

# ICT METHOD V/S TRADITIONAL METHOD: A STUDY OF LAW STUDENTS

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## ABSTRACT

*The rapid growth of Information and Communication Technologies (ICT) has challenged the traditional method of teaching and changed the educational landscape globally. The teaching method is now divided into two different ways of thinking on education, one is traditional and other one is ICT Method. Most of the teachers and experts have explored new methods of teaching and believe that modern methods or the ICT method is better than the traditional method of teaching. This paper aimed to find out the perception of the Law Undergraduate students regarding the ICT method of Teaching. Secondly, this paper also finds out gender wise perception of ICT teaching method. This study has been conducted on 150 first year students of a Law school in Noida. They are taught using traditional as well as ICT method of teaching in the law school. Self-designed questionnaires were used for evaluating the perception. Finally Mann-Whitney U- test was applied to measure significant difference between the perception regarding the traditional as well as ICT Method.*

**Keywords:** Information and Communication Technologies (ICT), Traditional Method of Teaching, Perception

## INTRODUCTION

The traditional role of teaching focuses on the teacher as organizers of learning activity, providers of information and experts of knowledge. The teacher carries too much of responsibility for teaching in the classroom to make sure everything they are teaching is understood by the students or we can say there is a typical way to control class where the teacher teaches using blackboard, explains concepts, asks students to copy and makes sure that students are paying attention.. Besides that, the traditional way also focuses on inculcating discipline among students and building their character.

The rapid growth of Information and Communication Technologies (ICT) has challenged the teachers' way of thinking and changed the educational landscape globally. As a result the recent decades have seen rapid and radical changes in the educational environment (Bell, 1973; Masuda, 1982). It is now widely accepted that the new method (ICT) is the best way to obtain attention of the new generation of students and make them interested in subjects. The ICT method also helps the students get actively involved through hands-on activities rather than teaching them by traditional method. The role of teacher has changed now. According to the new role, a teacher is now treated as an advisor, manager and facilitator of learning and also as a developer of skills. The use of ICT method develops the student-teacher relationship, where the teacher acts as an observer; standing back to let learning happen and lets the students solve problems. In this case the teacher is responsive to students' cognitive needs and development. The ICT is used in modern teaching to promote interaction, support creativity, active learning, high order thinking etc. Applying ICTs in the Indian higher educational system has a great importance with the view to create a real compatibility between Indian and European educational systems.

Research conducted by various authors indicates that the evaluation of teaching and learning process improves the quality of both teaching and learning (Martini, 2008; Bishop, 1977; Wossmann, 2007; Hanushek & Raymond, 2005) actually it creates a high level of responsibility among teachers and students which in turn produces better results. Teaching and learning process which uses ICT as well as Traditional should therefore be subject to evaluation. This study aimed to find out the perception of the Law Undergraduate students regarding the ICT method of Teaching and Traditional Method of Teaching. They are taught using traditional as well as ICT method of teaching in the law school. Because some of the teachers and experts have explored new methods of teaching and believe that modern methods or the ICT method is better than the traditional method of teaching and others believe that our traditional method of teaching is good and it can only be helpful for the overall development of the student. Secondly this paper also finds out gender wise perception of ICT Teaching method and Traditional Teaching Method. Beside this, the most dominated factor which affect traditional as well as ICT teaching method were also identified in this study.

## **REVIEW OF LITERATURE**

In ancient times, the traditional approach of teaching was considered as formal teaching method, it involves the direct flow of information from teacher as sage to students as receptacle. That was the time of '*guru-shishya parampara*' in India when classroom put students at the centre. The effectiveness of this transmission has been tested by posing various exercises to the students (Derek & Collett, 2003).

Use of ICT in teaching develops higher order skills such as collaborating across time and place and solving complex real world problems (Bottino, 2003; Mason, 2000; Lim and Hang, 2003). It improves the students' perception and understanding of the world. Thus, ICT can be used to prepare the workforce for the information society and the new global economy (Kozma, 2005). There are at least two fundamental reasons that justify the use of ICT. The first is that university

education has a responsibility to ensure the future graduates. The second reason is that ICT may contribute to more and better learning; i.e., they may improve the effectiveness of university education (Francesc, 2005). It is widespread belief that use of ICT in teaching can empower teachers and learners, transforming teaching and learning processes from being highly teacher-dominated to student-centered, and that this transformation results in increased learning for students. On the other side Nickerson (1995) pointed out that technology does not promote understanding in and of itself, it is a tool that can help students view learning as a constructive process and use simulations to draw students' attention. It provides a supportive environment that is rich in resources, aids exploration, creates an atmosphere in which ideas can be expressed freely, and provides encouragement when students make an effort to understand (DeMas, Garfield, and Chance, 1999).

