

## **Correlational study of ICT Knowledge of B.Ed student teachers and their Academic Achievement**

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### **ABSTRACT**

Information and Communication Technology is many apparatuses for instructing and learning in every aspect of the educational plan and in education system. ICT silks and understandings of B.Ed student teachers are essential for a profitable and remunerating life and can have a huge impact on associating individuals and improving their prosperity in the field of teaching. By advancing ICT proficiency in schools and colleges can turn out to be effectively connected with and educated residents in the neighbourhood and worldwide networks. This examination centres on the Information on Data Correspondence Innovation among B.Ed student teachers and how it relates to their scholastic accomplishment that is Academic Achievement. The method of normative survey was adapted to the study and the random sampling method adopted to gather or collect the data. Gender, Locale of the respondents was considered as the moderate variables for the present study. Present writing expresses that the ICT knowledge of B.Ed student teachers have positive connection with their scholastic performance.

**Keywords:** ICT, ICT Knowledge, Academic Achievement, B.Ed Student teachers

### **INTRODUCTION**

Technology has made information accessible / transmittable from anywhere and by / to all groups of people. Education has reached most parts of the world and ICT has become an integral part of human life(Ambeth, I & Anbalagan,S(2020) .Existing ICT facilities and rising ICT advances are vital to present-day social orders and applicable to people's work, business, home, and public activities. Schools and Universities need to set up their understudies for the world in which they live, a world portrayed by quick mechanical change and worldwide interchanges. ICT is indispensable for monetary

development and advancement. In this technology was very useful to convey instant urgent messages and well as to make people be aware current local and international news(Ambeth, I & Anbalagan,S(2020). ICT aptitudes are profoundly esteemed allthrough business and society. ICT can expand the scope of learning encounters accessible and can be conveyed in profoundly adaptable manners. The utilization of ICT in instructive settings, without anyone else for change in learning. The students may learn by using their multiple senses, which provides new and enriched experiences. The learning process will be an active one, leaving the students to learn by their own (Anbalagan, S). The abilities and information on utilizing these advances should: start and at the school level, tertiary training for what it's worth at this phase where students are prepared for the business world. The use of ICT to manage and organize explicit knowledge is highlighted. (Ambeth, I & Anbalagan,S(2020) This investigation expects to discover the Information on ICT among Secondary Trainee Teachers and its connection to their scholarly accomplishment. National Educational program Structure of Educator Training additionally underscores ICT. Indeed, even NCERT discharged the ICT educational plan. ICT-based training at its ideal use in Schools and school level should tackle the ICT instruction to improve the nature of learning Result This requires an examination in the current status of ICT Information on B.Ed student teachers and its connection with their scholarly accomplishment.

### **Review of Related Literature:**

The researcher studied the many pre research work and identify some relevant sources for the background support for the present research paper. In all the available reviews mainly selected few and and presented here as more relevant and suitable profs. Here Listed out some ICT Knowledge related, and Academic achievement related studies have been encountered.

- **Goodison, TA (2002).** Examined the UK grade school children\'s familiarity with the linkage among ICT and the manner in which they lean inside the setting of a school that has been especially fruitful in coordinating ICT into the educational program. Understudies were met by their educator and concentrates from the exchange, distinguished instances of good practices. Consequences of the investigation lustrate that ICT can make commitments to the advancement of autonomous learning.
- **PISA (2006):** The 2006 Developer for Global Understudy Appraisal concentrated on understudies' logical capabilities, estimated their insight, and gave polls concentrated on various parts of life. One angle was the students' involvement in Data and Correspondence Innovation (ICT). The study revealed that the ICT knowledge of the students have positive correlation with the academic achievement.
- **Smith, J Schuller,(20 10 ).** Contemplated the effect of Data Correspondence Innovation on inclining and boundaries affected on scholarly accomplishment among 234 college understudy tests the investigation discoveries uncover a positive connection between accomplishment inspiration and web based learning with ICT.
- **Kim, S. H, et al (20 14).** Broke down the factors influencing the ICT Proficiency level of Korean Grade School understudies. ICT uses effects affect ICT education score, however that log utilization time for study has a negative impact at the individual level. Also, significant urban communities, accomplishment levels, and the quantity of PCs per understudy have a positive impact at the school level. At the individual level, the outcome from the investigation demonstrated that the ICT level of

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female understudies was higher than that of male understudies all things considered or lower levels. The ICT proficiency of schools situated in significant urban areas was higher than that in rustic zones in normal level.

The specialist has inspected a couple of Indian-related investigations which have importance with the current examination.

