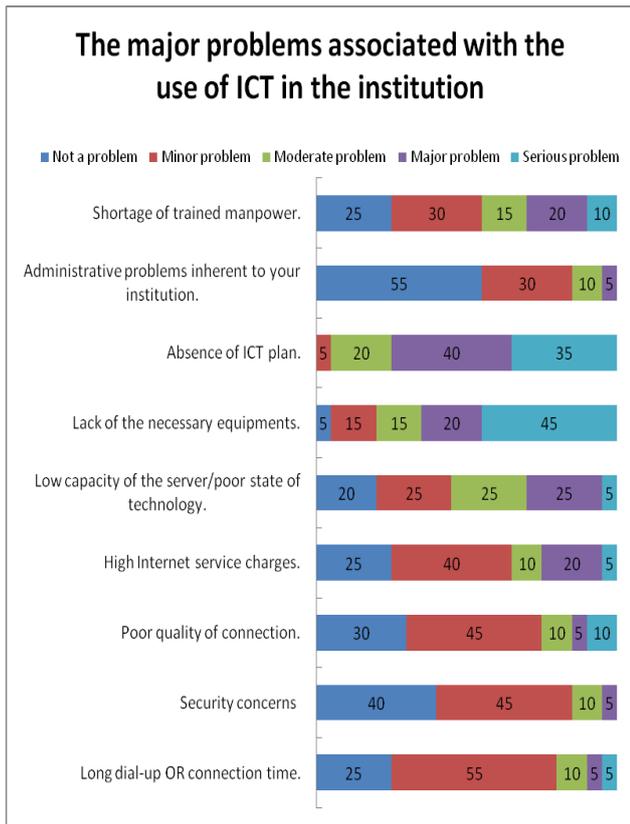


Diagram 1

V. CONCLUSION

- Q1). Long dial-up OR connection time: 25 % and 55% teachers seen no problem and minor problem respectively.
- Q2). Security concerns: 40 % and 45% teachers seen no problem and minor problem respectively
- Q3). Poor quality of connection. 30 % and 45% teachers saw no problem and minor problem respectively.
- Q4). High Internet service charges: 25 % teachers have seen no problem and 40% teachers seen minor problem respectively.
- Q8). Administrative problems inherent to your institution: 55 % teachers have seen no problem and 30% teachers seen minor problem respectively.
Researcher conclude that, there are no major problems related to 1) Long dial-up OR connection time, 2) Security concerns, 3) Poor quality of connection ,4)High Internet service charges and 5) Administrative problems inherent to your institution.
- Q5). Low capacity of the server/poor state of technology: 20 % teachers have seen no problem, 25% teachers seen minor problem, 25% teachers have seen moderate problem, 25% teachers have seen major problem and 5 % teachers have seen serious problem respectively.
- Q6). Lack of the necessary equipments: 15% teachers have seen moderate problem, 20% teachers have seen major problem and 45 % teachers have seen serious problem respectively.
- Q7). Absence of ICT plan: 20% teachers have seen moderate problem, 40% teachers have seen major problem and 35 % teachers have seen serious problem

respectively.

- Q9). Shortage of trained manpower: 15% teachers have seen moderate problem, 20% teachers have seen major problem and 10 % teachers have seen serious problem respectively.
- Q10). No network administrator: 10% teachers have seen moderate problem, 40% teachers have seen major problem and 25 % teachers have seen serious problem respectively.

Researcher conclude that, there are moderate, major and serious problems related to 1) Low capacity of the server/poor state of technology, 2) Lack of the necessary equipments, 3) Absence of ICT plan ,4) Shortage of trained manpower and 5) No network administrator.

Most of the institution adopts ICT technology for teaching –learning process during 11th period plane; still there is lack of high capacity of server, Lack of the necessary equipments, Absence of ICT plan, Shortage of trained manpower and No network administrator in institution. it will create a barrier in implementation of ICT in online evaluation and online assessment. Based on the findings, it was recommended that the institute should show more interest in imbibing information communication and technology (ICT) and supply the necessary ICT equipment and services.

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