



## CHALLENGES FACED BY SCHOOL EDUCATION SYSTEM IN ONLINE ASSESSMENT IN THE PHASE OF SUDDEN SWITCH TO ICT BASED TEACHING-LEARNING

**Mr. Pushpendra Yadav**

**Ms. Ruchi Rana**

### Abstract

In the past few months we all have been affected by Covid-19 pandemic. From March 2020 schools and colleges were closed due to increased cases of covid-19 across India. We can say this was one of the biggest pandemic of the century. We all remain closed in our homes with proper distancing in this pandemic lot of things in our habit, lifestyle and behaviour has been changed. In this pandemic our Education system completely relies on online/ICT based teaching and learning because besides there is no alternative left for us. In the phase of ICT based online teaching and learning specifically on school level students and teachers suffer a lot of problems to adapt new techniques on such a vast level because in School level for every active classroom in transition of knowledge pedagogy takes an important role. But in online mode face to face teaching is not possible for us. And in a sudden shift towards online teaching, online assessment is also a big concern for school, teachers and government. In online mode assessment going through many challenges. In this research paper researchers address the issue related to online assessment from the point of views of students, parents, teachers, school management and policy makers because assessment is the thing which leads students towards improvement and excellence.

**Key Terms:** Online Assessment, Online Teaching, ICT based Teaching and Learning

### 1. Introduction

*“As educators and policy makers, it is important to demonstrate for parents the connection between high levels of student participation in assessment and system accountability - ensuring the success of every student”.*

*-Kate Brown*

When we all are going through the different challenges in various fields of life during the pandemic, education also became a challenge among almost all the countries throughout the world. In the sector of education along with learning objectives, teaching strategies, teaching learning sources, assessment is something which holds a really remarkable position. And we all are quite aware about the importance and need of assessment in the process of teaching learning. Now along with the question of making the teaching learning happen in a pandemic it becomes really necessary to assess whether the practices which are going on are helping the learner to improve, what kind of problems they are facing during learning or whether the practices are helping them to identify their strengths and weaknesses. So here comes the vital need of online assessment in educational settings. Without result if we are proceeding further will just be like a ship without a rudder. And ultimately lead to the wastage of resources. Therefore certain online assessment techniques needed at this point of time and of course if need arises in the future. Online assessment is still a challenge while speaking in the context of developing countries such as India.

There are a lot many challenges such as accessibility, teacher's competency, student's capability, resources availability etc. We will focus by narrowing down to the challenges in online assessment. In the online assessment process various factors come into notice such as teacher's preparation, proper training, proper channel of work, types of assessment required for different domains. It is also one of the challenges to assess all kinds of domain cognitive, affective and psychomotor through online assessment which is very much emphasized in the process of teaching- learning by various commissions, policies and curriculum framework.

## **2. Assessment**

- Assessment is the feedback of a student's learning, insights, areas of improvement, performance. Etymological meaning of assessment is to 'sit beside the learner'.
- Assessment is a way to know the areas in which a learner needs help the points in which the learning is taking place effectively or we can say appropriately. Assessment occurs to provide feedback as well as a kind of motivation for the development and prepare the learner for upcoming practices in a more effective manner. Assessment is more process oriented which provides the opportunity to assess the learning and at the same time when the learning is taking place.
- Assessment is a way to make us able to get learning outcomes which have been designed in order to maintain the quality education throughout the country. The learning outcomes documents are given by NCERT for various levels. Assessment is the point which helps us to always create a better and clearer way for future learning and to get feedback on ongoing practices also.
- Assessment as learning, assessment of learning and assessment for learning shows the significance of assessment at various stages of learning in variant situations.

## **3. Purpose of Assessment**

- There always lies the need for the purpose. So far we have discussed why assessment is needed especially in the online mode it provides the track and monitor the learning which is

happening in the process. The purposes behind the assessment in the educational settings are given here briefly;

- To know about the suitability of learning styles needed by the learner and teacher at the same time.
- To get idea about the strength and weakness in the content faced by learner
- To make the online assessment feasible and user friendly
- Create readiness for opting the new techniques among the teachers as well learners
- To understand the difficulties faced by the learners in opting
- To know what kind of training can help the teacher better in online process of teaching and learning
- The aim of assessment also lies in framing out the necessary modification required in the curriculum for wholesome or holistic education
- Assessment is done to know the about the status of getting to know about the plan and actions needed further
- Assessment is process based so it is done in order to know about the interest of the learner, therefore a better teaching strategy can be practiced in order to hold the curiosity and sustain the same throughout the process.
- Assessment also can be used as a check to know whether there is connection or meaningful learning is taking place or not.
- Can lead us toward more qualitative improvement in the online teaching learning and therefore developing better online assessment techniques which can surely help the learners, teachers as well various bodies concerned with the education.

