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# IMPACT OF ICT IN SHARPENING TEACHING EFFECTIVENESS OF UNDERGRADUATE COURSES IN COMMERCE

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## *ABSTRACT*

*Over the past few years, information and communication technology (ICT) has become very vital component in teaching at undergraduate levels. This paper examines the impact of ICT in enhancing teaching effectiveness at undergraduate levels among commerce faculties. The findings of the study reveals that most of the respondents consider the use of ICT in teaching methodology cannot be under-estimated*

*The research was conducted by using questionnaire to gather data from commerce faculties from three different undergraduate colleges in central zone of Bangalore district. The questionnaire was given to 30 commerce teachers from 3 different colleges. From these 23 faculties returned, and which was used for analysis and representing an overall response rate of 76.66%.*

*The research does suggest that there is capacity in improving the self-confidence of teachers in employing ICT in their teaching skills. Most of the faculties agree that ICT helps in sharpening teaching effectiveness.*

***KEYWORDS**: ICT Skills, Teaching Effectiveness, Teaching Methods*

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## INTRODUCTION

The use of ICT is not something that education has embraced with open arms. There is a natural tendency in man to resist new ways of doing things. The teacher's attitude is responsible for the slow acceptance of modern technology in the education environment. Change is the need for the day. The rapid pace at which technology is transforming the process of learning in many countries is almost unbelievable. The unnoticeable drive gathered by the devices of technology while at work in education will change the entire learning scenario like nothing else during the next few years. What is really amazing is that the developments are being minimised into shorter and shorter time spans and this is the crux of the matter. As a result, the learning tools at the command of the children are getting more effective and sophisticated. At the root of this revolution is the personal computer. The commerce teachers cannot keep away from these changes.

The pressure for colleges to reform and faculty to change the method of instruction have intensified during the last decade Until teachers use the computer and become comfortable and confident using the computer,

the computer may remain an isolated tool with either the potential to increase student learning, or the potential to increase the amount of dust it collects (Deborah, 2000). When teachers do not use computers, the likelihood of students using and becoming computer literate is drastically affected. Teachers are teaching students in the same way they have done for years. Getting computers into colleges is not the answer. Our biggest stumbling block is getting teachers to recognize how technology can serve education and provide access to training.

## LITERATURE REVIEW

**Burns and Myhill (2004)** provide a list of possible criteria being: reciprocal opportunities, guidance and modelling by teachers, provision of a setting or learning environment and lastly facilitation of autonomous learning. These authors provide a more open context for ICT use and partner it with skills of teacher guidance and communication.

**Clark's (2005)** aimed to identify the effect of ICT use in teaching geometry for academically talented students at high intermediate stage. The most important contribution of the study is its ability to identify the gains in mathematics that students may attain relying on ICT-based technology. In contrast, the study's most prominent weakness is its heavy reliance on the use of conventional ICT tools as well confining its goals to achievement.

**Chang (2002)** conducted a study to clarify the effect of ICT problem-solving methods on the achievement amongst tenth grade students in earth sciences subject matter in Taiwan. The study sample consisted of 78 male students and 78 female students who were distributed into four experimental subgroups, while 69 male students and 69 students were distributed into four control subgroups. The two groups were taught the same subject (floods), using problem-solving methods for the experimental group and lecturing methods for the control one. The researcher found statistically significant differences among the tenth grade students, in favour of the experimental group.

**Vekiri (2010**) carried out an explorative study within the context of an intermediate computer school in Greece. This study sought to examine the values and beliefs of both genders in relation to computer machines and ICT, parents‟ conscious support, teachers‟ expectations, and conceptions of the nature of teaching ICT. Over 300 students participated in the study, and answered a self-report questionnaire

**Hennessy (2000)** the climate project, undertaken by 48 lower secondary school students was evaluated with the use of a portable computer to collect temperatures and representing them graphically in a geographical research centre. Motivation and confidence in the use of technology increased over three weeks.

## GAP

It has been observed from various studies that the colleges are facing many challenges and also are prone to significant changes from time to time. Many studies have not been carried out on use of competency of faculties on the use of ICT and its impact in undergraduate colleges at Bangalore district specifically giving importance to Effective Teaching. Therefore this area is taken into consideration.

## OBJECTIVE

To analyse the impact of ICT in enhancing teaching effectiveness of commerce faculties at undergraduate levels in Bangalore District.

## RESEARCH METHODOLOGY

### Research Instrument

The questionnaire was given to 30 commerce teachers from 3 different colleges in Bangalore district. From these 23 faculties returned, and which was used for analysis and representing an overall response rate of 76.66%. The back ground information of teachers (n=23) who completed properly and returned the questionnaires were indicated hereunder.

## RESEARCH FINDINGS

**Table 1: Background Information of Sample Teachers in the Study by Faculty, Gender and Age**

| Variables | Category | N | Percent |
|---|---|---|---|
| Faculty | Commerce | 23 | 100 |
| | **Total** | **23** | **100** |
| Gender | Male | 03 | 13.04 |
| | Female | 20 | 86.96 |
| | **Total** | **23** | **100** |
| Age | 21-25 | 05 | 21.74 |
| | 26-30 | 06 | 26.08 |
| | 31-35 | 04 | 17.39 |
| | 36-40 | 05 | 21.75 |
| | Above 40 | 03 | 13.04 |
| | **Total** | **23** | **100** |

It can be represented from the table that the number of samples selected from each faculty is almost proportional with slight difference. That is, the percentages of sample teachers in Table 1 from Commerce teachers from three colleges which is 100% respectively. The information in the table also reveals that 13.04% and 86.96% of the teachers were males and females respectively. Hence, the number of male teachers is fewer than that of female teachers. Therefore, this indicates that the great majority of the teachers in the sample areas of the study were females showing that the work environment was female dominated.

