

# "Exploring the Impact of Digital Repositories on Open University Education"

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**Abstract:** In the present study, "Exploring the Impact of Digital Repositories on Open University Education", which is a fast-changing, dynamic and technology-driven era, online and digital education has emerged as a game changer in the Indian Higher Education Scenario, particularly for open distance learning. Repositories are platforms that can be used to manage digital identity, which includes the number of citations and articles, study materials, other study materials, journals, research downloads, the cultivation of an online identity and the promotion of professional reputation. The study is "Exploring the Impact of Digital Repositories on Open University Education". The objectives of the study are to identify the availability of course materials in the digital repository of Open Universities. The effect of resources on skills development is measured according to the learner's feedback. Research Methodology: survey methods to determine the impact of digital repositories on open university education. The samples were drawn from learners who have taken courses in the Open ODL or online mode. The data were collected via the online mode via a custom-made questionnaire from learners who had learned via the ODL mode. Outcomes of the study: The results revealed that learners' utilization of digital repositories is easy and enhances their ability to teach. The results of this study can be used to determine learner opinions, face challenges in the use of digital repositories, and recommend valuable suggestions and solutions to make content more effective and easy ways to access material from digital repositories.

**Keywords:** ODL (open distance learning), DE (digital repositories), OER (open educational resources), IHE (Indian higher education).

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**Introduction:** In this fast-changing, dynamic and technology-driven era, online and digital education has emerged as a game changer in Indian higher education, particularly for open universities. Repositories are platforms that can be used to manage the digital identity of learners, allowing the management of digital identity, which is driven by technology, professional experience, ideas, capabilities, and the number of citations.

## Need for a Digital Repository

A large number of research papers, journal articles and reports, study materials, audio, and video materials are being brought out by the learners at IGNOU. A digital repository is a single platform where learners or students can archive all such resources to provide easy access to learners to develop the quality and skills of the learners. The digital repository portal provides easy single-point access to resource material that is available for use at any time, anywhere by its students, staff and faculty free to access.

## Statement of the Problem

"Exploring the Impact of Digital Repositories on Open University Education"

## Research objectives of the study

The objectives of the proposed research were as follows:

- identify the availability of course materials in the digital repository of Open Universities.
- The effect of resources on skills development is measured according to the learner's feedback.

## Review of Related Research

Achieng, Jane (2016) studied the usage of a digital repository in an academic institution and explored digital repositories as a new platform that libraries are adopting as additional digital resources and services on their portals. This requires additional investments toward the full creation and implementation of institutional repositories. It analyzes the usage of the digital repository from the user perspective of effectiveness, efficiency, satisfaction, and awareness. Ultimately, it determines the extent to which the users are utilizing the resources, the barriers that exist and the options that exist to help increase usage. This study also supports and provides directions for further research.

Gomez-Rey et al. (2016), in their research on student perceptions of quality online learning experiences, summarized 11 qualities: learning support, social presence, instruction, the learning platform, instructor interaction, learner interaction, learning content, course design, learner satisfaction, knowledge acquisition, and the ability to transfer. These variables need to be considered in relation to the five pillars of quality of online learning proposed by Sloan-C: access, learning effectiveness, student satisfaction, faculty satisfaction, and scale/cost-effectiveness.

Anistyasari et al. (2018) assessed student acceptance of digital repositories as knowledge management systems to support research activities. This study explores digital repositories that have been applied in several higher education programs. However, the acceptance of digital repositories in higher education has not been explored. This study proposed an appropriate conceptual model for the intention to use digital repositories by adopting a technology acceptance model that consists of three dimensions, namely, perceived usefulness, ease of use, and intention to use. This approach also facilitates and is relevant to the proposed study.

## Methodology

The research design of the study was survey methods to find learner feedback related to exploring the impact of digital repositories in repositories of various universities in India that run programs in the open distance learning mode or online mode.