#### **4. Review of online Assessment**

Su, Y. (2015). Highlighted in his research work assessments helps the learner to learn new knowledge on a continuous and sustainable basis. He focused on self-assessment is the central part of lifelong learning and it is related to formative assessment and summative assessment (Su, Y. 2015). McConlogue, T. (2020). Conducted a study in which he explains challenges occurring in designing all types of assessment. Basically in his study he is focused on a modularised degree programme for higher education. He highlighted since students can experience a variety of assessments so have difficulty taking one assignment to next (McConlogue, T. 2020). Kerton, C., & Cervato, C. (2014). Conducted a study on assessment in online learning in this research he explains how students interact with different online strategies. Researcher highlighted students do not use self-assessment tools effectively and time spent on online exams is being short. He further explains how to improve online assessment through careful online course design (Kerton, C., & Cervato, C. 2014). VIVOLO, J. (2016). Highlighted in his research work a big shift comes in the education system that is from traditional system of education to online learning but there are few resistance in online learning within organization or institution. J Michael et al. (2016) in his research work emphasize formative assessment and feedback to help and support students to do meaningful learning. McConlogue, T. (2020). Conducted a study on inclusive curriculum and

assessment practices in his study he said that in higher education due to widening participation agenda diverse group of students comes some of them have non-traditional backgrounds and that's why we need to change in curriculum and also assessment strategies so we meet the need of those students which comes from different background. Saliyeva, S., & Levesley, J. (2018). Particularly focuses on developing research skills inside the students to change assessment practices and argues that assessment skills motivate learning not only measuring the learning. Maharg, P., & Webb, J. (2019). explains in his book named 'Of tails and dogs: Standard, standardization and innovation in assessment' they found some of the hegemonic values and practices in assessment and also raised questions why these attributes make it difficult to achieve appropriate learning. Gibson, D., Ifenthaler, D., & Orlic, D. (2016). Highlighted on his work in which he said that to design a concept for the creation of global Open Assessment Resources a kind of item bank with integrated automated feedback and scoring tools which works for open educational resources .he claims such types of item bank will be helpful for various range of assessment applications, from quizzes and different type of taste and virtual performances. He says the concept of promoting deeper learning is based on authentic assessment and the concept of item bank brings us towards the idea of reusability Gibson, (D., Ifenthaler, D., & Orlic, D. 2016). Kneale, P., & Collings, J. (2018). highlighting in his research work how inclusive assessment offered a variety of students an equal and satisfactory learning experience which did not compromise at academic or professional standards. He says there are many variables contributing to the development of assessment strategies and feedback in higher education. Firth, N., & Newbery-Jones, C. (2019). had worked on digital assessment for the YouTube generation: reflective practice in 21<sup>st</sup>-century legal education and his work he pointed out to our students continuously seeking new ways of online interaction and these things clearly evidenced by the propagation of social media platforms in the last few years. He saw all these developments in the sector of social media in the form of innovation and attempted to reveal a mode of assessment which is appropriate for this type of online learning (Firth et al. 2019). RUBIO, F. (2015). highlighted in his research how technology supports language learning or facilitates language learning. And he explains in his findings that if we teach face two face mode course and same course on online mode then the outcome of language learning in both cases come the same.

Bhagat, K., & Spector, J. (2017). Conducted research in which he highlighted learning technologies structuring the innovative learning experience and also managing distance learning environments. He also suggested formative assessment is facilitating learning of common intellectual skills and also helpful in developing appropriate cognitive strategies for any type of problem (Bhagat, K., & Spector, J. 2017). Wang, X. et al. (2017) doing research work related to computer programming and says it's a very important and challenging issue to foster students' ideas and concepts and skills related to computer programming. In his research work he highlighted online peer assessment based systems tackle all these kinds of problems and helps the students to cope up with such types of problems during learning (Wang, X. et al. 2017). Hui-Chun Chu. (2014). empirically highlighted in his research work in mobile learning environment students are able to learn several things and explore and access different things from indoors and

outdoors of the house. In his study he tries to find out possible negative effects of mobile learning by using formative assessment based learning strategies and he further explains negative effects may be caused due to heavy load of cognitive mind and use of improper learning design (Hui-Chun Chu, 2014).