Some of the studies found the positive effects of ICT on the performance of the students (Kirkpatrick and Cuban 1998,). Fuchs and Woessman (2004), for example, find a positive and significant correlation between the availability of computers at school and school performance in PISA; however, the correlation becomes small and insignificant when other school characteristics are taken into account. Coates & Humphreys (2004) compared student scores in face-to-face and online economics courses taught at three different institutions. Rouse, *Krueger and Markman* (2004) found results from a randomized study of a popular instructional computer program designed to improve language and reading skills in the U S. Angrist and Lavy (2002) analyzed the effects of a large-scale computerization policy in elementary and middle schools in Israel, based on a controlled comparison between schools that received funding and schools that did not receive them. A study conducted by Fuchs and Woessman (2004) found a negative relationship between computer availability in the home and achievement scores for students in the U.S., while several other large-scale studies also conducted found a positive relationship between computer availability in homes and test scores (Blackmore, Hardcastle, Bamblett & Owens, 2005; Kozma, McGhee, Quellmalz, & Zalles, 2004; Light & Manson, 2008; Linden, Banerjee, & Duflo, 2003).

In terms of gender Gay and Blades (2005) recommend academicians and course administrators to pay more attention to the use of ICT's resources as a major component in classroom teaching. Females, to a larger degree than males reported that they had access to a computer off campus. Another survey conducted by Schumacher and Martin (2001) argued that females are less experienced with ICT's and are more likely than males to have negative attitudes towards computers. Furthermore, male students prefer to study to courses that require computer use more than female students and show interest in programming and games playing. They are also more experienced at the ICT's use than girls, apart from e-mails where no significant differences were reported. Moreover, Shashaani (1997) examined some males and females about their interest in internet use and discovered that there was a great difference on the interest level between the two groups. Male respondents showed to be more interested in internet services and use towards women. Similar results about the internet and computer usage between males and females were revealed by other studies as well. Although women and men show little difference in general attitudes toward internet, there were many differences toward internet

searching and usage. Ford and Miller (1996) suggest that women are more likely to report significantly greater levels of disorientation and disenchantment in relation to internet, compared to males. Morahan (1999) found that women college students get internet access less often, spend less time online and don't surf for different purposes as often as men.

## **OBJECTIVES**

1. To develop and standardize a measure to evaluate perception towards teaching method.
2. To identify factors underlying perception towards ICT teaching method and traditional teaching method.
3. To compare the perception of law students regarding traditional with ICT method of teaching.
4. To find out gender wise perception of ICT teaching method and traditional teaching method.

## **Hypotheses**

H<sub>0</sub>1: It states that there is no significant difference between Traditional Teaching Method and ICT Teaching Method.

H<sub>0</sub>2: It states that there is no significant difference between the perception of males & females towards the Traditional Teaching Method and ICT Teaching Method.

## **RESEARCH METHODOLOGY**

**Study and Sample:** The study was empirical in nature where survey method was used to collect the data. The population included all the undergraduate Law students of Symbiosis Law School. In all 150 questionnaires were distributed but only 105 questionnaires were returned and 95 responses were finally considered. An individual Student was the sample element from whom the data was collected.

**Tools Used for Data Collection:** The primary data was collected through non-probability judgmental sampling method as the data could be collected from the students who are taught through ICT as well as Traditional Method. The questionnaire was on a 7-point Likert Type scale, where 1 indicated 'Strongly Disagree' and 7 indicated 'Strongly Agree' consisting of 20 items.

**Tools Used for Data Analysis:** Perception towards Traditional as well as ICT method was assessed through various tests using SPSS. Firstly, the questionnaire was standardized using various measures such as Item to Total Correlation, Reliability etc. Validity was also ensured through Content Validity method. Factor analysis was also computed to identify underlying dimensions of respondent's perception towards Traditional Teaching Method and ICT Teaching Method. Descriptive statistics was computed to find out the acceptance level towards Traditional and ICT

method of Teaching. To compare the perception regarding Traditional and ICT, Mann-Whitney U-test was applied as the data was not normal.

