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Research Paper Title: **Enhancing Quality of Educational Resources in Open and Distance Learning**

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## DECLARATION

We, the undersigned, hereby would like to explicitly state that the write-up titled, “**Enhancing Quality of Educational Resources in Open and Distance Learning**” is original and has not been published earlier, or that it is not under consideration for possible publication elsewhere.

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## **Enhancing Quality of Educational Resources in Open and Distance Learning**

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### **Abstract**

Open and Distance Learning (ODL) is becoming a widely acceptable alternative to conventional university vis-à-vis classroom teaching-learning environment. This increasing trend is common mostly to pursue higher education in India. It has become necessary that quality of educational resources is ensured by the Higher Educational Institutes (HEIs) offering ODL programmes. Educational resources include infrastructure, course instructors/teachers, study materials, assessments, etc. The issue of a quality provision in ODL has been highlighted by stakeholders including the Governments, private groups, individuals and the society involved in an expanded system of higher education (Olojede, 2008). In India, responsibility of quality assurance is mainly on the government because government controls the regulating authorities such as University Grants Commission (UGC) or All India Council for Technical Education

(AICTE). For ODL, government releases various guidelines through these regulatory authorities time-to-time to ensure the quality of education and related matters. The quality standards proposed by said regulators may not be applicable in its entirety for ODL environment. This may be because of the challenges surrounding distance education such as level of programmes and diversity in laws from one country to another, scope of the programmes in terms of its recognition worldwide and language constraints for delivery and for assessments. Despite these challenges, the underlining principle that should guide quality assurance is the quality of resources through which a course can be delivered to learners. Such resources influence the quality of learning, which in turn promotes course participation (Olojede, 2008). This paper highlights few of the educational resources used in ODL environment and strategies to maintain or enhance their quality. For this paper, various

educational resources used by HEIs in ODL are identified and a qualitative study is carried out to cite quality measures.

**Keywords:** Educational Resources, Quality Assurance, HEIs, Strategies in ODL, Interactive e-Books, MOOCs

## Introduction

According to Sharath (2015), distance education helps people or learners to make informed choices about their present life and future. It is reflected as one of the most important innovations in education. It is an alternative to the conventional education system. To support this statement, regulators, learners, potential corporate sector who offers job opportunities to the students and parents need to be convinced that ODL institutions are not providing half-baked education but the education, which is at par with the conventional one. This can be achieved through the quality education, which is a by-product of quality or standard of resources. Comparable programmes delivered with high quality educational resources will help to change the mind-set of people towards distance learning as a second grade education (Stella & Gnanam, 2004).

Two principle components of ODL are ‘Open Learning’ and ‘Distance Education.’

According to University Grants Commission (UGC), Open Learning is a philosophy and Distance Education is the mode used for translating it into reality; the two are complementary to each other. In ODL environment, the learner and the teacher are separated by space and time demanding accurate mapping of all the resources to ensure desired outcomes. Two parallel authorities exist to regulate Open and Distance learning in India. Distance Education Bureau (DEB, n.d.), under University Grants Commission (UGC) and All India Council for Technical Education (AICTE, n.d.). According to AICTE, distance learning is creating an educational environment or experience of equal qualitative value for the students to best suit their needs outside the classrooms. In ODL, there is an increasing demand for quality educational services from learners. This indicates that in recent times students are increasingly becoming customers. This means students nowadays expect high quality programmes and are willing to search across borders to fulfil their needs. A jurisdictional restriction to ODL organisations also implies that students are disadvantaged of choices and may lead to significant academic loss (Ravichandran, 2016).

Maintenance of quality standards of technical education imparted through ODL has two aspects. One is the delivery mechanism of the courses/programmes and the other is quality

and relevance of the contents of the course. AICTE has now defined the procedures and regulations for the conduct of Technical Education through ODL and blended learning mode.

### ODL Resources in India

In India, Higher Education Institutions (HEIs) mainly deliver the programmes at Post-Graduate, Graduate, Diploma and Certificate levels. Among these levels, Post-Graduate and Graduate levels are with highest number of learners. The enrolment of learners for these levels is given in following table 1 (All India Survey on Higher Education, 2019).

