CURRENT USES AND TRENDS OF INFORMATION AND COMMUNICATION TECHNOLOGY AMONG TEACHERS AND STUDENTS AT TERTIARY LEVEL

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Abstract: The study aimed to explore the current uses and trends of Information and Communication Technology among teachers and students at tertiary level. Major objectives of the study were to find out the availability of Information and Communication Technology for teachers and students in universities and to investigate the problems faced by teachers and students in accessing Information and Communication Technology. For this purpose stratified random sampling technique was used . Teachers and students of two leading public sector universities located at Islamabad (National University of Modern Languages Islamabad and International Islamic University Islamabad) were selected as a population. Data were collected from the departments of social sciences: Departments of Education, Mass Communication and International Relations through personal visits. The findings of the study revealed that ICT facilities are not available for students. Teachers and students of both universities were agree for the fact that ICT tools are not accessible for them easily. The study tried to catch the attention of educational administrators and planners towards the existing condition of ICT at tertiary level and emerging trends of ICT and its existing functioning which will guide them in taking decisions at various stages.

Keyword: Use of ict, availability, problems, skills, tertiary level

Introduction

ICT plays a significant part in information societies and educational systems of nations. Most countries are focusing on different approaches to integrate information and communication technology in learning and teaching of students and teachers to perk up the quality of education by emphasizing each individual competencies such as decision-making, working as a member of a group, critical thinking, managing dynamic situations and effectual communication (Anderson & Weert, 2002). The mixing of information and communication technology in educational field has been seen as the instrument to assist teachers, students and educationists to understand the potential of the new technological apparatus to revolutionize an outdated educational system (Albrini, 2006).

Communicating, collecting information, and using them for specific purpose are as old as the human civilization itself. In the absence of the means and tools, the primitive way was to carry out them orally, store them in the memory, and transmit them orally. In this way invention of ink and paper must be regarded as the first breakthrough in the area of ICT. Print media also helped a lot in the development of ICTs. Advancement in the ground of telecommunication technology has contributed in the evolution of ICTs. Starting from the age of sending messages through pigeons, we have reached the age of satellite communication. ICT is defined as a wide-ranging set of technological equipment and resources that are used to generate, communicate, disseminate, store up, retrieve and direct the information. When we talk about ICT in education it refers to a hardware and software technology that contributes in the educational information processing. Developed and developing both countries give significance to the integration of ICTs in educational institutions by prioritizing ICT literacy. Educationists and authors surveyed the importance of ICT which revealed the significance of information and

communication technologies in teaching and learning practice in educational institutes. Expectations associated with teachers and students are changing, students are expected to turn into more self-directed towards their education and teachers are projected to facilitate this type of student learning activities. For this teachers and students need ICT services in their institution and proper training (Siddiqui, 2004).

When we talk about information and communication technology at tertiary level we are referring towards the physical devices which mediate information transmission through communication for teachers and students to improve teaching learning process, skills and interest (Sharma, 2005). Globally educational trends are changing day by day. Society is expecting such educational institutes that provide students with large volume of information by using ICT to support self-directed learn. In Pakistan mostly leaders and administration of colleges and universities are less concerned regarding the utilization of information and communication technology in educational institution due to no training facilities, low budget and unavailability of resources. The focus of the present study will be on ICT use and competence issues students are facing in using ICT in universities. There is a widespread ignorance about the use, applications and advantages of ICT on the part of teachers, leader of institution and educational authorities responsible for bringing improvement in the functioning of educational system. Most of the teachers and students have fear in using information and communication technology and they want to stick to the traditional method of teaching and learning because of lack of training, understanding and ignorance. A mere literacy related to ICT is not sufficient for enabling the teachers and students to make use of ICTs in a fruitful way. The major objectives of the study were to find out the availability of Information and Communication Technology for teachers at tertiary level, to investigate the problems faced by teachers in accessing Information and Communication Technology at tertiary level, to find out the availability of Information and Communication Technology for students at tertiary level, to investigate the problems faced by students in accessing Information and Communication Technology at tertiary level.

Review of Related Literature

Universities are considered to be the highest places of learning in the country and same as university teachers are also positioned at a higher stage than teachers of schools and colleges. Being well-informed though is a condition for teacher but is not the just feature necessary of a university teacher. Above all teacher must have a capability to lead since he is considered to be a chief of the learned community of the society at large. Teachers have to work hard to achieve this talent and work still harder to turn this talent into a skill. Present age with teaching aids has made this attempt easy for those teachers who actually want to have them recognizes as skilled teacher. Present gadgets and innovations, unknown only a few decades back have become necessary part of the educational system today. It is the curiosity of the individual, aspiring to be a good teacher to keep himself side by side with swiftly changing technology and employ it intelligently.