## **RESULTS & DISCUSSION**

### **Standardization of Measure for Traditional Method**

**Consistency, Reliability and Validity:** As stated earlier the questionnaire was standardized. For this first of all, item to total correlation was applied, then reliability and validity was calculated. The consistency of the questioners was checked through Item to total Correlation. The results of item to total correlation shows that all the items included in the questionnaire were highly correlated with the total since the value or correlation coefficient was very high so all the items were considered for further analysis (See annexure Table-1). For checking the reliability of questionnaire Cronbach Alpha method was applied in the questionnaires. The reliability value for Traditional Method of teaching through Cronbach Alpha is equal to .953. Since the value is greater than 0.7 hence the questionnaire was found highly reliable (See annexure Table-1). The face validity was checked and found to be high.

### **Dimension Identification for Traditional Teaching Method**

Factor Analysis using principal component Varimax rotation Kiser normalization was applied on the raw scores of 20 items to find out the factors that contribute towards “Traditional Method of Teaching”. After factor analysis following factor were identified (See annexure Table-3):

#### **Factors of Traditional Method**

1. **Productive Learning:** This factor has emerged as the most important determinant of this research with a total variance of 58.168. The traditional method increases the engagement in the classroom. Because it is stated earlier that in this method the teacher while teaching in the classroom makes sure that everything taught is understood by the student or students paid attention and listen carefully or not. The students also note down the relevant and important points at the time of lecture because notes are not provided to them and everything they has to note down. The writing habit actually improves the knowledge and writing skills of the students as well as the interest in the subject. It is also helpful for the students for planning the course content better.
2. **Conventional Technique:** This is the second most emerged factor of the study with a total variance of 5.766. This factor basically focuses on the negative aspect of the traditional method which is monotony in teaching. The students sometimes get bored and need change. This method focuses only on blackboard teaching or reading out concepts from the book which generally leaves nothing to be done by the students except copying the content. No extra activities are done and it is expected from the students to pay attention all the time, which generally proves to be quite impossible.

## **Standardization of Measure for ICT Method**

**Consistency, Reliability and Validity:** Consistency of all the items in the questionnaire was checked through item to total correlation. The results of item to total correlation shows that all the items included in the questionnaire were also highly correlated in this questioner with the total since the value or correlation coefficient was very high so all the items were considered for further analysis (See annexure Table-1). The reliability test was again carried out by using SPSS software and the Cronbach Alpha and the value is equal to .942 in case of ICT teaching method. Since the value is greater than 0.7 hence the questionnaire was found highly reliable (See annexure Table-2).The face validity was also checked and found to be high.

## **Dimension Identification for ICT Teaching Method**

Factor Analysis using principal component Varimax rotation Kaiser normalization was also applied on the raw scores of 20 items to find out the factors that contribute towards ICT Method. After factor analysis following factor were identified (See annexure Table-3):

### **Factors of ICT Method**

1. **Comprehensive Approach:** This factor emerged as the most dominating factor with a variance of 53.281. The modern ICT method basically improves the student's ability to think in more than one way. The more vivid and lifelike examples help them relate a concept with practical situations. The availability of search options and updated technology with the students also helps them critically analyze what they are being taught. This results in enhanced learning. It also adds to the Motivation level of the students since the student-teacher interaction is more when there is more scope to perform for both student and the faculty. This method is responsive to students learning needs and fair in evaluating their learning.
2. **Interaction:** This factor has emerged as the second important determinant of research with a total variance of 6.183. The clearly organized and structured presentation and other teaching material enable the students to concentrate better. This basically improves the independent learning skill and establishes a positive learning environment. The sufficient learning material provided by the teacher or the availability from the different resources helps the students for better understanding of the subjects.
3. **Extraneous information:** The total loading of the sixth factor is 5.979.The availability of the too much study material and sometimes irrelevant information given to explain the concepts creates extra burden on the students. In the study too it was found that the students felt that most of the time the material has little connection with the course.

## **Comparisons**

### **Traditional Teaching Method and ICT Teaching Method**

To compare the perception of the law students regarding Traditional and ICT Teaching method the Mann-Whitney U- test was applied as the data was not normal.

The computed value of Z is -4.799 with a significance level of  $p = 0.000$ . Since the probability value ( $p$ ) is less than the 0.05, the result is significant. This shows that at 5% level of significance, there is a difference between the perception of law undergraduate students regarding the traditional and ICT method of teaching. As the mean value of the ICT Method (95.8211) is higher than that of Traditional Method (78.5474) of Teaching we can say that students like more ICT Method of teaching as compare to the Traditional method.

