

Awareness and Impact of Information Communication Technology (ICT) on the Academic Performance of the Students of Sarada Vilas Teachers (B.Ed.) College, Mysore: A study

Dr. Arundhathi B. L

Department of Library & Information Science
University of Mysore
Mysore

Swapna C,

Library Project Assistant
University Library
University of Mysore
Mysore.

Shwetha

Department of Library & Information Science
University of Mysore
Mysore

Manjula P,

Library Project Assistant
University Library
University of Mysore
Mysore.

Abstract: *In the present study an attempt has been made to know the awareness of ICT among the students of Sarada Vilas Teachers (B.Ed.) College, Mysore and also to know the impact of ICT on their academic performance. Survey method was adopted via convenient sampling technique to collect the data required for the study. The study shows that majority of the students are aware of ICT and ICT has a positive impact on their academic performance.*

Keyword: Awareness of ICT, Impact of ICT, Academic Performance, Sarada Vilas Teachers (B.Ed.) College, Mysore

Introduction:

Educational sector has been considered as one among the major beneficiaries of ICT. Educational institutions have realized the importance of adopting ICT and are now investing in building ICT infrastructure to help both teachers and students in teaching as well as learning process. It has become inevitable for both teachers and students to adopt ICT for their academic purpose and knowledge betterment.

Objective of the study

- 1 To know the awareness of ICT among B.Ed. students of Sharada vilas college.
- 2 To know the changing communication behaviour due to ICT among B.Ed. students of Sharada vilas college.
- 3 To know the impact of ICT on learning.
- 4 To study the barriers faced by the students while using ICT.

Methodology

For the study Survey method is used to find the awareness of information and communication technology among Sharada Vilas B. Ed college students. In order to collect the comprehensive and relevant data, the 'questionnaire method' is used in the present study. Total of 160 questionnaires are distributed among the students of Sharada Vilas B.Ed. College, Mysore, 150 filled questionnaires were received from the students i.e.93.75 % of response rate.

Scope and limitation of the study

The Present study aims to know the use and impact of ICT among students. The study is confined to the students of Sarada Vilas B. Ed College, Mysore only.

Review of literature

Tiwari and Tikam (2016) surveyed 250 B. Ed students of Raipur University with the objective to explore the use and awareness of electronic resources and impact of ICT on their study. The study found that majority of respondents use computer and internet for academic purpose. The study suggests that institutions should provide ICT facilities for students for their academic betterment.

Philomina and Amutha (2016) conducted a study on 42 teacher educators working in Tiruchirappalli district in India to assess the awareness of ICT. The study found that awareness of ICT among the respondents differs relating to gender and subject. The study found that ICT awareness should be strengthened among teacher educators.

Beena & Mathur (2012) in their study debated the role of ICT in transforming teaching and learning process. They have tried to explore the awareness and impact of teacher educator about the use of ICT for effective teaching learning process.

Analysis and Interpretation of Data

Table 1: Knowledge of ICT

Sl No	Excellent	Good	Fair	Poor	Bad	Total
No Of Frequency	8	112	22	5	3	150
Percentage	5.33	74.66	14.66	3.33	2	100

The above table illustrates that 112 (74.66%) of the respondents have good knowledge of ICT. only 3 (2%) of them rated themselves they have bad knowledge of ICT.

Table 2: Frequency Distribution of Access to ICT in College

Access to ICT in University	Never	Occasionally	Often	Always	Total
Smart class system	25 (16.66%)	49(32.66%)	42(28%)	34(22.66%)	150
Teacher's use of digital presentation	33(22%)	69 (46%)	4026.66%)	8(5.33%)	150
Wi-Fi access	14(9.33%)	13 (8.66%)	8(5.33%)	115(76.66%)	150
Access to computers after the lab hours	19(12.66%)	28(18.66%)	25(16.66%)	78(52%)	150
Institution have a LMS	24(16%)	27(18%)	17(11.33%)	82(54.66%)	150

Table 2 shows that majority of the respondents have the opinion that they have access to ICT in their institutions, 49 (32.66%) of the respondents opined that they have occasionally use smart class system. 69 (46%) of the respondents have opined that their teachers use digital presentation occasionally. 115 (76.66%) of them have said that they always have wi-fi access in the campus. 78 (52%) of them opined that they can use computers after the lab hours. 82 (54.66%) of them opined that they have LMS in the institution.

