Education

Research Paper



ICT and CCE Awareness Among Secondary School Students

* M.Rajendra Nath Babu

* SRF-P.hD Scholar, Dept of Education, S.V.University, Tirupati, Chittoor, AP-517502

ABSTRACT

Computer has occupied an important place in our daily life. All over the world the importance of computer is so much recognized that its education is included in the curriculum of schools, colleges and universities. The ICT in teaching and learning is an innovation that had revolutionized the educational system. Innovative practices based on ICT should be an integral part of CCE system. The aim of the present study is to know the awareness among ICT and CCE among secondary school students in Y.S.R.Kadapa District. 60 secondary school students were selected for the study. Mean, S.D and t-test were used for the analysis of the data.

Keywords : ICT, Information Needs, CCE, Awareness, Students

INTRODUCTION:

"If a country is to be corruption free and become a nation of beautiful minds, I strongly feel there are three key societal members who can make a difference. They are the Father, the Mother and the Teacher." -

Dr. A.P.J. Abdul Kalam,

In present scenario, teachers need to help their students in: how to learn, how to grow in future, how to develop study skills, how to conduct fundamental research, how to examine, evaluate and assess information and also how to question and then dismantle unauthentic structure of knowledge and cognition if need be. This is necessary if the teachers really want to survive in the ICT savvy world of education. All these expectations may be met only though need-based, goal-oriented and meaningful in-house discussion, conferences, symposia, workshops, refresher and orientation courses, crash courses, capsule courses and subject-based courses, interdisciplinary and holistic approaches to education and quality research and by enriching the existing libraries and making use of the user-friendly ICT with contextually appropriate and firm pedagogical scaffolding. The teacher educators and individual teacher ought to sincerely and persistently work hard toward this goal.

The use of information and communication technologies no doubt is gaining momentum in Indian higher education. The Internet is used by faculty, staff and students in sourcing information. Information and communication technologies assist libraries in providing efficient and current information services. Once the staff and students are able to use these technologies effectively, the teaching, learning and research activities in the college will be made easier for the college community. ICT usage will facilitate development since there will be free flow of information. The electronic revolution, specifically, Internet is narrowing the information gap. The power of web technology is enabling the generator of information to disseminate their creativity at low cost and high speed. Internet is the gateway for libraries and information centers to enter the Electronic Information Era and is providing the information, generated by different organizations, institutions, research centers and individuals all over the world. This paper is an attempt to investigate the use of Information and Communication Technology among the students of rural areas in Tamil Nadu. For this purpose a survey was carried out using questionnaire tool. The findings indicated that more than half acquired their internet skill through training from the college. The results indicated majority of students used Internet weekly (56.53%). The study found that most of the respondents 73.91% use internet for literature search.

ICT is an essential tool for achieving sustainability and will help in enabling better and increased access to information to enrich the teaching learning process. Teaching is a process in which the teacher and students create an interactive environment

ICT in Education is the foundation upon which a country develops. It is a dynamic force in the life of every individual influencing his physical, mental, emotional, social and ethical developments. It is a complete development of the individuality of a child enabling him to make original contribution to human life.

Worldwide research has shown that ICT can lead to improved student learning and better teaching methods. A report made by the National Institute of Multimedia Education in Japan, proved that an increase in student exposure to educational ICT through curriculum integration has a significant and positive impact on student achievement, especially in terms of "Knowledge- Comprehension" "Practical skill" and "Presentation skill" in subject areas such as mathematics, science, and social study.

However, you can see that there are many education technology solutions provided in the world which may cause confusion among educators about how to choose the right ICT solution. Let's have a look at the advantages and disadvantages of ICT tools for education and discover what kind of education ICT solution is suitable for your school needs.

MAIN ADVANTAGES OF ICT TOOLS FOR EDUCATION

- 1 Through ICT, images can easily be used in teaching and improving the retentive memory of students.
- 2 Through ICT, teachers can easily explain complex instructions and ensure students' comprehension.
- 3 Through ICT, teachers are able to create interactive classes and make the lessons more enjoyable, which could improve student attendance and concentration.

New scheme of evaluation

As a part of this new system, student's marks will be replaced by grades which will be evaluated through a series of curricular and extra-curricular evaluations along with academics. The aim is to reduce the workload on students and to improve the overall skill and ability of the student by means of evaluation of other activities. Grades are awarded to students based on work experience skills, dexterity, innovation, stead-iness, teamwork, public speaking, behavior, etc. to evaluate and present an overall measure of the student's ability. This helps the students who are not good in academics to show their talent in other fields such as arts, humanities, sports, music, athletics, etc.

However, what is visible through all these efforts is the lack of understanding of the framework and ideology behind implementing CCE. Some facets of CCE.