**Table 1** Enrolment of learners at different academic levels (Source: AISHE Report/UGC)

Academic Year	Level	Total enrolment*	Percent in total enrolment (Conventional + ODL)
2016-17	Post-Graduate	13,18,871	11.28%
	Graduate	25,69,091	
	Diploma	90,579	
	Certificate	49,673	
2017-18	Post-Graduate	12,68,586	11.00%
	Graduate	25,54,411	
	Diploma	1,22,744	
	Certificate	85,602	
2018-19**	Post-Graduate and Graduate	17,05,059	10.72%

(\*UGC announced that in the above enrolments 48.64% learners are women)

(\*\*as per details provided by HEIs)

To cater the said portion of ODL learners, the HEIs mainly use following resources:

1. Tutors/Trainers/Instructors
2. Self-Learning Material/ Self-Instructional Material
3. Videoconferencing sessions
4. Notes
5. E-Books
6. MOOCs
7. E-Learnings, etc....

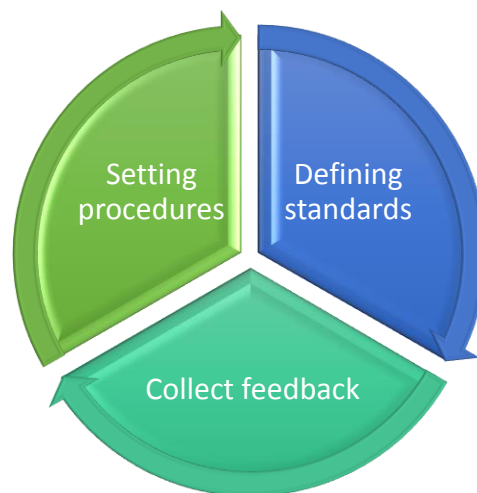
Quality of above-mentioned educational resources determines the quality of programmes delivered through these resources. Better the resources, better will be the programme and the students. Quality of resources can be ensured through a Quality Assurance System, which consists of formal procedures and rules. Quality assurance in ODL ensures the following:

- What activities to be undertaken
- Who should undertake the same, and
- To what standard it should be done

It is important to note that Quality Assurance (QA) is not the same as assessment. Quality Assurance is an ongoing process used during the creation and execution of the academic programme and assessment is something that is done once a programme is completed.

### Quality Assurance Process

Quality assurance process may be different for different organisations. On the basis of set of activities the organisation performs, definition of quality and quality assurance changes. Broadly, a quality assurance system ensures defining right procedures, implementing those procedures with right standards or tools and collects the feedback from right users to verify said purpose of quality assurance. In ODL, primary objective of quality assurance is to attain the student satisfaction and improve the acceptability of the programmes worldwide. A typical quality assurance system in ODL can have following phases or steps:



**Figure 1** Quality assurance process in ODL

In ODL environment, setting up the procedures can be the first phase of quality assurance system. Procedures are nothing but the description of how various activities are performed or being performed in the system. In other words, it comprises of ways of doing things. Objectives of such procedures in any system are as follows:

1. Procedures are used to define what the organisation considers to be a good practice to be followed, and
2. Procedures are used to ensure that staff should apply good practices consistently while performing their regular duties in the organisation.

Typically, an ODL organisation may have procedures for preparation of new self-instructional material or change the content of existing self-instructional material in case the same is obsolete or outdated, addressing queries of the learners, conducting online or contact sessions, preparing/improving/revision of assessments to evaluate the learners and evaluations of submitted responses.

Beldarrain (2006) suggests that technology has played a critical role in changing the dynamics of each such procedures over the years, as well as the pedagogy in ODL. As new technologies emerged, instructional designers and educators such as HEIs had

unique opportunities to foster interaction and collaboration among learners, thus creating a genuine learning community. For instance, e-books and, following that, interactive e-books have gained an extensive interest and have been used as a valuable medium in both conventional and ODL education systems.

All these procedures are routine and an ODL organisation needs to perform them on a recurring basis. Along with these recurring procedures, an ODL organisation may have the procedures which are long term or non-recurring like development of new programmes, recruiting subject experts, writing a course, testing and validating a course or programme, obtaining accreditations from regulating authorities, provision of academic infrastructure and legal compliances if any.

