# Impact of ICT on Students Assessment Process in Schools - A review Article

**Dr. Jitendra Tripathi, HOD and Associated Professor, Dept of Physics IPS College, Indore, India.**

**jtripathi00@gmail.com**

**Rakhi Chitnis, Research Scholar, Sri Satya Sai University of technology and Medical science,**

**Sehore, India. rakhi.chitnis@gmail.com**

*Abstract -* **This review article is the study of impact of Information and communication technology on student's assessment at school level. Assessment is the process of gathering systematic information of students in order to improve students learning. With the information and communication technology, there is various way which helps to assess students at various levels. Assessment is an on going process that improves quality of an individual and provides feed back. This article focus on the relevant research on ICT in assessment and to know how various technological tools can be used for assessing students learning. It also throws light on current trends in assessment and the challenges faced during the use of technology in Indian education system.**

*Keywords- Assessment, ICT- information and communication technology, NCF-National curriculum frame work*

## I. INTRODUCTION

Educational objectives are goals towards the progress of students. They are the end results of learning stated in terms of changes in behavior of child. When viewed in this manner, assessment becomes an integral part of the teaching –learning process. According to Banjamin Bloom mastery learning not only yield effective outcome but also improves student's confidence and attitude towards learning.

Class room assessment help to make better improvement in students as they are directly related with the instructions given in the classroom.

These help teachers to analyze at the individual student level.

The process of teaching and learning is impossible without quality assessment tools .Hence assessment is the integral part of education system. It helps to reflect what teachers teach and what learner learn. Assessment programe helps all stake holders and policy makers to develop appropriate programe to improve students learning. It also enables teachers and school principal to identify better resources needed(Rucha Jain ACER,2010)

 In Indian education system assessment mostly base on memorizing of facts rather than problem solving and creative thinking (Dr.Tapas kumar sarkar,2012).The present system of assessment does no focus on students understanding and application skills. It is more of forceful activity which creates burden on student rather they enjoy learning.

As per NCF 2005and the frame work of Rashtriya Madhyamik Shiksha Abhiyan(RMSA), there are certain guidelines to develop assessment Programe which creates stress free learning. Students should learn from practical life knowledge. There is a need to go beyond textbook.

Examinations are more flexible. These all need a learning shift which is much away from route learning.

With the Integration of technology has brought a paradigm shift in student's assessment and evaluation. These tools help to assess individual student.

ICT can provide with number of applications which includes examination from simple MCQ, online test, automated assessment. It also help to generate feedback which can be used to improve students performance.ICT in assessment, includes a large data base which can store data .Technology based assessment promotes skilled based learning.

## II. LITERATURE REVIEW

Caroline V Gipps (2006) ICT based assessment can be used to develop virtual learning assessment. Research showed that computer based assessment is needed to enhance learning. It helps in student's record and to convey feedback. Students can also use online assessment.

Application of technology can help in accurate marking, reduces error and speed up the marking process with lesser cost.

Dr.Datta Sawant(2015) Technology in education helps in teaching learning. It creates interest in students which leads to effective learning outcome. Different resources such as pictures, videos, Google scholars, online workshops and webinar can be effectively used to under stand the concept and for assessment. These eventually turnout as improved learning. As per NAAC teaching

learning and evaluation is the center of our education system in higher education, similarly at school level it should be the same criteria. Information and communication technology has a major role in education system. It is used to create, disseminate, store, and manage the information amongst all stakeholder.

Marcel Robles and sandy Braathen(2002) assessment is the pathway which reflects the instructional methodology that teachers give in the classroom. Assessment is the process which is viewed as a system which shows students academic achievements. There are three major component of assessment (1) Measurement of learning objective (2) self assessment of students(3) Interaction and feed back amongst instructor and students. Effective assessment is an ongoing process, Hence along with traditional assessment Online assessment tools can also be included in teaching learning process. These techniques are more effective, convenient and flexible for both teachers and students. But at the same time educators need to be more skilled and also students have to be more responsible. Assessment is more effective when it is multidimensional.