- Assessments should capture all three major goals of education – the psychomotor, cognitive and the affective.
- It does not imply breaking syllabus into smaller bits and testing students weekly through class tests because this is again paper and pencil assessment.
- It does not emphasize formal assessments only, rather assessments or observations are to be made in informal settings like break-time, in the corridor, in the playfield, etc.
- It goes beyond assessment as only a post-learning experience, rather it emphasizes on assessments to be made during the learning experience.
- It emphasizes on documenting the learner's efforts in learning, processes of thinking to be captured through assessments.
- Emphasis is also on tailoring instruction according to different learning styles and assessing differentially. Differential assessments would mean giving more scope to learners to exhibit their understanding of concepts in a variety of ways like – role play, collecting material and displays, reading and writing tasks, surveys, presentations, etc. All these have to form a part and parcel of each theme that is dealt with in a classroom.
- Assessment to be continuous implies that children need to be assessed throughout the year through a range of tools and techniques.
- CCE tends to make assessments school-based and done by teachers. It does not mean increasing the subjective bias while assessing. Rather it implies that teachers need to corroborate their comments with concrete observations and anecdotes of learning.
- It also shifts the onus of assessing a learner not only to the class teacher rather assessment to be collaboratively done by all the subject teachers. Thus, this process of collaboration increases objectivity and validity instead of generating bias.

Review of related literature:

Jasmine kumar and et al, conducted study on "professional competency of teachers and teacher educators in relation to their ICT usage" with the sample of 30 teacher educators and 50 teacher from Government, Government Aided and Aided Minority institution in Chennai city, Tamilnadu. Reported that professional competency and ICT usage are significantly related.

Selvam .M. conducted a study on "Attitude of matriculation teachers towards educational technology – an investigation" with 79 teachers selected from the matriculation schools located in Erode as sample concluded that there is no significant difference in the mean attitude scores of matriculation teachers towards Educational Technology between the sub-variables like gender, age, religion and marital status.

Angel Rathnabai, conducted study on "Infusing ICT in teaching learning process: A Reflection" places namely Mysore, Pondicherry and Tumkur. It was hypothesized that CAI approach would be effective than traditional approach on acquisition and retention of knowledge and it would be an effective reinforcement tool. The students undergoing the CAI approach has found to score more in knowledge acquisition test and in the test conducted after reinforcement than the students undergoing traditional approach. The mean scores reveal that the students under CAI approach has scored more than the students under traditional approach in the delayed test conducted after a month. Thus infusing ICT in teaching learning process enhances the teaching and learning which in turn provides the quality education.

Illayaperumal, in a study on "Perception of student teachers towards the role of technology in education for sustainable development " with the sample of 100 student teachers (50 B.Ed., and 50 D.T.Ed.,) selected from the union territory of Puducherry, Concluded that the perceptions of student teachers are above average. Also a significant difference is observed between the groups regarding locality, type of selection and community. Therefore it is necessary for our future teachers to have the knowledge and understanding of the role of ICT in sustainable development.

Priya, a study on "An analysis of web usage among teacher educators and student teachers" reported that WWW is considered as an important learning environment among the Student Teachers and Teacher Educators. The Student teachers access the Web more than the Teacher Educators. It shows that the internet has not penetrated fully in every sphere of life, particularly in the academia.

Prof Ram Takwle (2003) says about IT driven education: "They are changing the methods of content generation, content storage, content packaging and content delivery and hence offer a new paradigm of education." These multimedia programs and packages are also intended to supplement the real classroom activities and help their easy assimilation. ICT especially in the 21st Century context of teacher education fulfills the following objectives.

- It envisages excitement to the learner's eyes, ears, and more importantly the head.
- ICT fulfills the needs of learners by providing items and packages of higher standard and interest.
- It helps in transforming the definition of literacy, learning and knowledge; a definition that increasingly includes multimedia digitized literacy.
- Multimedia provides a kind of control over the learning environment to the pupil teachers and they experience learning from their failures and I practices.
- ICT facilitates the learner to have control on lesson, pace the sequence, content, feedback, which in turn enhances the efficiency of learning.
- Unlike books, it is interactive in nature and creates motivation and interest among the learners, in turn meeting the individual unique needs effectively and efficiently
- Develops the ability of self-learning and interacting individually, as the learner attains vast experiences effectively, efficiently and expeditiously,
- ICT-empowered simulated situation minimizes dangers in the real world' e.g. practical in science, pilot training driving etc.
- ICT is a powerful new development with ambitious role in teacher education, Digital and Internet.-based multimedia transforms the present trend in the field. It takes just a computer to play multitude of media enabled programs and packages.

STATEMENT OF THE PROBLEM:

The Title of the Problem is "ICT and CCE awareness among secondary school students".