## Research Design

The research design of the study was survey methods to find learner feedback related to the utilization of digital materials in the repositories of various universities in India, which run programs in open distance learning mode or online mode. The questionnaires were used to administer the research through an online mode.

## Data collection tools

The homemade questionnaires were used to administer the research through an online mode. For the questioners, four dimensions related to the study are as follows: the availability and quality of resources uploaded in the digital repository, the effect on the utilization of digital resources according to the learner's priority, and the barriers found by the learner's utilization of digital repositories to identify the learner's feedback.

## Sample of the Study:

There are varieties of programs and excessive volumes available in the digital repository of social media and different websites of various Open Universities and numbers of learners who have taken courses from ODL and the online mode. Owing to the large number of programmes and learners, it is necessary to delimit the study. The sample was drawn from learners who had performed different programs by open distance learning or online learning modes from some open universities and Institutions of India. 246 number of learners have responded as sample from different Open Distance Universities and Institutions. The samples also reflected the gender- and programmewise information of the learners.

## Data analysis

The questionnaires were administered online via a homemade questionnaire.

## Validity and Reliability

Research is related to learners’ feedback on the utilization of digital repositories, which is valid and reliable according to the content given in questionnaires and all the dimensions of the research point of view.

**Reliability of tools**

**The reliability of the questionnaire was measured by the Cronbach’s alpha of each construct. The values of the Cronbach’s alpha test are given in Table 1.1.**

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.923	.925	40

The Cronbach’s alpha test was performed after the tool was finalized with the responses of 30 learners. The values of Cronbach’s alpha are .923 and .925, which indicate that the items given in the tools are reliable and valid.

**Research procedures**

The research was administered through an online mode with the help of learner feedback. Quantitative data analysis was performed, and the results were determined. The data generated through questionnaires were entered into the MS Excel Worksheet and then analyzed via SPSS. A quantitative analysis was performed. The data have been presented through various charts, tables and diagrams.

**Findings and Discussions**

**Demographic Information:** In terms of the learner’s feedback response, 246 learners were from open distance universities and Institutions in India, which are located in different states of India. Among the 246 learners, 144 or 58.53% were male, and 102 or 41.46% of the females responded to different programs in the open distance learning or online mode. The demographic information is shown in the table and Figure 1.2.

**Table 1.2 Total number of learners by gender**

Gender	Total Numbers of Learners	Percentage
Male	144	58.37%
Female	102	41.46%
Prefer not to say	0	0
Total	246	100%