## **5. CHALLENGES FACED BY SCHOOL EDUCATION SYSTEM**

Due to the sudden shift towards online education various challenges came into the light in front of the school education system in India. Because in the time of pandemic and after pandemic this was the main concern of the central government, state government and educational bodies and authorities to ensure uninterrupted learning for our students at their homes. And for this regard the government and educational bodies take different types of online initiative for the students. In all from these initiatives one initiative was to run schools through online mode which provide online classes, online teaching materials to the students and assess the progress of students through an online assessment module. Since this process was taken in the implementation due to spread of Covid-19 pandemic across India.

### **5.1 CHALLENGES TO SCHOOL TEACHERS**

Since we all know assessment is a very critical aspect of the teaching and learning process. It is equally important for teachers as well as students. As a point of view of teachers it enables them to measure effectiveness of teaching with students' performance to specific learning objectives. Due to sudden shift of teaching towards online and ICT based teaching learning mode there are several challenges arises in front of teachers:

- **Lack of Training:** In last few months things around us changes very rapidly in Covid-19 pandemic situation there is no way to train our school teachers with face to face mode and train them towards online assessment technique because many of teachers are not happy with online assessment but in the phase of pandemic no other option available for them.
- **Expertise in Technology:** We know all of the school teachers are not much familiar with online teaching or ICT based teaching and learning so they need urgent training regarding online assessment. We need experts in the field to get help from for this regard.
- **Grading of Students:** Since due to lack of transparency in the assessment there is no new way developed that students can know their assessment process and grading technique. In the online mode the transparency has been challenged all the more.
- **Pattern of Assessment:** This is also a big challenge in front of school teachers to decide the pattern of assessment because there is no set valid and reliable pattern available for them.
- **Prepare Quality Questions:** How to formulate a good quality pool of questions for online assessment for the students through which they can assess students through online mode.

- **Increase Workload:** This is also seen as an online assessment sometime time consuming for students as well as teachers.

## **5.2 CHALLENGES TO STUDENTS AND PARENTS**

- Due to pandemic and sudden shift towards online learning and ICT based teaching and learning students and parents feel different kinds of problems and challenges:
- Since the age group of students in schools is 5 to 16 so in certain situations and cases specifically in remote areas, rural belt of India students are not familiar with such type of online learning and ICT based teaching and learning. They feel difficult to give answers to such types of questions which are based on online assessment.
- The type of questions or modules in online assessment is totally different so sometimes students feel difficult and not relevant because previously students were not trained for online assessment.
- For the students and parents there is a need for time to understand the nature of online assessment.
- Since in every active learning classroom there are individual differences and teachers choose our assessment techniques or modules as per the diversity of students in the classroom but in online mode of assessment does not have such type of flexibility for students.
- In online mode careless assessment can bring a very bad and negative impact on students because in online mode students have high expectations of assessment.
- In online assessment some time technology and language could be the barrier.
- Financial issues are also big constraints in online assessment for parents as well as students because accessibility of good quality internet connection, Wi-Fi, broadband, smart phones and laptop is not possible for Economical Weaker Section or Marginalized Section Students.

## **5.3 CHALLENGES FOR SCHOOL MANAGEMENT**

During pandemic and after pandemic School Management also need to change their working style. We can say after pandemic complete teaching and learning shifted towards online teaching and ICT based teaching and learning. The role of leaders and teachers also changed in this situation and in this regard online assessment brings new challenges in front of school managements.

- The first big challenge in front of school management is to ensure uninterrupted online teaching and learning for students in the time of pandemic and for implementation of such type of learning they have to develop their teaching learning resources for online mode. In all

this preparation or selection of such types of teachers who can assess the students through online mode is also a big challenge to school management.

- The quality of assessment depends upon the high quality of the pool of questions for assessment so this was a task for school management to develop a high quality standard pool of questions through subject experts which is relevant to online assessment.
- To develop sustainable internet connection inside school organizations and also ensure to provide the same type of seamless connection to our teachers if they are doing work from their home because in online based assessment good quality internet connection may work as a major factor.
- In online assessment effective communication work as a major intervening variable because in remote area locations, rural areas doubt of students regarding online assessment must be clear by school management.
- Online exam security and process of examination is very critical in online assessment. So there must be an attempt at a sense of security, explanation about process, transparency about assessment must be provided by the school management. So the trust can build up among students towards online assessment.