Table 3: Frequency Distribution of Software Use

Software	Always	Occasionally	Often	Never	Total
MS word	87 (58%)	39 (26%)	22 (14.66%)	2 (1.33%)	150
MS PowerPoint	80 (53.33%)	46 (30.66%)	21 (14%)	3 (2%)	150
CAD	2 (1.33%)	19 (12.66%)	29 (19.33%)	100 (66.66%)	150
Flash	13 (8.66%)	15 (10%)	31 (20 %)	91 (60.66)	150
Adobe presenter	20 (13.33%)	35 (25.33%)	32 (21.33%)	63 (42%)	150

The table 3 explains that Majority of the respondents i.e. 87 (58%) & 80 (53.33%) always use MS word and MS Power Point respectively. highest percentage of the respondents i.e. 100 (66.66%) opined that they never use CAD (Computer Aided Design)

Table 4: Frequency Distribution on Opinion towards ICT Based Teaching-learning

Students Attitude towards ICT based Teaching – learning	Strongly Disagree	Disagree	No opinion	Agree	Strongly Agree	Total
Integrating ICT in education is important	1 (0.66%)	48 (32%)	1 (0.66%)	100 (66.66%)	0	150
ICT can counter the shortcoming in traditional learning	28 (18.66%)	82 (54.66%)	29 (19.33%)	9 (6%)	2 (1.33%)	150
ICT has an impact on daily life	64 (42.66%)	63 (42%)	21 (14%)	2 (1.33%)	0	150
Technology has changed the way you communicate with teachers	51 (34%)	89 (59.33%)	7 (4.66%)	2 (1.33%)	1 (0.66%)	150
Integration of ICT can raise the educational standards	57 (38%)	76 (50.66%)	14 (9.33%)	2 (1.33%)	1 (0.66%)	150
ICT has enhanced Communication among teachers and students	38 (25.33%)	91 (60.66%)	15 (10%)	5 (3.33%)	1 (0.66%)	150
ICT enabled education is a good supplement to face-to-face communication	34 (22.33%)	64 (42.66%)	27 (18%)	21 (14%)	4 (2.66%)	150

The table 4 reveals that Frequency Distribution on Opinion towards ICT Based Teaching-learning. 100 out of 150 respondents (66.66%) agreed that Integrating ICT in education is

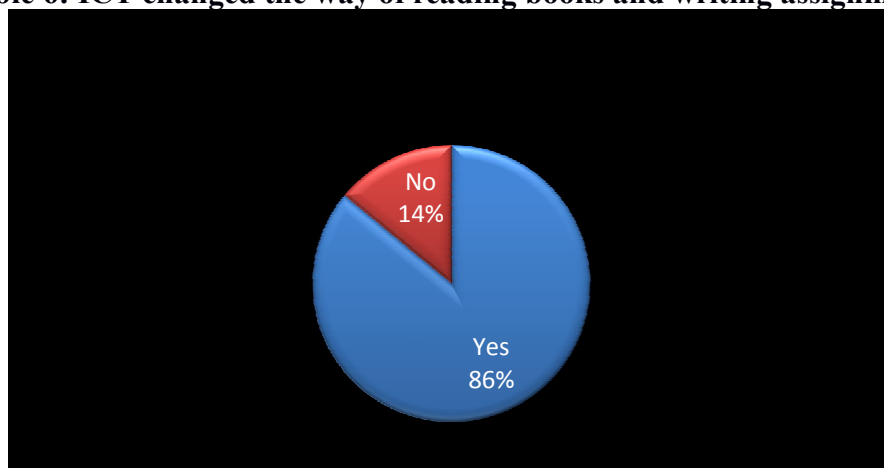
important, 91(60.66%) are highly disagree with ICT enhanced Communication among teachers and students.