<b>Test Statistics<sup>a</sup></b>	
	ICT
Mann-Whitney U	2.694E3
Wilcoxon W	7.254E3
Z	-4.799
Asymp. Sig. (2-tailed)	.000
Grouping Variable: Method of Teaching	

<b>Group Statistics</b>				
Method of Teaching	N	Mean	Std. Deviation	Std. Error Mean
ICT	95	95.8211	21.54164	2.21013
Traditional	95	78.5474	25.45617	2.61175

### **Gender wise comparison of Traditional Teaching Method and ICT Teaching Method**

To compare the Gender wise perception of the law undergraduate students regarding Traditional and ICT Teaching method again Mann-Whitney U- test was applied. The computed value of Z is -0.269 with a significance level of  $p = .788$ . Since the probability value ( $p$ ) is not less than the 0.05, the result is insignificant. The result indicated that at 5% level of significance, there is no difference between the perception of girls and boys regarding the traditional and ICT method of teaching.

<b>Test Statistics</b>	
	ICT
Mann-Whitney U	4.250E3
Wilcoxon W	1.069E4
Z	-.269
Asymp. Sig. (2-tailed)	.788
a. Grouping Variable: Gender	

The result of the study clearly indicated that the students of law undergraduates found it better to learn using the ICT method of teaching. Generally speaking, as per the results of the study, ICT method creates a healthy learning environment and the way of communication makes learning easier for students. The ICT brings better quality of material to the classrooms and libraries from

plethora of e-library and other databases for the teachers as well as the students. Basically it provides the opportunity for the learner to actively involve all his senses to get the information in the class, which results in active response too. The ICT method provides variety in the presentation of content which helps learners in concentration, better understanding, and long retention of information which is not possible in case of Traditional Method.

## CONCLUSION

The use of Information and Communication Technology has no doubt improved the quality of higher education in the past decade. The reason is that ICT contributes to better learning environment and improves the effectiveness of teaching method. This paper was aimed to find out the perception of the Law Undergraduate students regarding the ICT and Traditional method of Teaching. The results of the study revealed that there was a difference between the perception of law undergraduate students regarding the traditional and ICT method of teaching. They prefer the ICT method of teaching because they believe that ICT method creates a healthy learning environment and brings higher quality of study material in the classrooms and libraries from the different e-library sources for the teachers and students. Legal principles, concepts, learning from jurisdictions, case analysis, etc. learnt from oral dictations drained out the interest in the subject which was regained only through self-motivation or to get good marks. But the students found it more interesting when presentations using photographs, videos, storylines, cases, etc. were presented in the class using the ICT method, & engaged in discussions more actively.

The gender wise perception was also checked in the study and the results indicated that there is no difference between the perception of girls and boys regarding the teaching methods. It showed that both of them thought alike when it came to selecting a more preferred method of teaching. In the study, the response of both girls and boys showed that ICT method of teaching generated more interest in class and enhanced interaction in class by bringing in better teaching material, more recently updated practical examples and well structured classes which gives ample scope of learning by doing, seeing, hearing, thinking and reading rather than just by learning through listening.

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## ANNEXURE

**Table-I showing results of Item to total correlation**

Items	Traditional Method			ICT Method		
	Computed Correlation Value	Consistency	Accepted/Dropped	Computed Correlation Value	Consistency	Accepted/Dropped
VAR00001	.797	Consistent	Accepted	.726	Consistent	Accepted
VAR00002	.737	Consistent	Accepted	.757	Consistent	Accepted
VAR00003	.693	Consistent	Accepted	.713	Consistent	Accepted
VAR00004	.798	Consistent	Accepted	.743	Consistent	Accepted
VAR00005	.755	Consistent	Accepted	.604	Consistent	Accepted
VAR00006	.759	Consistent	Accepted	.664	Consistent	Accepted
VAR00007	.747	Consistent	Accepted	.638	Consistent	Accepted
VAR00008	.787	Consistent	Accepted	.720	Consistent	Accepted
VAR00009	.778	Consistent	Accepted	.677	Consistent	Accepted
VAR00010	.736	Consistent	Accepted	.719	Consistent	Accepted
VAR00011	.609	Consistent	Accepted	.751	Consistent	Accepted
VAR00012	.743	Consistent	Accepted	.742	Consistent	Accepted
VAR00013	.758	Consistent	Accepted	.736	Consistent	Accepted
VAR00014	.668	Consistent	Accepted	.554	Consistent	Accepted
VAR00015	.801	Consistent	Accepted	.775	Consistent	Accepted
VAR00016	.748	Consistent	Accepted	.749	Consistent	Accepted
VAR00017	.783	Consistent	Accepted	.704	Consistent	Accepted
VAR00018	.785	Consistent	Accepted	.725	Consistent	Accepted
VAR00019	.685	Consistent	Accepted	.658	Consistent	Accepted
VAR00020	-.101	Consistent	Accepted	-.083	Consistent	Accepted