Second and most important phase in devising a quality assurance in ODL is defining right standards along with all the procedures identified. Standards are the yardsticks with the help of which the expected level to be attained for any procedures or activity is defined. In other words, Standards are the Specifications identifying the level or degree to which activities are to be performed. Standards for the educational resources commonly used in ODL are described in following table 2:

**Table 2** Standards for the educational resources in ODL

<b>Sr. No.</b>	<b>Educational Resources</b>	<b>Standard</b>	<b>Indicator/Measure</b>
1	Tutors/Trainers/Instructors	Qualification pack	Number of tutors having prescribed qualification
2	Self-Learning Material/Self-Instructional Material	Pre-decided structures, House-style, Guidelines, Template	Units developed, Timely delivery
3	Videoconferencing sessions	Duration, Template, House-style, Guidelines	Sessions conducted as per standard
4	Notes	Template	Number, Coverage
5	E-Books	Pre-decided structures, House-style, Guidelines, Template	Units/Books developed
6	MOOCs	Audience, House-style, Guidelines, Template	Number of users
7	E-Learnings	Pre-decided structures, House-style, Guidelines, Template	Number of E-Learnings created

Above standards are indicative and an ODL organisation may have different set of standards as per its target audience, internal policies and regulation norms.

Third and most important phase in the quality assurance is collection of the feedback from users. After successful definition of procedures and standards, ODL organisation needs to evaluate that the procedures and standards so defined are implemented in a right way and for right users or not. This should be the responsibility of each process-owner in the organisation. In ODL, typically different departments exist to do so. For instance, the academicians can undertake the procedures related to development of self-instructional material and its evaluation.

Each process-owner can define the standard feedback collection methodology to collect the user views on resources they have provided. These resources are provided as a part of programme delivery by ODL organisations. Following table 3 suggests the target users of different educational resources:



**Table 3** Potential users of educational resources

<b>Sr. No.</b>	<b>Educational Resources</b>	<b>Potential users</b>	<b>Indicator/Measure</b>
1	Tutors/Trainers/Instructors	HEIs, Learners	Programmes developed, Student satisfaction
2	Self-Learning Material/ Self-Instructional Material	Learners	Passing rate
3	Videoconferencing sessions	Learners	Passing rate
4	Notes	Learners	Passing rate
5	E-Books	Learners	Total access
6	MOOCs	Learners	Total access, Registrations
7	E-Learnings	Learners	Total access

Quality of HEIs or their programmes is a sum total of quality of their educational resources through which they execute the said programmes or courses. HEIs shoulders the responsibility of enhancing the quality of their educational resources to ensure learners' participation and sustainability of both programme/course and the institution itself. Quality Assurance in the HEIs is the nucleus of distance education system. HEIs should define suggestive measures to improve the quality and standards (Anbalagan, 2016). Table 4 depicts some strategies an HEI can adopt to enhance the quality of educational resources.

**Table 4** Strategies an HEI can adopt to enhance the quality of educational resources

<b>Educational Resources</b>	<b>Potential Users</b>	<b>Standard</b>	<b>Strategies to Enhance Quality</b>	<b>Reference</b>
Tutors/Trainers/ Instructors	HEIs, Learners	Qualification Pack	<ul style="list-style-type: none"> <li>• Appointment of specialised experts</li> <li>• Optimal mix of youth and experience</li> <li>• Diversified portfolio of teachers</li> <li>• NSQF compliances</li> <li>• Students and society is looking for skill focus in teaching</li> <li>• Faculty development and training</li> <li>• Seminal research agenda</li> <li>• Training for designing and documenting Self-Instructional Material (SIM), Self-Learning Material (SLM) and E-Contents</li> </ul>	(Bordoloi, 2018);  (Rao, 2016);  (Madan, 2016);  (Ubarhande & Bagade, 2019);
Self-Learning Material/ Self-Instructional Material	Learners	Pre-decided structures, House-style, Guidelines, Template	<ul style="list-style-type: none"> <li>• High Quality Design and Development of SLM</li> <li>• Development of SLM well before launch of a programme</li> <li>• Anti-Plagiarism test on the material</li> <li>• Availability of SLM in both print and interactive multimedia content</li> <li>• Updated and peer reviewed content</li> <li>• Decision or Adapt or Develop</li> </ul>	(Veeraraghavan, 2016);  (Olojede, 2008);  (Yuan et al., 2008);  (COMMON WEALTH of LEARNING, 2005);  (Pande et al., 2020);