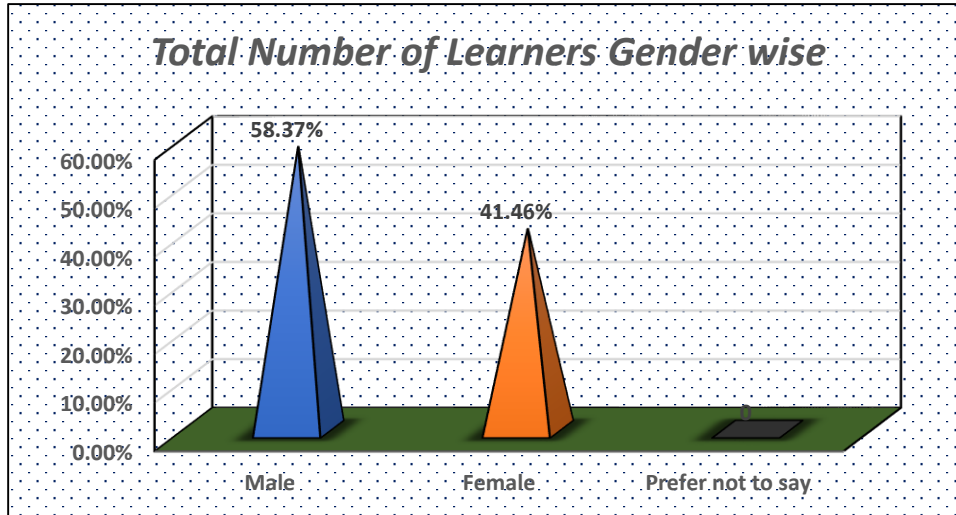


Figure 1.2: Total number of learners by gender

Programme information of the learner: Of the obtained responses, 11.78% of the learners were from the certificate course, 36.17% of the learners were from diploma courses, 17.07% of the learners were from undergraduate courses, 24.39% of the learners were from postgraduate courses, and 0.81% of the learners were from M.Phil. A total of 0.04% of the students from Ph.D.s and 0.8% and 9.34% of the learners from other skilled courses, respectively. Learners who have given feedback have taken