Innovative ICT/IT tools, tactics, and methods are being used in the Higher Education Institutions within India.

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Abstract - Information and communication technology makes the teaching-learning process simple, interesting, easy, simple, and effective. At present, there is no such area of education in which Information and communication technology is not used. Information and communication technology find out the needs of classroom behavior The level of education can be improved by the use of Information and communication technology It can be related to the use of teaching materials and programmed instructional materials Information and communication technology classroom behavior by encouraging and motivating the students for self-learning can make it more effective. This paper discusses the need for upgraded ICT and The importance of ICT tools is being used in the Higher Education Institutions within India.

Key Words: **ICT, Education and Technology, Teaching – Learning Process, Creative Learning**

1.INTRODUCTION

To understand the concept of Information and communication technology properly, its meaning should be understood first. Information and communication technology is made up of the combination of 2 words education and technology, to understand its meaning clearly, first it is necessary that the meaning of education and technology should be separated separately.

Education is the basic means of human development, through which the innate powers of man are developed, knowledge and art skills are increased and behavior is refined and he is made a civilized, qualified, and cultured citizen. It is made up of Lagna which means to learn and to teach, hence education means the process of teaching-learning.

Many scholars have given different definitions of education, but if we talk about the broad meaning of education in a nutshell, then it can be said that teacher is a continuous purposeful social process by which the innate powers of man are developed, and his art skills are developed. It is increased so that according to

the need of the nation, society, and the world, both the individual and the society develop continuously through education.

2. LITERATURE REVIEW

Nature of Information and communication technology in India: At present, Information and communication technology is a broad, wide, and independent study area, its nature is as follows:

1. Information and communication technology studies the impact of science and technology on education.

2. In Information and communication technology, importance is given to the practical side.

3. The basic subject of Information and communication technology is science.

4. It takes help from the laws of sciences like psychology, engineering, etc.

5. Information and communication technology is a continuously developing subject.

6. Its purpose is to develop in the process of teaching and learning.

7. In this systematic approach, priority is given to Systematic Approaches.

8. In this, teacher-student and technical processes are included together.

9. It is capable of bringing about necessary changes in the learning conditions to fulfill the educational objectives.

10. Information and communication technology helps in the manufacture of equipment according to educational, economic, social, and technical needs.

11. Information and communication technology helps in the spread of education.

3. Need for ICT in India

Information and communication technology makes the teaching-learning process simple, interesting, easy, simple, and effective. At present, there is no such area of education in which Information and communication technology is not used. Information and communication technology performs many important tasks, it is needed in completing these tasks. Technical education is needed due to the following reasons -

1. Information and communication technology makes the teaching process scientific, objective, clear, simple, interesting, and effective.

2. Information and communication technology gives proper guidance to solve the teaching problems

3. It provides proper guidance to make the teaching-learning process effective

4. It occupies an important place as an effective art of communication in the exchange of ideas between the teacher and the student.

5. Arranges and controls learning situations to achieve Information and communication technology objectives

6. It controls the wastage of energy and time in the teaching process

7. It emphasizes the development of innovative new methods for effective teaching

8. It emphasizes the development of appropriate assessment provisions to measure behavior change and to check the outcomes of the learning process.

9. This Software approach refers to the psychological methods and methods that are used in the field of education, it is based on psychology especially the psychology of learning.

In India Educational approaches have a very important role in modern educational activities, we can make it clear by the following points:

1. This approach plays an important role in simplifying the common or difficult subject matter.

2. Content becomes more interesting and engaging

3. These approaches are used to arouse the interest of the students and to make them curious and motivated

4. Students become more active they become excited

5. If the hard craft is used in education, then education will remain incomplete, because of this, hard craft emphasizes the compulsory use of tools, by mechanizing education, more students can be educated in less time and less cost.

6. Computer in rigorous craft approach has brought an unprecedented revolution in the field of noble education

7. As a result of the rigorous craft approach, correspondence courses and the Open University have been born, which are benefiting the students of arithmetic.

8. Cognitive, affective and functional learning objectives can be achieved through rigorous craft approaches

9. By making the teaching process simple, easy, and interesting through the software approach, the knowledge and experience of the students can be increased and the teaching-learning process can be made interesting, purposeful, and effective.

10. The qualitative competency of the teacher can be developed by providing stimulus-response related to teaching and learning in small and large groups and also at the individual level through a software approach.

11. Active participation of students in classwork can be ensured through software and efforts are made to mobilize appropriate resources and processes to achieve the best results.

12. Self-Instructional Programs Individual Instruction by Self Instructional Programs has got a special emphasis in the field of Individual Instruction

13. Psychological principles of teaching and learning are used in the software approach so that the desired changes can be made in the behavior of the students.

14. Through these approaches, the teacher can bring about the desired behavioral change in the behavior of the students by acquiring scientific and psychological knowledge of various multi-media and multi-sensory teaching strategies.

15. Through these approaches, the work efficiency of the teacher increases, it works to make the teaching-learning process interesting, simple and effective and manages the educational activities efficiently and effectively.

16. Through these approaches, students can get degrees while sitting at home, as well as the requirements of correspondence and distance education can be fulfilled.

4. How innovative ICT Tools can be used in the Higher Education Institutions within India?

Information and communication technology is becoming important day by day due to its usefulness, Information and communication technology makes the teaching-learning process easy, simple, elegant, and effective, it has done the work of modernizing the process of education. Following is a brief explanation of the important functions of Information and communication technology.