This can be achieved through various online assessment tools. Online expanded menu of assessment techniques.

Alistair Campbell (2005) study has developed a e-marking tool which more lecture centered rather than student centered. This tool reduces the non productive busy work of marking such as adding up marks recording etc. It provides different views of information and feed back.

A rubric based marking system with grade description has been incorporated in the tool. Thus teaching learning and assessment come closer with rubric system and e-marking.ICT in assessment in the form of e-marking tools has open up the possibilities to both tutor and students for anytime and anyplace marking, self and peer assessments, management and process of sub marks and feedback.

Lubna Malik (2015) provides that integration of technology has added new dimensions to the teaching profession. With the simplest tool such as e-mail can be used to assess students in classroom where parents can also involved through their constructive and honest feedback. Students get immediate feedback that improves their learning.

### III. CURRENT TRENDS OF ASSESSMENT IN SCHOOLS

In order to judge today's students, a single test at the end of year is not sufficient. They need a diversified process which helps in continuous improvement in their learning.

The main purpose of assessment is to know students understanding about the content .Teachers can also understand their level of achievement and provide them with feedback for the different areas of concern. Standardized assessment provides students achievement at different levels.

What teacher teaches and what students learn is reflected by a well designed assessment process. Teaching for successful leaning cannot occur without quality assessment (Dr. Purna prbhakar nandamuri ,Dr K.V Rao 2013) Assessment system in our schools today is more of storing facts and putting it on paper at the time of examination. But with the today's generation what we need is to foster the qualities like critical thinking, problem solving, independent thinking, and initiate leadership.

As per the study in the year 2016 shows the major focus on measurement of student's performance through formative assessments. With the intervention of technology in assessments, fixed – in- point summative assessment now has change to more continue and adaptive formative assessment. Such type of assessments motivates students and helps them to become an independent learner. They understand what they have to learn, how they have to learn and why they have to learn.

Summative assessment sum ups the teaching learning process which taken when learning has been completed.

But 21$^{st}$ century students require some thing much more than the system of assessment that are followed today. In order to assess students mastery the y must be given with real life tasks where students apply there critical thinking skills. This assessment must include writing

Assessments, individual or cooperative projects teacher's observations and portfolio and many more with in the classroom. All such type of assessments can now be possible using technology along with classroom

Instructions. Thus this blended mode of assessment can bring out the most in students and help them to improve their learning.

### IV. INTEGRATION OF ICT IN SCHOOL ASSESSMENTS

Technology is the boon to the education of 21st century. It has given a paradigm shift to the education system. Assessment system, which is the major and an important part of teaching learning, can also be benefited by the use of technology.

Technology provides various different level of assessments, instant results and the storage of historical data, This also help teachers for their class room planning in a better way as per the individual requirements.

There are wide range of technological tools are available that can be easily used by the teachers in the classroom even after classroom. The assessment results and feedback can be access from anywhere, thus technology provides flexibility of place and time. Even student's can also compare there performance and can improve there learning.

Various tools such as standalone assessment system, E portfolio, Digital rubrics, online assessments, online forum etc can be used for assessments of students.

Flipped classroom is another newly integrated concept where learner goes through the content before the lesson from online videos and applies his knowledge in classroom .Teacher can provide with digital content to the students before lessons in the class.

Also interactive whiteboards, learning apps on mobile and internet also help in classroom for assessments.

## V. CHALLENGES IN USING TECHNOLOGY IN SCHOOLS FOR ASSESSMENTS

As per Honorable Prime minister of India, country is progressing towards digitalization in walks of life and so in the field of education.

Undoubtedly, technology in education system has opened all new avenues. It has given all new pictures to education system. But still there are certain areas where it faces challenges as specially in school education system.

Following are the major challenges in use of technology:

➢ Professional Development: With the lack of ongoing professional development and lack of knowledge, teachers are not interested in introducing technology in their plan. Teachers are not skilled enough to use technology. There is lack of initiative taken from both management and staff.