#### **5.4 CHALLENGES FOR POLICY MAKERS**

If we look towards documents related to our Indian education system like NPE-1986, NCF-2005, NEP-2020 then we see all policies and curriculum emphasis towards ICT based teaching and learning but due to sudden shift towards ICT based teaching and learning the stakeholders related to teaching and learning was not ready for this type of change so now new challenges arises in front of policy makers because no policy maker is ready for such type of sudden and radical change in the system.

- RTE-2009 ensures free and compulsory education to the students to the age of 16. But in the age of online education this may be a big challenge for policy makers to retain such type of education across India.
- For online assessment there are no authorized documents or policy available so far.
- There is a lack of transparency in online assessment so there is an urgent need for authorized policy or documents from the side of policy makers and respective governments so we can build up trust among teachers as well as students.
- Maintaining the standard of schools is also a big challenge in front of policy makers because assessment policy reviews the quality of schools so in online mode of assessment there is a big challenge in front of policy makers to ensure the standard and quality of schools across India.

## **6. SUGGESTIONS**

- Urgent need for a document or policy related to online assessment to it can work as a guideline and build trust among teachers and students.
- Training of students, teachers and staff of school provided by school management for online tests and also assessment.
- Timely and flexible open book tests which should be properly structured and proper guidelines and time slots should be allotted to students so that they can upload in their answers in a given time frame.
- E-assessment should be integrated as part of online or ICT based teaching and learning and should be part of course design.
- School Management should use software like plagiarism checkers etc. which increase validity and trustworthiness of examinations and online assessment process.
- Online software like Google classroom, Lesson Up, Spiral, classFlow, PearDeck, etc. should be used for the purpose of formative assessment.

## **7. CONCLUSIONS**

- In the last few months we all know Covid-19 Pandemic affects all dimensions and areas of the school education system.
- Online teaching and ICT based teaching and learning was only medium during the period of pandemic.
- We need proper training for students, teachers, school staff for online teaching as well as online assessment.
- In the phase of pandemic and till now online assessment is the only way or system to evaluate the overall performance of students.
- The experience of the past few months teaches us norms for assessment should be changed on various aspects especially if we implement it through online mode.
- Policy makers must develop and design documents, modules related to online assessment.



### References

- Bhagat, K., & Spector, J. (2017). Formative Assessment in Complex Problem-Solving Domains: The Emerging Role of Assessment Technologies. *Journal of Educational Technology & Society*, 20(4), 312-317. Retrieved September 20, 2020, from <http://www.jstor.org/stable/26229226>
- Firth, N., & Newbery-Jones, C. (2019). Digital assessment for the YouTube generation: Reflective practice in 21st-century legal education. In BONE A. & MAHARG P. (Eds.), *Critical Perspectives on the Scholarship of Assessment and Learning in Law: Volume 1: England* (pp. 51-78). Australia: ANU Press. Retrieved September 19, 2020, from <http://www.jstor.org/stable/j.ctvp7d4db.8>
- Gibson, D., Ifenthaler, D., & Orlic, D. (2016). Open Assessment Resources for Deeper Learning. In Blessinger P. & Bliss T. (Eds.), *Open Education: International Perspectives in Higher Education* (pp. 257-280). Cambridge, UK: Open Book. Retrieved September 19, 2020, from <http://www.jstor.org/stable/j.ctt1sq5v9n.18>
- Hui-Chun Chu. (2014). Potential Negative Effects of Mobile Learning on Students' Learning Achievement and Cognitive Load—A Format Assessment Perspective. *Journal of Educational Technology & Society*, 17(1), 332-344. Retrieved September 20, 2020, from <http://www.jstor.org/stable/jeductechsoci.17.1.332>
- International Journal of Current Research Vol. 12, Issue, 07, pp.12582-12586, July, 2020  
<https://ndpublisher.in/admin/issues/EQv11n2b.pdf>
- J. Michael Spector, Dirk Ifenthaler, Demetrios Sampson, Lan (Joy) Yang, Evode Mukama, Amali Warusavitarana, . . . David C. Gibson. (2016). Technology Enhanced Formative Assessment for 21st Century Learning. *Journal of Educational Technology & Society*, 19(3), 58-71. Retrieved September 19, 2020, from <http://www.jstor.org/stable/jeductechsoci.19.3.58>
- Kneale, P., & Collings, J. (2018). Towards inclusive assessment: The journey at the University of Plymouth. In Auferkorte-Michaelis N. & Linde F. (Eds.), *Diversität lernen und lehren – ein Hochschulbuch* (pp. 31-43). Opladen; Berlin; Toronto: Verlag Barbara Budrich. doi:10.2307/j.ctvbkjx58.5
- Kerton, C., & Cervato, C. (2014). Assessment in Online Learning—It's a Matter of Time. *Journal of College Science Teaching*, 43(4), 20-25. Retrieved September 19, 2020, from <http://www.jstor.org/stable/43632008>