Help in all-round improvement

Information and communication technology helps in finding and solving problems related to different areas of education.

Improving teaching

Information and communication technology analyzes the teaching process completely, it tries to find the various levels of teaching and the relationship, the impact on each other, the principles of teaching, the teaching stages and the teaching formula, etc., by developing the principles of teaching. brings about qualitative improvement.

Curriculum development

Keeping in mind the educational objectives set by the Information and communication technology, its next step is to develop the proper curriculum, only the right kind of curriculum can be able to achieve the educational objectives. It is necessary to refine and reintroduce according to the ideologies, only Information and communication technology can do the job of developing the curriculum properly.

Recognizing classroom behavioral needs

Information and communication technology find out the needs of classroom behavior The level of education can be improved by the use of Information and communication technology It can be related to the use of teaching materials and programmed instructional materials Information and communication technology classroom behavior by encouraging and motivating the students for self-learning can make it more effective.

Training of teachers

In the changing environment, a teacher must use a new curriculum and new materials Have Video Video Tape Tape Closed Circuit TV Helps teachers to teach properly

Teaching-learning process analysis

The purpose of Information and communication technology is to analyze the teaching-learning process in-depth, its effort is to see the differences seen in teaching, its interrelationships.

 5. The importance of ICT tools is being used in the Higher Education Institutions within India:

1. It is very much needed from the point of view of formulating the objectives of teaching and writing them practically.

2. Select and use appropriate recharge trends to advance the learning process

3. In this, the text is analyzed in the form of its elements, and those elements are arranged sequentially

4. In Information and communication technology, the qualities and abilities of the students are analyzed.

5. Correspondence text can also be made effective using radio-television tape-recorder etc.

6. The research work done in the field of teaching does not show any effect on the teaching process, but education provides opportunities for innovative experiments in education for technical research work.

7. Teaching training strategies have also been developed to provide appropriate opportunities for individual variation, in which programmed learning techniques allow students to learn at their own pace.

8. Today everyone has the facilities of radio, television, etc., so they can be used in education.

9. There is also a great need for education technology from the point of view of making the teaching process meaningful and effective.

10. Adequate teaching strategies, aids, and reinforcements can be selected to achieve the set objectives.

11. Criteria examinations are designed to achieve the objectives and decision regarding teaching is made using them.

12. With the use of hardware, the ideas of scholars, experts, and teachers can be stored original, so that future generations can see them listening to these original ideas.

13. The problems of educational administration and management can be studied scientifically with the help of method analysis.

14. Effective teachers can be produced from Information and communication technology because education technology has developed new experiments

15. By the use of Information and communication technology, the form of teaching can be explained and teaching principles can be rendered.

16. New paradigms of educational technical teaching can be developed and teaching can be presented interestingly.

17. As a result of Information and communication technology, the knowledge and skills of an effective teacher can be benefited by all, whether in the village or the city, the

address given by him on radio and television can be broadcast everywhere

18. Education has proved to be a technological boon for self-help students

19. Students can be easily motivated now by Information and communication technology

20. By keeping effective lessons safe by educational technical tools, they can be used to benefit as many students as needed.

6. Tactics of Information and communication technology

Today Information and communication technology have been developed and established as a new independent study area, its field has also become extensive, various scholars have explained the field of Information and communication technology in different ways Derek Rowntra
1973 Derek Rowntra of Information and communication technology. Specify the following areas –

1. Identifying Learning Goals and Objectives

2. Planning the Learning Environment

3. Finding and Preserving Content

4. Selecting the Appropriate Teaching Strategy and Learning

Communication Learning Media

5. Evaluating the effectiveness of the learning system

6. Gaining insights based on an evaluation to enhance future

effectiveness

According to another scholar, general educational administration at the educational technical-scientific level is concerned with general educational testing and educational instructional procedures

7. Importance of Information and communication technology

Information and communication technology is playing an important role in the current teaching-learning process.

1. Information and communication technology provides opportunities to the teacher to use machines like radio-TV, tape recorder, etc. in the field of education, which can be availed by the students sitting far and wide.

2. Teaching process is simplified by Information and communication technology

3. With its help, qualitative advancement in teaching is possible

4. Through Information and communication technology, the teacher can arrange for the education of more and more students like programmed study, correspondence study, distance education, etc.

5. Through Information and communication technology, the teacher can develop creativity by moving forward with originality in the students by using the teaching of all three levels of memory perception.

6. With the help of Information and communication technology, the teacher can save his time

7. With the use of Information and communication technology, the teacher can make his teaching effective.

8. With the help of this teacher increases his work efficiency

9. Through Information and communication technology, the teacher gets an opportunity to show his talent.

10. Through Information and communication technology, the teacher can know to what extent the educational objectives were achieved.

11. Information and communication technology helps the teacher in selecting the appropriate motivational tendencies.

12. Information and communication technology helps the teacher in proper planning of the teaching-learning process.

13. Through this knowledge, the teacher can organize his knowledge and present it systematically.

14. It helps the teacher in determining the objectives of education and writing them in practical form.

8. CONCLUSIONS

India is currently facing global exposure to different tools and technologies. There is a day-to-day change in terms of technology and India being a developing nation always witnessing new information and communication technology. Hence, here we have described the needs and requirements for Innovative ICT/IT tools, tactics, and methods are being used in the Higher Education Institutions within India.

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