			<ul style="list-style-type: none"> <li>• Periodic updates in the content</li> <li>• Learner centric language and tone given to the content</li> <li>• Digital Repositories(covers a plethora of different content management systems and the search engines that index them)</li> <li>• Learning repository (created from combinations of in-house and third-party resources, enabling academics to retrieve and share these resources)</li> </ul>	(Craig et al., 2012);  (Atkinson et al., 2009)
Video-conferencing sessions (Podcasts and Streaming)	Learners	Duration, Template, House-style, Guidelines	<ul style="list-style-type: none"> <li>• Participation of learners</li> <li>• Interactivity</li> <li>• Inclusion of practical and cases as applicable</li> <li>• Effective use of tools of communication</li> <li>• Flexibility of schedule</li> <li>• Scope for recording</li> </ul>	(Veeraraghavan, 2016);  (Craig et al., 2012)
Notes	Learners	Template	<ul style="list-style-type: none"> <li>• Availability of Handouts like conventional classes</li> <li>• Availability of Lecture PPTs in PDF downloadable format</li> </ul>	(Pratt, 2015)
Interactive E-Books	Learners	Pre-decided structures, House-style, Guidelines, Template	<ul style="list-style-type: none"> <li>• The first teaching machine</li> <li>• Interaction occurs in multi-channels</li> <li>• Interaction is among user, digital book, and environment</li> </ul>	(Bozkurt & Bozkaya, 2015);  (McLuhan, 1964)

			<ul style="list-style-type: none"> <li>• The book elements interact among themselves</li> <li>• Interaction occurs synchronously among many components</li> </ul>	
MOOCs	Learners	Audience, House-style, Guidelines, Template	<ul style="list-style-type: none"> <li>• Updated cMOOCs &amp; xMOOCs</li> <li>• Better learning experiences</li> <li>• Targeting new segments of the student market</li> <li>• Using MOOCs as a marketing tool</li> <li>• Education Research and Development</li> <li>• Scope to submit feedback from MOOC participants within course itself</li> </ul>	(Haggard, 2013)
E-Learnings	Learners	Pre-decided structures, House-style, Guidelines, Template	<ul style="list-style-type: none"> <li>• Subscribed Content Delivery(provides a means of keeping up-to- date with content on the Internet that is updated frequently)</li> </ul>	(Bhanushe, 2016);  (Craig et al., 2012)

### Conclusions:

There exists a viewpoint among the learners and companies offering jobs to these learners that distance education cannot be taken at-par with traditional educational system. This stigma attached to the distance education that it is not superior or at-par with conventional/traditional education system can

be eradicated with development of comparable programmes and by offering them quality educational resources.

There is a need felt for quality assurance in the ODL system. Challenges in ODL such as quality and relevancy of content, learner's participation, technology advancements and its adoption, availability of skilled human

resources, etc. can be overcome through innovative ways and strategies. Strategies identified by researchers across the world related to online and distance learning enumerated in Table 3 needs to be integrated. A robust Quality Assurance framework shall be devised to ensure the quality in programme development, delivery, student support and evaluation. This paper leaves a scope to develop a framework using various educational resources and strategies identified. In ODL, penetration of advanced technology based tools for development of content and evaluation will change the entire paradigm. Technologies such as Artificial Intelligence can be used to develop the assessment models. Tools such as Renderforest, Animaker Edify, Ezvid, Hippo Video and Powtoon can be utilised to create more interactive delivery resources to ensure increased learner's attention and participation.

Educational Resources highlighted in this paper and respective strategies identified from literature will contribute to enhance the quality of teaching and learning in ODL. Currently, HEIs are using few of the resources identified in this paper; however, utilisation of optimum resources with applicable strategy will surely boost student inclination towards ODL.