different courses in different areas, and different open universities and institutes run online courses and open distance learning in India. The data are shown in Table & Figure 1.3.

Table:1.3 Total Number of Learners Programmewise

S. No.	Programmes	Total Numbers of Learners	Percentage
1.	Certificates Course	29	11.78%
2.	Diploma Course	89	36.17%
3.	Under Graduate Course	42	17.07%
4.	Post Graduate Course	60	24.39%
5.	M.Phil.	1	0.40%
6.	Ph.D.	2	0.81%
7.	Other Skilled Course	23	9.34%
Total		246	100%

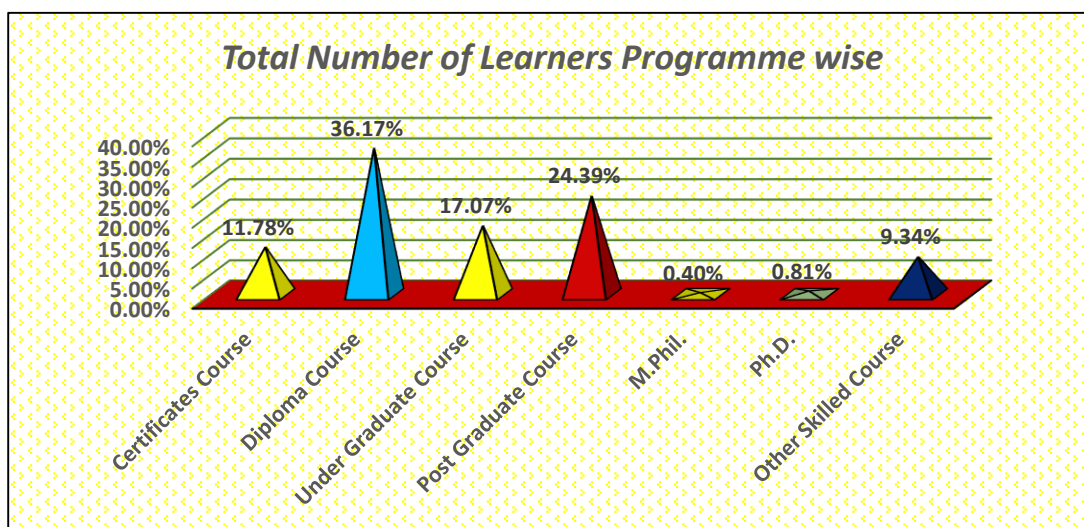
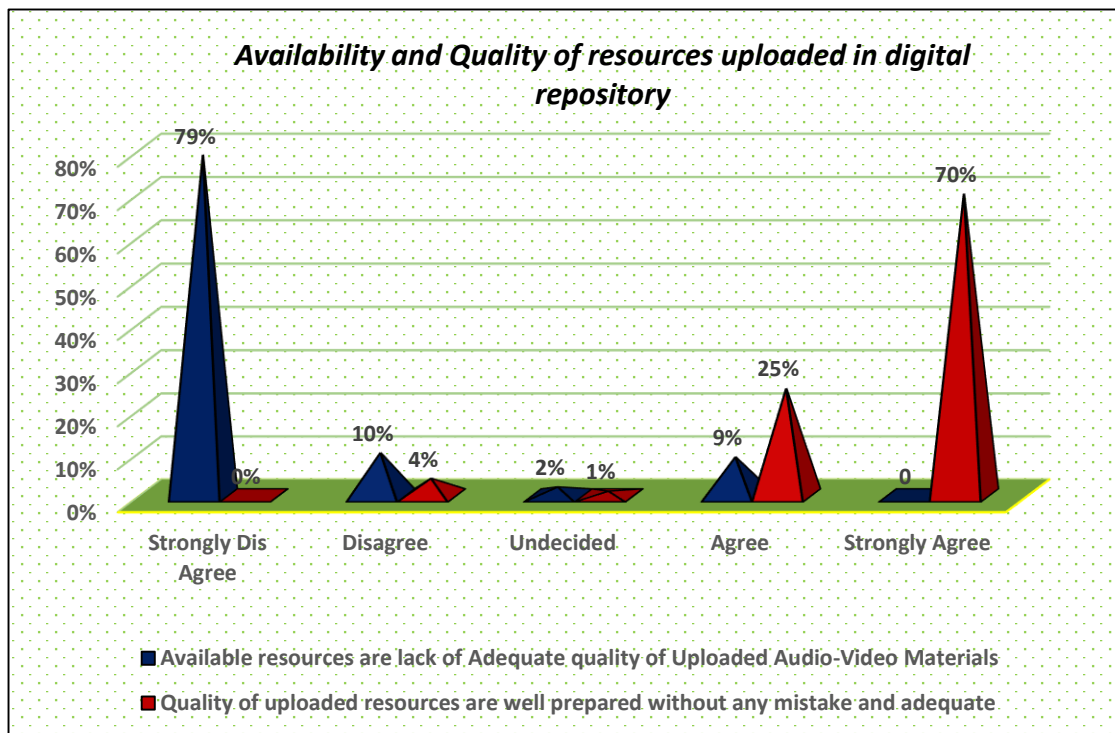