- **Irfan Shah (2005)** directed exploration to consider the ICT familiarity with optional and higher auxiliary instructors, to contemplate the ICT utilization of optional and higher optional educators, to examine the ICT need of optional and higher auxiliary instructors and to consider the factors related With the ICT mindfulness, use, and need of optional and higher auxiliary instructors. It was discovered a low level of ICT mindfulness, use, and the requirements auxiliary and higher optional educators. The factors identified with ICT attention to instructors were showing experience, age, and complete pay the factors identified with the ICT utilization of educators were all out pay and PC preparing. He variable identified with the ICT need of instructors was the Degree Program which they went to at the college level
- **Sandhya Khedekar and Sunita Marge (20 12)** Conducted the Study on ICT Mindfulness and Scholarly Execution of Optional Understudies, the current investigation scientists attempted to examine the attention to ICT of students, by and discover the connection between consciousness of ICT and Scholastic Execution of SSC, CBSE, and ICSE Optional understudies regarding sexual orientation and school types. The expressive technique was utilized for the investigation five-point rating scale instrument that was developed for the information assortment. It was discovered that there is a noteworthy connection between the attention to Data and Correspondence Innovation and the and flourished effect of ICT on the Scholarly Exhibition of Optional understudies as for sexual orientation and school type. There is no huge distinction in ICT mindfulness among understudies of SSC, ICSE, and CBSE sheets, however, there is a noteworthy contrast in ICT mindfulness and saw sway on Scholastic Execution based on sexual orientation and school type.

The related examinations demonstrate that ICT is the central factor for a move from educator focused owned figuring out how to understudy focused learning errands. The attention to current ICT devices and assets are significant and moving components for 21<sup>st</sup> century understudies to accomplish scholarly greatness in a time of globalization an itemized examination would assist us with bringing out the genuine image of our understudies in these zones.

### OPERATIONAL DEFLATIONS

- **ICT:** characterized as conveying through a differing set of mechanical apparatuses, gadgets, and assets. Information and Communication Technology serve to make, disperse, store, and deal with the learning.
- **Knowledge of ICT:** The awareness of ICT tools, devices, and resources and the skills to use it in the learning context by the secondary school students. Thus, Knowledge of ICT includes the understandings of the information related to computer skills and functions.
- **Academic Achievement:** Academic Achievement is identified with the obtaining of standards and

speculations Furthermore, the ability to proficiently perform certain controls, destinations, images, and thoughts. The appraisal of scholarly accomplishment has been to a great extent bound to the assessment in the wording of data, information, and comprehension. Mainly says that the teacher's trainees performance in their subject which they are studied in the course.

- **B.Ed Student Teachers** : are the professional degree students that gets ready understudies for fill in as an educator in schools, and other a lot more the extra work like fields and examination must be done all together for the understudy to be completely able to educate.

### **THE OBJECTIVES OF THE STUDY**

1. Check the ICT-Knowledge among student teachers
2. Check out relationship between ICT Knowledge of B.Ed student teachers and Scholastic performance(AA)
3. Check the link between ICT Knowledge of B.Ed student teachers combined with Scholastic accomplishment related to finalised sample and the background variables.

### **HYPOTHESES FOR THE STUDY**

1. The ICT Knowledge of B.Ed student teachers are less.
2. Significant level is null related to the relationship between ICT Knowledge of B.Ed student teachers and their AA.
3. Significant level is null related to the relationship among ICT-Knowledge of B.Ed trainees AA and some background variables.

### **METHODOLOGY**

Method for present research study normative survey was adopted. In this present situation to collect the data is very typical hence above method was adopted.

### **SAMPLE OF THE STUDY**

Present research consist totally 500 B.Ed student teachers of Bengaluru was selected.

#### **Distribution of the Final Sample**

**Tabel-1**

<b>Gender</b>	<b>Local</b>		<b>Total</b>
	<b>Urban</b>	<b>Rural</b>	
<b>Boys</b>	100	150	250
<b>Girls</b>	100	150	250
<b>Total</b>	200	300	500

Table-1explains the ultimate sample and additional sample related to Gender and Locality. **TOOLS USED FOR THE STUDY:**

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Present research work consist the researcher try to construct and standardize the ICT Knowledge tool for B.Ed student teachers. According to the process and procedure draft tool prepared 30 items as MCQ. Based on the Computer operating system, File and Presentation, Social Media, Application, Internet and Mailing, OER and Cyber Laws. Every Question has one correct response and have one mark will be given form each question. Draft tool was piloted on 10 0 samples. Based on the draft finalised 27 items. Through the test-re test method and also Correlation value 0 .854 was estimated. Content validity establish by the senior Teacher Educator.

### STATISTICAL TECHNIQUES USED IN THE STUDY

1. Descriptive analysis
2. t-test
3. Correlation Analysis

### RESULT AND DISCUSSION:

**Table-2**

**The ICT Knowledge of Bed trainees related total sample**

V	Mean	Median	Mode	S.D	Q.D	Skewne ss	Kurtosis
<b>ICT Knowledge</b>	15.8690	16	15.86	4.68125	4	-518	-167

Above table - No.2 explains the mean value of ICT Knowledge stated 15.86 & 'M' validity value of the tool is 12.5 is less than the scored value of the final sample. So it can be consider and conclude as like this the B.Ed student teachers ICT knowledge is high for the overall sample.