In order to determine the advantages and disadvantages of using ICT in teachers' teaching method, arithmetic means, standard deviations, mode and percentages regarding ICT skills and its applications were calculated.

Regarding the age of the respondents, 21.74% of the teachers were between 21 and 25 years and 26.08% of the teachers were between 26 and 30 years. The rest of the teachers 17.39%, 21.75% and 13.04% were between 31 and 35years, 36 and 40 years and above 40 years respectively. This shows that the vast majority of teachers were young.

**Table 2: Background Information of Sample Teachers in the Study by Educational Level, Teaching Experience and Workload**

| Variables | Category | N | Percent (%) |
|---|---|---|---|
| Educational Level | PG | 15 | 65.23 |
| | MPhil | 05 | 21.73 |
| | PhD | 03 | 13.04 |
| | **Total** | **23** | **100** |
| Teaching Experience in Years | <2 years | 06 | 26.08 |
| | 2-5 years | 08 | 34.79 |
| | 5-10 years | 06 | 26.09 |
| | >10years | 03 | 13.04 |
| | **Total** | **23** | **100** |
| Workload | <10hours | 01 | 4.34 |

| | | | |
|---|---|---|---|
| | 10-16 hours | 08 | 34.78 |
| | 16-22hours | 07 | 30.44 |
| | >22 hours | 07 | 30.44 |
| | **Total** | **23** | **100** |

With regard to Educational qualification of the respondents, 65.23% of the faculties were Post Graduates. Regarding this the UGC (University grant commission) states that the faculties need to possess post-graduation and NET in their respective disciplines for them to be an Assistant professor. As to the teaching experience of the respondents, the majority of the teachers (34.79%) had teaching experience of more than 2 to5 years, and 26.08%and 26.09% of them had teaching experience between less than two years and in between five to ten years. This, therefore, indicates that the minority of the teachers have less teaching experience. Regarding the teachers' workload, 4.34% of the teachers had a workload of 10 hours/week while 60.88% shows a workload of more than 16 to 22 hours. This, therefore, shows that the majority of teachers had workload of 16 to 22 hours/week.

**Table 3: Impact of ICT in Sharpening Teaching Effectiveness**

| No. | Advantages and Disadvantages of using ICT in Your Teaching Method | Mean | Standard Deviation | Mode | Percentage | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Strongly disagree | Disagree | Agree Nor disagree | Agree | Strongly agree |
| 1 | ICT makes teaching more interesting | 4.04 | 1.224 | 5 | 8.69 | 4.35 | 4.35 | 39.14 | 43.47 |
| 2 | ICT provides a comprehensive view of the topics discussed | 3.96 | 1.186 | 4 | 8.69 | 4.35 | 4.35 | 47.83 | 34.78 |
| 3 | ICT increases students' motivation | 3.74 | 1.214 | 4 | 8.69 | 8.69 | 8.69 | 47.84 | 26.09 |
| 4 | ICT improves the presentation of material in my chapters | 3.91 | 1.240 | 5 | 8.69 | 4.35 | 13.05 | 34.78 | 39.13 |
| 5 | ICT makes preparing lessons easy | 3.64 | 1.136 | 4 | 8.69 | 4.37 | 17.39 | 47.86 | 17.39 |
| 6 | ICT makes the lessons more interesting for the students | 3.78 | 1.242 | 4 | 8.69 | 8.69 | 8.69 | 43.47 | 30.43 |
| 7 | ICT makes it easy to control the class | 3.57 | 1.199 | 4 | 8.69 | 13.04 | 8.69 | 52.19 | 17.39 |
| 8 | ICT has enabled me to better my search skills | 4.04 | 1.186 | 5 | 4.35 | 8.69 | 13.05 | 26.08 | 47.83 |
| 9 | ICT helps in improving my self-esteem | 3.83 | 1.154 | 4 | 4.34 | 13.05 | 8.69 | 43.49 | 30.43 |
| 10 | ICT makes me feel more professional | 4.04 | 1.147 | 5 | 4.35 | 8.69 | 8.69 | 34.78 | 43.49 |
| 11 | ICT has positive influence on students attention span | 3.70 | 1.222 | 4 | 8.69 | 8.69 | 13.05 | 43.49 | 26.08 |
| 12 | ICT improves teacher student relationship | 3.70 | 1.222 | 4 | 8.69 | 4.35 | 26.09 | 30.44 | 30.43 |

The results from the above table indicates that the highest advantages for implementing ICT in the teaching process was ICT makes teaching more interesting, ICT has enabled me to better my search skills, ICT makes me feel more professional where the arithmetic mean is 4.04 where standard deviation of all the three are 1.224, 1.186 and 1.147 accordingly. The mode was 5 which indicate that the highest response was Strongly Agree with a percentage of 43.47%, 47.83% and 43.49% accordingly. Secondly, ICT provides a comprehensive view of the topics discussed where the arithmetic mean was 3.96 and standard deviation of 1.186. The mode was 4 which indicate that the highest response was Agree with 47.83% of respondents.

Most of the teachers are in the opinion of using ICT as a teaching methodology. Approximately 84% teachers supports that use of ICT is the need of the hour.

## CONCLUSIONS

The teachers are generally confident about their ICT use, there must still be recognition that this is a self-checking and therefore liable to issues of overconfidence or lack of awareness.

Therefore teachers should be subjected to a test on ICT knowledge so that there can be analysis made and can find out their weakest areas in applying ICT in their teaching.

The data and findings drawn from the questionnaires were limited to 23 faculties from 3 different colleges. The study did not investigate the level of ICT resources available to the teachers. The research was only towards teacher's responses and students were not considered. Moreover, the study did not focus on outcomes, but it only concentrated on impact of ICT on effective teaching.

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