## References

- 1) AICTE. (2019). *All India Council for Technical Education*. Retrieved from <https://www.aicte-india.org/All India Survey on Higher Education>. Department of Higher Education.
- 2) Anbalagan, M. G. (2016). Improving Quality Assurance and Standards for Distance Education in India. *Distance Education in India: Emerging Challenges and Prospects*, 79–79).
- 3) Atkinson, K., Fluker, G., N. L., Dracup, M., & McCormick, P. (2009). Introducing a Learning Repository Using a Blended Professional Development Approach. *ASCILITE 2009 : Same places, different spaces, Auckland, New Zealand, in Proceedings of the 26th ASCILITE conference, Australian Society for Computers in Learning in Tertiary Education*, 35–39.
- 4) Beldarrain, Y. (2006). Distance education trends: Integrating new technologies to foster student interaction and collaboration. *Distance Education*, 27(2), 139–153.
- 5) Bhanushe, M. (2016). Academic Audit Parameters to Assure Quality of ODL. *Distance Education in India: Emerging Challenges and Prospects*, (76–76).

- 6) Bordoloi, R. (2018). Transforming and empowering higher education through Open and Distance Learning in India. *Asian Association of Open Universities Journal*, 13(1), 24–36.
- 7) Bozkurt, A., & Bozkaya, M. (2015). Evaluation Criteria for Interactive E-Books for Open and Distance Learning. *The International Review of Research in Open and Distributed Learning*, 16(5), 58–82.
- 8) COMMONWEALTH of LEARNING. (2005). *CREATING LEARNING MATERIALS FOR OPEN AND DISTANCE LEARNING: A Handbook for Authors and Instructional Designers*. Canada: COMMONWEALTH of LEARNING.
- 9) Craig, A., Coldwell-Neilson, J., Goold, A., & Beekhuyzen, J. (2012). A review of e-learning technologies – opportunities for teaching and learning. *International Conference on Computer Supported Education*, 29–41.
- 10) DEB. (n.d.). *Distance Education Bureau*. Retrieved from <https://www.ugc.ac.in/deb/>
- 11) Haggard, S. (2013). *The Maturing of the MOOC*. Victoria Street: Department for Business, Innovation and Skills.
- 12) Madan, M. (2016). Present Status of Distance Education in India: Issues and Challenges. *Distance Education in India: Emerging Challenges and Prospects*, 60–61.
- 13) McLuhan, M. (1964). *Understanding media*, p. 174.
- 14) Olojede, A. (2008). Issues and Challenges in Enhancing Quality Assurance in Open and Distance Learning in Nigeria. *Fifth Pan Commonwealth Paper presented at the ICDE International Conference (19-23 November), New Delhi.*, 01–06.
- 15) Pande, J., Singh, A., Panighari, M. R., & Saxena, K. (2020). Quality Assurance Toolkit for ODL Institution: A Review Study of Uttarakhand Open University. *The Online Journal of Distance Education and e-Learning*, 8(1), 55–71.
- 16) Pratt, K. (2015). Supporting Distance Learners: Making Practice More Effective. *Journal of Open, Flexible, and Distance Learning*, 12–26.
- 17) Rao, K. C. (2016). "TEACHERS !!! PL DON'T TEACH US" - Dynamics of Pedagogy for Distance Education. *Distance Education in India: Emerging Challenges and Prospects*, 55–56). Puducherry: Directorate of Distance Education, Pondicherry University.

- 18) Ravichandran, M. (2016). Distance Learning in India: The Role of Apex Bodies. *Distance Education in India: Emerging Challenges and Prospects*.
- 19) Sharath, A. M. (2015). The Challenges of Distance Learning Education System in Karnataka State for Higher Level Education. *Nitte University, Fourth International Conference on Higher Education: Special Emphasis on Management Education*.
- 20) Stella, A., & Gnanam, A. (2004, MArch). Quality Assurance in Distance Education: The Challenges to be Addressed. *Higher Education*, 47(2), 143–160.
- 21) Ubarhande, P. B., & Bagade, S. J. (2019). Critical Evaluation of Competency Mapping for Teachers in Traditional and ODL Environment. *Symbiosis International Research Journal on Open and Distance Learning*, 2(1), 01–11. Retrieved from <http://www.scdl.net/ReserachPDF/volume3/Critical%20Evaluation%20of%20Competency%20Mapping%20for%20Teachers%20in%20Traditional%20and%20ODL%20Environment.pdf>
- 22) Veeraraghavan, P. V. (2016). Improving the Quality and Standards of Distance Education Programme in India. *Distance Education in India: emerging Challenges and Prospects*.
- 23) Yuan, L., MacNeill, S., & Kraan, W. (2008). Open Educational Resources—Opportunities and Challenges for Higher Education. *CETIS, J.*, 01–34.