ICT Knowledge and academic achievement of B.Ed understudy educators uncover that the circulation approximates typicality. The ICT Information score of the recurrence circulation shows sight skewness. The high frequencies will be centred and less frequency were distributed in both the tail end. the recurrence dissemination is viewed as adversely slanted (Ferguson, 1971)

**Table-3**

**Sig. disparity among 'M' totals related ICT- Knowledge (Gender and Locality)**

V	N	M	SD	t	Sig	
<b>Gender</b>	<b>Male</b>	250	16.80 42	4.5490 9	1.98	p>0 .0 5
	<b>Female</b>	250	15.10 27	4.40 810		
<b>Locale</b>	<b>Rural</b>	300	15.7612	4.9860 9	4.338	p>0 .0 1
	<b>Urban</b>	200	17.70 10	4.4740 2		

Above table explains that ICT knowledge ‘M’ scores of male and female remained equated and that one shows around in so considerable disparity among ICT knowledge of Boys and Girls. According the obtained ‘t’ value of variables differ from the table value 1.96 and 2.58 indicating that 0 .0 5 level of significant is not adoptable.

Above same table explains by comparing the Mean score of Rural and Urban B.Ed pupil school teachers. ‘t’ value which exhibit in the table was 4.33 its above the table value of 2.58(Henry E. Garrett) This suggests discrepancy exists sig. at 0 .0 1level. It was found that the Urban school students (Mean score: 17.70 ) better in ICT knowledge than Rural school students (Mean Score: 15.76).

**Table-4:**

**Significance of difference between mean scores of Academic Achievement amongst many categories of Sub samples**

V		N	M	SD	t	Significance
<b>Gender</b>	<b>Male</b>	250	267.65	95.3848	7.38	p<0 .0 1
	<b>Female</b>	250	318.58	88.69321		
<b>Locale</b>	<b>Rural</b>	300	222.45	99.8867	6.13	p<0 .0 1
	<b>Urban</b>	200	317.6	83.10 632		

Above table describes that the academic achievement ‘M’ counts of Male and Female stayed equated and its states readily available exists by no means considerable disparity amongst Male and Female. ‘t’ value which obtained in table (7.38) was higher than the table value of 2.58. So the result indicates that on 0 .0 1 level it is significant. Girls academic achievement mean score is higher than boys mean score (318.58>267.65). This information proves that girls have better academic achievement.

Related to the comparison of Rural and Urban mean score of B.Ed rural and urban student teachers, it is indicated that there is significant difference between rural and urban Bed pupil educators. T-value mentioned as in the table 6.13 is above the table value of 2.58. It shows that difference significant at 0 .0 1 level. With continue the explanation Urban Bed undergraduate educators AA is higher than Rural B.Ed student’s teachers academic achievement. (317.6>222.45).

**Table-5**

**Correlation of ICT Knowledge and AA used for the Overall Sample and Associate samples**

<b>ICT Knowledge x Academic Achievement</b>		<b>‘r’</b>	<b>‘t’</b>	<b>‘sig’</b>
<b>Total Sample</b>		0 .59	14.22	p<0 .0 1
<b>Gender</b>	<b>M</b>	0 .56	9.66	p<0 .0 1
	<b>FM</b>	0 .62	13.41	p<0 .0 1

<b>Locality</b>	<b>R</b>	0.58	11.69	p<0.01
	<b>U</b>	0.46	6.21	p<0.01

Above table explains here remains correspondence among ICT Knowledge and AA of teacher trainees of Bed respectively Gender (Boys & Girls) and Locality (Rural & Urban) at 0.01 level of significant. So, research say here remains positive correspondence among ICT knowledge then AA of teachers' trainees of Bed for the final sample respectively moderate variable like gender and locality.

**IMPLICATIONS OF THE STUDY**

There are many factors which make a contribution the instructional fulfilment of college students. Digital literacy is a essential facture for allowing each teachers and college students to take advantage of creative potentials of ICT throughout the lifelong gaining knowledge of. It turned into predicted that the existing look at would conveyable fact regarding the information and commucniation technology related to system of education especially higher education level. The Problem likewise provided perception about truth concerning on academic fulfilment and enrichment by using information and communication technology of the students of different levels. Based on the observation of this policy has to be made and change accordingly.

**CONCLUSION**

The present analysis was meant to review the data of ICT among B.Ed student teachers in reference towards the AA. Present research paper states information and communication technology knowledge of B.Ed student teachers was high related to overall model and at hand remained not any important distinction believes Male and Females data in Information and Communication Technology. I used to be conjointly found that urban B.Ed Student teachers were higher in ICT knowledge than rural college B.Ed student teachers. The study conjointly relevant was positive physical phenomenon between ICT data then Rural college B.Ed student teachers. By the investigation effect of Information and Communication Technology skills on individual student teachers academic performance expects good ICT knowledge for the student teachers of Bed.

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