More technology-rich world raises latest concerns for education while also expecting educational institutes to expand into the front of knowledge societies. Firstly technology can present the vital tools for civilizing the teaching and learning process in educational institutes and opening newest opportunities. In particular it could perk up the customization of the education process adapting it to the demanding needs of the student. Secondly education has the accountability of preparing students for professional life therefore it must train and give students those skills vital to join a society where technology-related competencies are becoming ever more essential. The extension of these competencies which are parts of so called 21st century competencies is ever more becoming a very important part of the goals of compulsory education. Lastly in a knowledge economy determined by technology, nation who does not master these competencies may experience from a new digital divide that may affect their capability to fully incorporate the knowledge economy and society (Pachler, 2010).

Reference to the practice and impact of ICTs in education region a study was conducted by Wasif, Ehsan and Shafqat in 2011. Consequences illustrate that accessibility and practice of ICT get better the information and education skills of learners. It also revealed that availability of information and communication technology in education system is supportive for the students to get improved their learning skills as well as most existing technologies can be helpful to produce the productive knowledge of students connected to their studies. Study shows that information and communication technology brings an encouraging force on education sector of Pakistan (Wasif, Ehsan, Shafqat, 2011).Information and communication technologies were originally proposed to serve up as a way of improving capability in the educational procedure. Furthermore it has been discovered that the use of ICT in learning can help get improved memory retention, raise motivation and usually get deeper perceptive (Forcheri and Molfino, 2000).

Methodology

Study was descriptive in nature. Descriptive research is measured as a suitable method keeping in sight the nature of the problem and demand of the study. The main purpose of the descriptive study is to present to the

researcher a profile or to explain associated aspects of the phenomena of interest from an individual, organization, industry or any other perspective (Sekaran, 2003).

The study was delimited to only two public sector universities, which were National University of Modern Languages Islamabad and International Islamic University Islamabad. All the students of Master program and practicing teachers of social sciences departments comprised the population of the study. Stratified random sampling procedure was used in the present study.
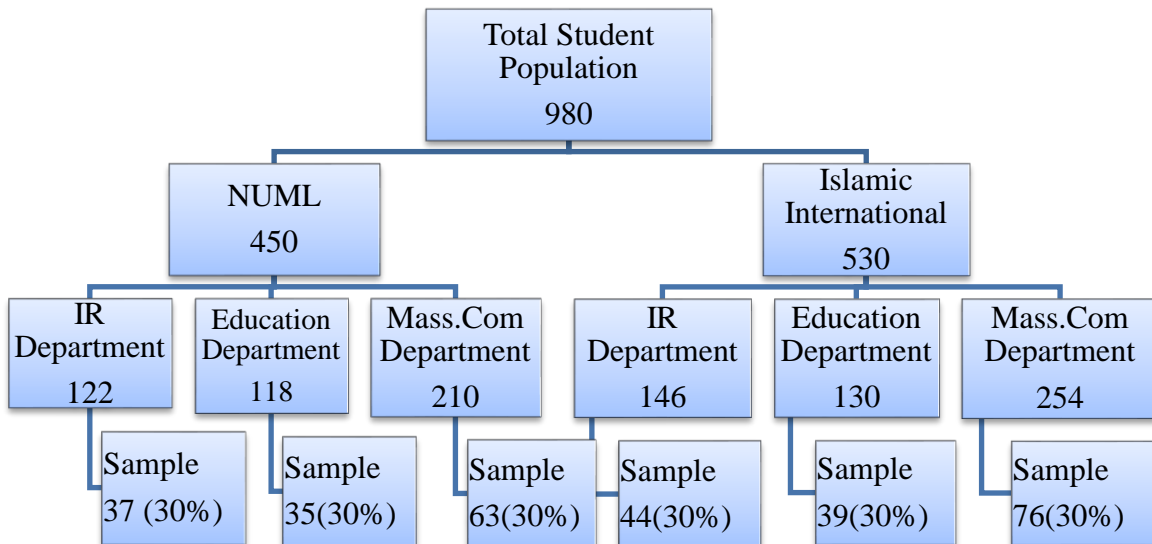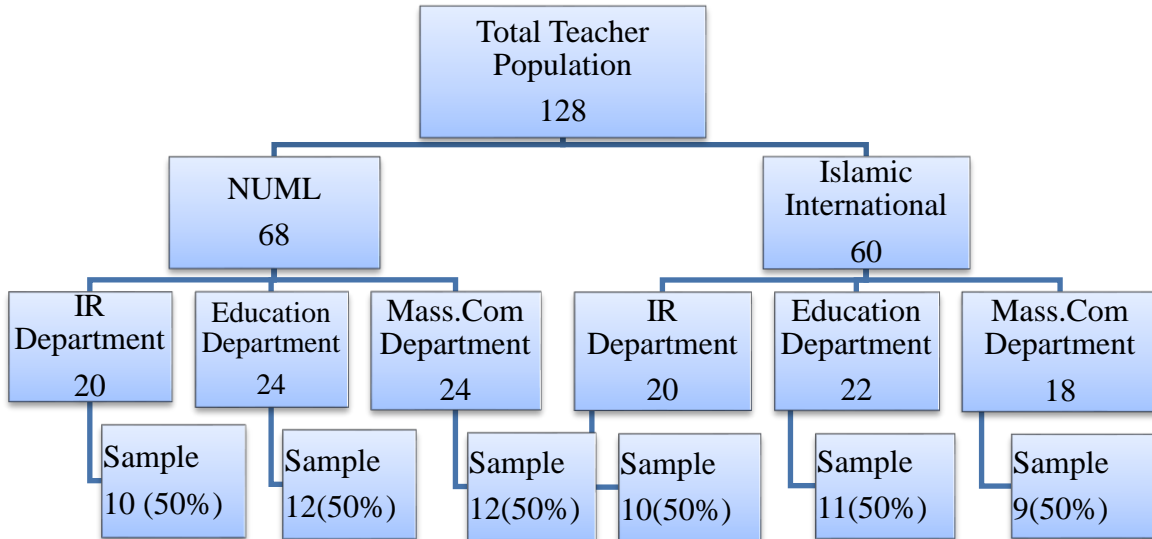
In the present study two questionnaires were developed for the measurement of emerging trends of ICTs among teachers and students at tertiary level. Because through this tool researcher intended to explore the emerging trends of ICT among teachers and students of tertiary level. Gutman split half reliability of emerging trends of ICTs among teachers and students was computed through split half method, so the total reliability was .89 and 81 respectively.