Table 5: Changes in Communication Behavior Due to ICT

Changes in Communication behaviour	Strongly Agree	Agree	No opinion	Disagree	Strongly Disagree	Total
Teacher’s use of ICT encourages students to use ICT	44 (29.33%)	90 (60%)	11 (7.33%)	3 (2%)	2 (1.33%)	150
Teacher suggest e-content for students	21 (14%)	85 (56.6%)	33 (22%)	7 (4.6%)	4 (2.6%)	150
Submission of assignments via e-mail	21 (14%)	49 (32.6%)	31 (20.6%)	24 (16%)	25 (16.6%)	150
E-groups for announcements & meetings.	13 (8.6%)	42 (28%)	42 (28%)	30 (20%)	23 (15.33%)	150
Interaction with other College students	29 (19.33%)	46 (30.6%)	30 (20%)	26 (17.3%)	19 (12.6%)	150
Interaction with teachers increased	26 (17.3%)	60 (40%)	30 (20%)	27 (18%)	8 (5.3%)	150
Helped to overcome inhibitions to interact	15 (10%)	69 (46%)	44 (29.3%)	14 (9.3%)	8 (5.3%)	150
Help to document and share learning materials	34 (22.6%)	79 (52.6%)	23 (15.3%)	10 (6.6%)	4 (2.6%)	150
Changed the way to access library	32 (21.3%)	72 (48%)	33 (22%)	8 (5.3%)	5 (3.3%)	150

The table 5 shows Changes in Communication Behavior Due to ICT. 44 (29.33%) of the respondents are strongly agree that use of ICT by Teacher’s encourages students to use ICT. 32 (21.3%) of the respondents strongly agree that ICT has changed the way they use library.

Table 6: ICT changed the way of reading books and writing assignments



The above pie chart shows that 129 (86%) of students opined that ICT has changed the way students read books and writing assignments. only 14% of the students are of the opinion that ICT has not changed the way of their reading and writing.

Table 7: Impact of ICT on academic progress

Impact of ICT on learning	Strongly Agree	Agree	No opinion	Disagree	Strongly Disagree	Total
Simplified the communication within institution	42 (28%)	85 (56.6%)	18 (12%)	3 (2%)	2 (1.3%)	150
Helped in enhancing learning	34 (22.6%)	78 (52%)	22 (14.6%)	11 (7.3%)	5 (3.3%)	150
Web based video lectures update knowledge	46 (30.6%)	76 (50.6%)	11 (7.3%)	12 (8%)	5 (3.3%)	150
ICT helps to do cross courses through online	34 (22.6%)	59 (39.3%)	34 (22.6%)	19 (12.6%)	4 (2.6%)	150
Reduced dependency on teachers	38 (25.3%)	69 (46%)	32 (21.3%)	7 (4.6%)	4 (2.6%)	150
Helped to score better in examination	28 (18.6%)	83 (55.3%)	27 (18%)	6 (4%)	6 (4%)	150
Helped to know about higher studies & jobs	55 (36.6%)	66 (44%)	14 (9.3%)	11 (7.3%)	4 (2.6%)	150

The table displayed impact of ICT on learning, 85 (56.6%) respondents agreed that ICT has simplified the communication within institution. 78 (52%) of respondents agreed that ICT has helped in enhancing learning. 76 (50.6%) agreed that Web based video lectures update knowledge, 59 (39.3%) of respondents agreed that ICT helps to do cross courses through online. 69 (46%) of them agreed that ICT has reduced dependency on teachers. 83 (55.3%) of them agreed that ICT has helped to score better in examination. 66 (44%) of them agreed that ICT has helped to know about higher studies & jobs.

Table 8: Barriers in using ICT

Barriers in using ICT	Strongly Agree	Agree	No opinion	Disagree	Strongly Disagree	Total
Lack of Time	27 (18%)	45 (30%)	27 (18%)	36 (24%)	15 (10%)	150
Syllabus pressure	25 (16.6%)	47 (31.3%)	26 (17.3%)	34 (22.6%)	18 (12%)	150
Infrastructure inability	27 (18%)	32 (21.3%)	41 (27.3%)	30 (20%)	20 (13.3%)	150
Owning ICT tools are expensive	21 (14%)	26 (17.3%)	35 (23.3%)	44 (29.3%)	24 (16%)	150
Non-reliability of online content	13 (8.6%)	40 (26.6%)	39 (26%)	38 (25.3%)	20 (13.3%)	150
Lack of skill to handle the ICT tools for learning	18 (12%)	28 (18.6%)	41 (27.3%)	46 (30.6%)	17 (11.3%)	150

The table 8 explains the barriers encountered by respondents using ICT. 45 (30%) students agreed that lack of time is the main constraint in using ICT. 47 (31.3%) of the respondents agreed that Syllabus pressure is the barrier to use ICT. 40 (26.6%) of the respondents agreed that Non-reliability of online content is the barrier to use ICT.