OBJECTIVES OF THE STUDY:

To study the ICT and CCE awareness of Secondary School Students.

HYPOTHESIS OF THE STUDY:

There is no significant difference between Boys and Girls Students with regard to awareness towards ICT and CCE. There is no significant difference between VII and VIII Students with regard to awareness towards ICT and CCE.

METHODOLOGY:

Method: In the present study Descriptive Survey Method of investigation was employed.

Sample: For the purpose of the study a sample of 60 Secondary School students was selected in Y.S.R.Kadapa Disrtict through random sampling technique.

Tool: The ICT and CCE awareness questionnaire (Achievement Test) developed by the investigator.

Statistics Used: Mean, SD, t-test were used to analyze the data.

ANALYSIS AND INTERPRETATION OF THE DATA:

Hypothesis – 1: There is no significant difference between Boys and Girls Students with regard to awareness towards ICT and CCE.

Table-1: Means and Standard deviations of Achievement Test in ICT and CCE scores of Gender and their t- value.

Gender	Ν	Mean	Std. Deviation	Std. Error Mean	t-value
BOYS	30	64.93	11.450	2.090	3.24*
GIRLS	30	55.67	10.694	1.953	

Note: *: Significant at 0.05 level

From the above table we conclude that mean and S.D values of boys and girls in the achievement test in ICT and CCE scores are 64.93, 55.67 and 11.450, 10.694 and calculated t-value is 3.24. Hence the calculated t-value is greater than the table t-value. Hence we reject the null hypothesis. So we conclude that "There is no significant difference between Boys and Girls Students with regard to awareness towards ICT and CCE." is rejected.

Hypothesis – 2: There is no significant difference between VII and VIII Students with regard to awareness towards ICT and CCE.

Table-2: Means and Standard deviations of Achievement Test in ICT and CCE scores of Class and their t- value.

Class	N	Mean	Std. Deviation	Std. Error Mean	t-value
VIII	30	68.30	9.980	1.822	
VII	30	52.30	7.607	1.389	6.98*

Note: *: Significant at 0.05 level

From the above table we conclude that mean and S.D values of VII and VIII class students in the achievement test in ICT and CCE scores are 52.30, 68.30 and 9.980, 7.607 and calculated t-value is 6.98. Hence the calculated t-value is greater than the table t-value. Hence we reject the null hypothesis. So we conclude that "There is no significant difference between VII and VIII Students with regard to awareness towards ICT and CCE." is rejected.

FINDINGS OF THE STUDY:

- There is a significant difference between Boys and Girls Students with regard to awareness towards ICT and CCE.
- There is a significant difference between VII and VIII Students with regard to awareness towards ICT and CCE.

IMPLICATIONS OF THE STUDY:

This study is helpful to

- Establish the ICT based culture among the teacher trainees.
- Cultivate the trainees' enthusiasm for ICT to make their society into "informative society".
- ICT stimulates educators to start a revolution in the whole educational system.
- ICT enhances the awareness among the trainees to increase their capab ility and independence to search for and acquire the knowledge they need in their teaching process.
- Expose them to environments of positive world-wide competence which leads into quality-based attitudes in their future teaching process.

CONCLUSION:

The teacher education system empowered by ICT driven infrastructure can have a great opportunity to come up to the centre stage and ensure academic excellence, guality instruction and leadership in a knowledge-based a society. ICT has revolutionized the entire concept of education, learning and research by offering new opportunities and challenges in creation and dissemination of information by way of Web TV's, Net PC's and Web-based education independent of time, pace and place. It is really a challenging task to strengthen ICT in teacher education because a large majority of the teacher education institutions are unequipped or under-equipped in the terms of digitized and high-tech infrastructure. CCE will help in identifying the learning difficulties of students at regular time intervals right from the beginning of the academic session and employing suitable remedial measures for enhancing their learning performance. There are many more systemic changes which ought to be in place before the implementation of CCE. Flexibility, change and willingness to learn are the key factors.

REFERENCES

Mangal .S.K.(2010), Essential of Educational psychology, PHI learning private limited, New Delhi. | Ahmed, S. and Singh, M.(2010) Multimedia in Teacher Education Empowering Accessible, Flexible and innovative learning, Shikshak - Shikha Shodh Patrika Vol. (04) No (1) pp. 32-33. | Paliwal A.K. (2006).Faculty development in teacher education perceptions and changing context, sovinier 7th National conference MATE pp 10-11. | Takwal, R. (2003) Problems and Issues faced by Indian Education system UGC Golden Jubilee Lecture series. pp.5. | Venna S.K (2010) Teacher Education some qualitative consideration, Shikshak - Shikha Shodh Patrika vol (04) NO (1) pp. 10.