Data Analysis

Table No.1 describes mean score of teachers in both institutions. Results show that Islamic International university teachers had high score while NUML university exhibit lower score on emerging trends of

information and communication technology at tertiary level among teachers. NUML teachers mean score on availability of ICT were 32.7 on other hand teachers of Islamic International exhibit higher mean score of 34.6.

Table 1. Mean of respondents score on emerging trends of information and communication technology among teacher's for the variable institution

Institution	NUML	Islamic International
	M	M
Availability of ICT	32.7	34.6
Problems in accessing ICT	32.3	35.5

Islamic international teachers have high mean score of 35.5 on problems in accessing ICT as compare to the teachers of NUML University who exhibit lower score 32.3. The evident shows that the teachers who are teaching in Islamic International University have more availability of Information and Communication Technology facilities and have more chances to utilize these facilities in a skill full manner as compare to the teachers of NUML university.

Table 2. Mean of respondents score on emerging trends of information and communication technology among students

Institution	NUML	Islamic International
	M	M
Availability of ICT	23.9	31.6
Problems in accessing ICT	25.0	29.5

Table No. 2 describes the mean score of Institutions on availability of ICT and problems in accessing ICT. NUML students mean score on availability of ICT were 23.9 on other hand students of Islamic International exhibit higher mean score of 31.6. Islamic international students have high mean score of 29.5 on problems in accessing ICT as compare to the students of NUML University who exhibit lower score 25. The evident shows that the students who are studying in Islamic International University have more availability of ICT facilities and have more chances to utilize these facilities in a skill full manner. Result shows that students of Islamic International University have high mean score while students of NUML university exhibit lower score on emerging trends of Information and Communication Technology at tertiary level among students.

Conclusion and Recommendations

The conclusion drawn from the teachers opinion with the availability of ICTs shows that majority of the teachers agreed upon the fact that Information and Communication Technologies like broad band internet, wi-fi network, intranet facilities, digital library, video conference room and trained technical staff is available for them at tertiary level but on the other hand many teachers disagree upon the fact that some other ICT facilities like personal computers, laptops, printers, projectors and scanners are not available in sufficient number for the teachers at tertiary level. Where as problems regarding ICT, overall result shows that majority of teachers were agree that they are facing problems in accessing ICTs at tertiary level like unavailability of electricity, weak phone lines, lack of supporting staff, difficulty in accessing websites and virtual conference room.

Students opinion with the availability of ICTs, the result shows that majority of students were not agree for the fact that ICT tools such as Wi-fi network, computers in sufficient number, laptops, free of cost printers, lectures in electronic form, multimedia, scanners and trained technical staff are available to make their learning more effective and facilitative. Overall result shows that majority of students were not agree that ICT facilities are available at tertiary level.

It is recommended that at tertiary level special attention may be paid towards infrastructure such as unavailability of electricity, weak phone lines, lack of supporting staff and less access to virtual conference room which are hindering in assessing information and communication technologies for teachers. It is recommended that computers, laptops, printers, multimedia, lectures in electronic form and scanners may be provided to students sufficiently at tertiary level and trained technical staff should be available at university to resolve issues related with Information and Communication Technology equipment for students. It is also recommended that problems in accessing ICTs tools may be reduced for students by universities. Access to internet may be improved for students so that they can enhance their knowledge by using the educational literature, references, encyclopedia, collaborative projects, databases and dictionaries.

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