➢ Resist to change: As well said by Mahatma Gandhi " Be the change you wish to see in the world", we must always welcome changes and adopt it. For the integration of technology in their lesson , teachers always fills it is something out of their jobs. They are not ready to accept the change by using technology.

➢ Availability of resources: Still there are many places in the country where there is lack of resources. Basic requirements for the use of technology are not readily available.

➢ Lack of awareness: There is lack of awareness amongst teaching community regarding current trends of technology that can be effectively used in teaching learning process. For eg.MOOCs (massive open online courses) which is the hottest topic in higher education, now can be mode of delivery in schools as well.

## VI. CONCLUSION

There is intense need of generating highest level of knowledge and skill in students to prepare them for $21^{st}$ century challenges. The prime function of education system to assess the learning of an individual to achieve the goals. Thus a well instructional technology can be integrated in classroom to develop quality assessment system. ICT based assessment provides feedback which is needed to enhance learning. With the use of multi media materials for assessment this development continues. The use of ICT to record student responses, to capture material produced and to convey feedback will grow as the use of virtual learning environments grow [15]

## REFERENCES

[1]   Amrein, A. L., & Berliner, D. C. (2002). High-stakes testing, uncertainty, and student learning. Educational Policy Analysis   Archives, 10(18). Available at www.epaa.asu.edu/epaa/v10n18.

[2]   Angelo, T. A., & Cross, K. P. (1993). Classroom Assessment Techniques: A Handbook for College Teachers (2nd ed.). San   Francisco : Jossey-Bass.

[3]   Aviram, R., & Tami, D. (2004). The Impact of ICT on education: the three opposed paradigms, the lacking discourse. Unpublished manuscript, Beer-Sheva University, Israel.

[4]  Bakhtin, M. (1994). The problem of the text in linguistics, philology and the human sciences:an experiment in philosophical analysis, in: Speech genres and other late essays (V. W. McGee, Trans.) (Austin, TX, University of Texas Press), 103–131.

[5]   Bakker, S. (2001). Editorial: Examinations and entry to university: pressure and change in a mass system. Assessment in Education, 8 (3), 285–290.

[6]  Bangert-Drowns, R. L., Kulick, J. A. & Morgan, M. T. (1991). The instructional effect of feedback in test-like events, Review of Educational Research, 61, 213– 238.

[7]   Bauman, Z. (2003). Education's challenge in the liquid modern era'. In Bron, A., & Schemmann, M. (Eds.). (2003). Knowledge Society, Information Society and Adult Education (pp. 23–44). Munster: LIT Verlag.

[8]  Black, P., & Wiliam, D. (1998). Assessment and classroom learning. Assessment in Education: Principles, Policy & Practice, 5(1), 7–74.

[9]   Boston, MA: Pearson A &B.Just Science Now! (n.d.). Assessment   Inquiry   connection. http://www.justsciencenow.com/assessment/index.htm

[10]   Bourdieu, P. (1988). Homo Academicus (P. Collier, Trans.). Oxford: Polity Press

[11]   Bourdieu, P., & Passeron, J-C. (1977). Reproduction in Education, Culture and Society (R.Nice, Trans.). London: Sage.

[12]   Conley, D.T. 2014. A New Era for Educational Assessment. Students at the Center: Deeper Learning Research Series. Boston, MA: Jobs for the Future.

[13]   Geoffrey Crisp (2011).Teacher's Handbook on e-Assessment. Australian Learning and Teaching Council Ltd, an initiative of the Australian Government.

[14]   C. Ricketts &S. J. Wilks(2010)Improving   Student Performance Through Computer-based Assessment: Insights from recent research.

[15] Rodney S. Earle (2002)The Integration of Instructional Technology into Public Education John Grin, Henk van de Graaf(1996)Technology   Assessment as Learnin

[16] Caroline V. Gipps What is the role for ICT-based assessment in universities?