Figure 1.3: Total Number of Learners Programmewise

The objective is to first identify the availability and quality of course materials in digital repositories determined by the learners of open distance education or online mode who have used digital repositories. Among the obtained responses, 79% strongly disagreed, 10% disagreed, and 9% agreed with the learner’s lack of adequate quality of uploaded audio–video materials. In the opinion that the learners related to the quality of uploaded resources are well prepared without any mistakes and that adequate strongly agreed 70% and agreed 25%, strongly disagrees 10% disagreed, and 9% agreed. The results are shown in Table & Figure 1.4.

**Table 1.4: Availability and quality of resources uploaded in the digital repository**

S. No.	Availability and Quality of resources uploaded in digital repository	Strongly Dis Agree	Disagree	Undecided	Agree	Strongly Agree
1.	Available resources are lack of Adequate quality of Uploaded Audio-Video Materials	79%	10%	2%	9%	0
2.	Quality of uploaded resources are well prepared without any mistake and adequate	0%	4%	1%	25%	70%

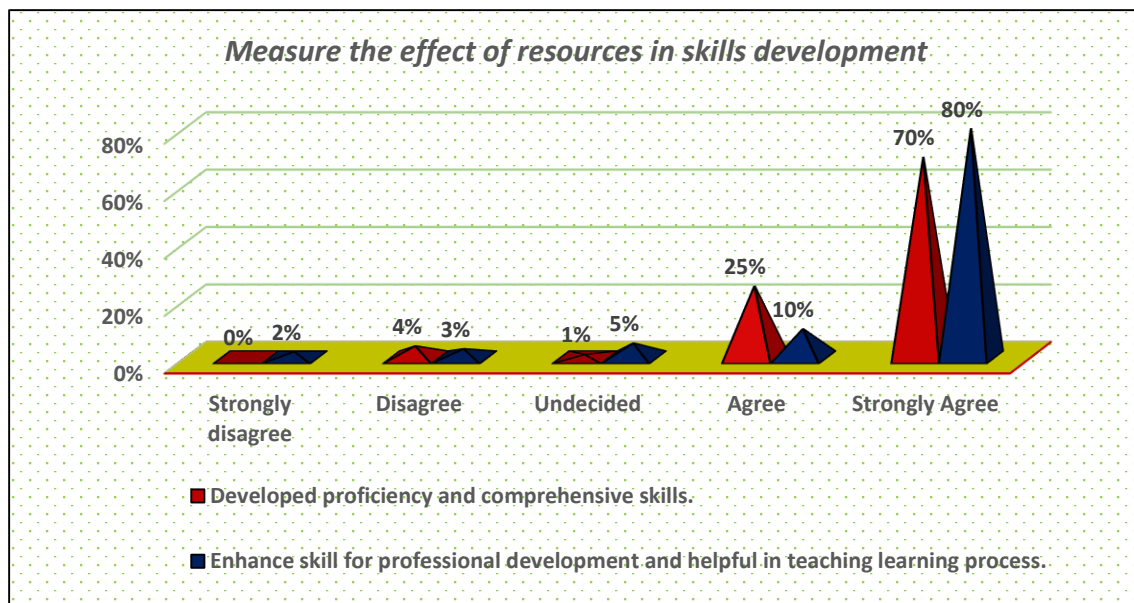


**Figure 1.4: Availability and quality of resources uploaded in the digital repository**

According to the objective second measure of the effect of resources on skills development found by the obtained data, 70% strongly agreed with the opinions of the learner who developed proficiency and comprehensive skills, 25% agreed, and 4% of the learners disagreed with the remaining 1% undecided. In the opinion of the learners related to enhancing skills for professional development and being helpful in the teaching process, 80% strongly agreed, 10% agreed, 3% disagreed, and 2% strongly disagreed. The results are shown in Table & Figure 1.5.

**Table 1.5: Measuring the effect of resources on skills development according to learner feedback**

S. No.	Measure the quality of resources according to learner's priority	Strongly disagree	Disagree	Undecided	Agree	Strongly Agree
1.	Developed proficiency and comprehensive skills.	0%	4%	1%	25%	70%
2.	Enhance skill for professional development and helpful in teaching learning process.	2%	3%	5%	10%	80%



**Figure 1.5: Measuring the effect of resources on skills development**

**Conclusion and suggestions**

In the present study, "Exploring the Impact of Digital Repositories on Open University Education," the results showed that the learner lacked adequate quality of uploaded audio-video materials; 79% strongly disagreed, 10% disagreed, and 9% learners agreed. In the opinion that the learners related to the quality of uploaded resources are well prepared without any mistakes and that adequate strongly agreed 70% and agreed 25%, strongly disagrees, 10% disagreed and 9% agreed. Second, the effects of resources on skills development found by the obtained data were the opinions of the learner who developed proficiency and comprehensive skills: 70% strongly

agreed, 25% agreed, and 4% of the learners disagreed that the remaining 1% were undecided. In the opinion of the learners related to enhancing skills for professional development and being helpful in the teaching process, 80% strongly agreed, 10% agreed, 3% disagreed, and 2% strongly disagreed. The results of Frieda N. L. Henok<sup>1</sup>, Wilson Yule<sup>2\*</sup> (2019). Usage and Impact of the Institutional Repository at the University of Namibia and Achieng Jane (2016). An analysis of the usage of a digital repository in an academic institution supports the study.

## Implications of the Study

The present study can be beneficial for determining learner opinions and facing challenges in the use of repositories of Open Universities and institutions that run online courses, recommend valuable suggestions and solutions to make content more effective, develop in regional languages/National Languages and provide easy ways to access material from digital repositories to benefit learners and society.

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