- Learning Outcome for Secondary Level (2019). Retrieved December 2, 2020 From [https://ncert.nic.in/pdf/notice/learning\\_outcomes.pdf](https://ncert.nic.in/pdf/notice/learning_outcomes.pdf)
- Maharg, P., & Webb, J. (2019). Of tails and dogs: Standards, standardisation and innovation in assessment. In BONE A. & MAHARG P. (Eds.), *Critical Perspectives on the Scholarship of Assessment and Learning in Law: Volume 1: England* (pp. 25-50). Australia: ANU Press. Retrieved September 19, 2020, from <http://www.jstor.org/stable/j.ctvp7d4db.7>
- McConlogue, T. (2020). Developing Inclusive Curriculum and Assessment Practices. In *Assessment and Feedback in Higher Education: A Guide for Teachers* (pp. 137-150). London: UCL Press. doi:10.2307/j.ctv13xprqb.14
- McConlogue, T. (2020). Designing Assessment Across a Programme. In *Assessment and Feedback in Higher Education: A Guide for Teachers* (pp. 53-63). London: UCL Press. doi:10.2307/j.ctv13xprqb.9
- National Educational Policy (2020). Retrieved December 2, 2020 , from [https://www.education.gov.in/sites/upload\\_files/mhrd/files/NEP\\_Final\\_English\\_0.pdf](https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf)
- National Policy on Education (1968). Retrieved December 2, 2020, from [https://www.education.gov.in/sites/upload\\_files/mhrd/files/document-reports/NPE-1968.pdf](https://www.education.gov.in/sites/upload_files/mhrd/files/document-reports/NPE-1968.pdf)
- National Policy on Education (1986). Retrieved December 2, 2020, from [https://www.education.gov.in/sites/upload\\_files/mhrd/files/upload\\_document/NPE86-mod92.pdf](https://www.education.gov.in/sites/upload_files/mhrd/files/upload_document/NPE86-mod92.pdf)
- NCF (2005). Retrieved December 2, 2020 From <https://ncert.nic.in/pdf/nc-framework/nf2005-english.pdf>
- RUBIO, F. (2015). Assessment of Oral Proficiency in Online Language Courses: Beyond Reinventing the Wheel. *The Modern Language Journal*, 99(2), 405-408. Retrieved September 19, 2020, from <http://www.jstor.org/stable/43650037>
- Saliyeva, S., & Levesley, J. (2018). Learning-oriented assessment. In Tong V., Standen A., & Sotiriou M. (Eds.), *Shaping Higher Education with Students: Ways to Connect Research and Teaching* (pp. 178-187). London: UCL Press. Retrieved September 19, 2020, from <http://www.jstor.org/stable/j.ctt21c4tcm.29>
- Su, Y. (2015). Ensuring the continuum of learning: The role of assessment for lifelong learning. *International Review of Education / Internationale Zeitschrift Für*

*Erziehungswissenschaft / Revue Internationale De L'Education*, 61(1), 7-20. Retrieved September 19, 2020, from <http://www.jstor.org/stable/24637237>

VIVOLO, J. (2016). Understanding and combating resistance to online learning. *Science Progress (1933-)*, 99(4), 399-412. doi:10.2307/26406355

Wang, X., Hwang, G., Liang, Z., & Wang, H. (2017). Enhancing Students' Computer Programming Performances, Critical Thinking Awareness and Attitudes towards Programming: An Online Peer-Assessment Attempt. *Journal of Educational Technology & Society*, 20(4), 58-68. Retrieved September 20, 2020, from <http://www.jstor.org/stable/26229205>

---

**Mr. Pushendra Yadav**

**Research Scholar, Department of Education, CIE, University of Delhi.**

**Email: [pushendra.cie@gmail.com](mailto:pushendra.cie@gmail.com), Contact no.9125300302**

**&**

**Ms. Ruchi Rana**

**Research Scholar, Faculty of Education, Banaras Hindu University (BHU),  
Varanasi**

**Email: [ruchirana1222@gmail.com](mailto:ruchirana1222@gmail.com), Contact no. 8219835361**