Table 9: Disadvantages of ICT for Teaching and Learning

Disadvantages of ICT for teaching and learning	Strongly Disagree	Disagree	No Opinion	Agree	Strongly Agree	Total
Addiction to the technology	28 (18.6%)	22 (18.6%)	37 (24.6%)	45 (30%)	18 (12%)	150
Not interacting face-to-face with people	14 (9.3%)	27 (18%)	34 (22.6%)	56 (37.3%)	19 (12.6%)	150
Stress	23 (15.3%)	35 (23.3%)	31 (20.6%)	36 (24%)	25 (16.6%)	150
Increases expenses	19 (12.6%)	20 (13.3%)	32 (21.3%)	57 (38%)	22 (14.6%)	150
Information overload	17 (11.3%)	42 (28%)	21 (14%)	44 (29.3%)	26 (17.3%)	150

The table 10 illustrate the disadvantages of ICT in teaching and learning, 45 (30%) of the respondents are agreed that ICT has made them addicted to the technology. 56 (37.3%) of the respondents agreed that ICT has a disadvantage of avoiding face-to-face interaction with people. The other disadvantages that are agreed by the respondents are Stress 36 (24%), Increases expenses 57 (38%) followed by Information overload 44 (29.3%).

Findings of the study

- The study found that 112 (74.66%) of the respondents have good knowledge of ICT.
- Majority of the respondents agreed that Integrating ICT in education is important, and majority of the respondents are highly disagree with ICT enhanced Communication among teachers and students. Respondents are of the opinion that face to face interaction is highly helpful in the process of learning.
- Majority of the respondents have said that they always have wi-fi access in the campus and they can use computers after the lab hours.
- Majority of the respondents strongly agree that use of ICT by Teacher’s encourages students to use ICT and ICT has changed the way they use library.
- Majority of the respondents opined that ICT has changed the way they read books and write assignments.
- The present studies found that majority of the respondents have opined that ICT helped them in enhancing learning.
- Study found that majority of the students agreed that lack of time is the main constraint in using ICT followed by Syllabus pressure.
- Study found that respondents are of the opinion that major disadvantage of ICT is addiction to the technology and avoidance of face-to-face interaction with people.

Suggestion & Conclusions:

ICT has certainly influenced the traditional teaching methods of education. the awareness of ICT has become inevitable in this era. Many studies and investigations have been conducted to know the awareness of ICT and impact of ICT among the students in their learning process. those studies are evident that students have implemented ICT in their learning process. The present also support the earlier studies that students of Sarada Vilas Teachers

(B.ED.) College, Mysore have the awareness of ICT and ICT has a positive impact on their learning process i.e studying and writing assignments.

Hence the curriculum developers and educational planners can take full effort in providing ICT knowledge to the students. The administrative authority of the college should take keen interest in adoption and enhancement of technology based teaching skills. Theoretical as well as practical knowledge should be provided to the students with the help of well trained ICT experts. The study has observed that effective implementation of ICT in B.Ed. colleges can allow students more flexible access to study materials, reducing barriers of time and place of study. Library should conduct regular user orientation programmes for the students to use ICT for their academic work.

References

- 1 Abdulganiy, A.O. (2002). Application of information technology in libraries: a case study of selected colleges of education libraries in Nigeria, *Middle Belt Journal of Library and Information Science*, 2(1/2), 16-24.
- 2 Tiwari, R, A., & Tikam, S. (2016) Awareness and Use of ICT by B. Ed. Students of Pt.Ravishankar University, *Journal of Ravishankar University*. (22), 44-48.
- 3 Vasimalairaja, M. (2015) Awareness of ICT and self Esteem of B.Ed. trainees, *International Journal of Informative & Futuristic Research*. 3(2), 602-607.
- 4 Tiwari, Riya & Tikam, Swati. (2016) Awareness and use of ICT by B. Ed students of Pt. Ravishankar University, *Journal of Ravishankar University*, 22(A), 44-48, ISSN-0970-5910
- 5 Vasimalairaja, M. (2015). Awareness Of ICT And Self Esteem Of B.Ed.Trainees, *International Journal of Informative & Futuristic Research*, 3 (2), 602-607. ISSN: 2347-1697.

