A Study on the Use of Digital Learning Resources by Faculty in Higher Education Institutions of Jammu Division

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ABSTRACT

This study examines the awareness, types, frequency and purposes of use, perceived usefulness and difficulties associated with digital learning resources among faculty members of higher education institutions in Jammu division. A descriptive survey design was adopted and data were collected through a structured questionnaire containing 23 study items with five-point response scales. The sample comprised 252 faculty members selected through convenience sampling from four government colleges, four private colleges and two public universities. Data were analyzed using frequencies, valid percentages and descriptive statistics in IBM SPSS statistics, Version 32. Missing responses were excluded from item-wise percentage calculations. The findings showed that 34.1% were very aware of subject-related digital resources, while 35.1% of valid respondents were moderately aware of SWAYAM, NPTEL and e-PG Pathshala. Online course materials were often used by 49.2%, whereas 65.1% never used e-journals or scholarly articles. Digital resources were always used for research by 59.5% of valid respondents and often used for preparing lectures by 52.8%. Perceived usefulness item means ranged from 4.33 to 4.45. Insufficient practical training recorded the highest difficulty mean of 3.91, followed by access charges at 3.75 and internet problems at 3.18. The study indicates positive perceptions alongside uneven reported use and highlights the need for practical training, affordable access and reliable connectivity within the selected institutions. Further research could compare practices across different institutions.

Keywords: Digital learning resources, Faculty members, Higher education, Jammu division, Awareness.

Introduction

Education involves the continuous acquisition, interpretation and application of knowledge. The resources used in this process influence how teachers explain concepts, organize instruction and support independent learning. Books, journals, reference works and classroom materials have traditionally provided the foundation for academic activities. The development of information and communication technologies has extended this foundation by making educational content available through digital platforms.

Digital learning resources refer to materials accessible through computers, mobile devices and other electronic systems that support teaching and learning (World Bank, 2022). They include e-books, scholarly articles, instructional videos, presentations, online courses, simulations and materials available through educational repositories (OECD, 2023). These resources differ in their content, format and conditions of access. Some are provided through institutional subscriptions, while others are freely available or distributed under licenses permitting reuse and adaptation.

Some digital learning resources are also available as open educational resources (OER). Their defining feature concerns the permissions associated with their use, rather than their availability on the internet alone. An openly licensed teaching material may allow users to retain, modify and redistribute its content, subject to the relevant license conditions (UNESCO, 2019). Consequently, digital learning resources and open educational resources are related concepts, although they should not be treated as interchangeable. Research examining the use and creation of open materials has demonstrated the importance of considering faculty participation in both accessing existing content and developing educational resources (McKerlich et al., 2013).

The expansion of electronic access has introduced different possibilities for classroom preparation and academic communication. A teacher may consult an e-publication while preparing a lecture, demonstrate a process through a video, or recommend an online module for additional study. Such practices allow materials to be selected according to the subject, learning purpose and requirements of students. However, the presence of a resource does not establish that it is regularly used or appropriately incorporated into instruction. In India, national initiatives have created opportunities for accessing educational content through organized online platforms. SWAYAM, for example, provides courses through four components: video lectures, downloadable reading materials,

self-assessment activities and online discussion forums. This arrangement illustrates how different forms of content can be combined within a single educational platform to support learning beyond conventional classroom materials (Ministry of Education, n.d.).

Faculty members play an important role in selecting and using these materials. Their awareness, familiarity with available platforms and ability to evaluate academic content may affect the way e-resources are used. Institutional arrangements also matter, particularly where access depends upon internet connectivity, equipment, subscriptions or technical assistance. (Mtebe & Raisamo, 2014) identified poor internet connectivity, inadequate computer facilities, limited technical skills and the absence of institutional policies as major barriers to the use of open educational resources in higher education institutions in Tanzania. Their study indicated that access to educational materials also depends upon suitable facilities and institutional support.

Digital Learning Resources in Jammu Division

Higher education institutions in Jammu division provide a regional setting for examining the relationship between academic work and e-learning materials. Faculty members working in colleges and universities may encounter digital content through institutional facilities, national educational platforms, scholarly databases and independently accessed online sources. The availability of these materials creates opportunities for supplementing lectures, preparing instructional content and guiding students towards additional academic reading. Examples of organized digital initiatives are visible within the region. The Central University of Jammu has a Digital Learning Cell concerned with activities relating to e-content and online education (Central University of Jammu, n.d.). Government College of Education, Jammu, also provides an e-content section through its institutional website (Government College of Education, n.d.). These examples establish the presence of educational initiatives supporting digital access; they do not, by themselves, demonstrate the extent of faculty use across higher education institutions in the division. A regional investigation is needed to understand how such opportunities translate into everyday academic practice. Access arrangements, subject requirements and institutional support may differ between colleges and universities. Faculty members may also vary in their familiarity with particular formats and platforms.

Faculty Awareness and use of Digital Learning Resources

Awareness is important for the use of an educational resource. Faculty members need to know that relevant materials exist, understand where they can be accessed and recognize their possible application. Familiarity with the name of a platform, however, may differ from the ability to locate suitable content or assess its relevance to a particular academic task. Utilization concerns the actual use of resources in academic activities. It can be examined through the types of materials accessed, frequency of use and purposes for which they are selected. A faculty member may use e-journals for research, instructional videos for classroom explanation and online courses for professional development. These activities reflect different patterns of use and should be considered separately when describing usage patterns. Perceived usefulness is another important aspect. Faculty members may consider a resource helpful when it supports explanation, provides supplementary information or assists in preparing academic material. Such perceptions should not be confused with demonstrated improvements in student achievement, which require separate evidence. Similarly, reported barriers identify difficulties experienced by respondents; they do not necessarily mean that every difficulty has an equivalent effect on utilization.

Indian research on open educational resources has identified issues relating to awareness, licensing, time and institutional support. (Mishra & Singh, 2017) also observed that positive attitudes towards sharing educational materials could coexist with limited awareness of openly licensed resources. These findings indicate the need to study knowledge, practices and constraints within the same study.

For the present investigation, faculty use is examined through six dimensions: awareness, resource types, frequency, purposes, perceived usefulness and barriers. Their relationship to the central subject is represented below.

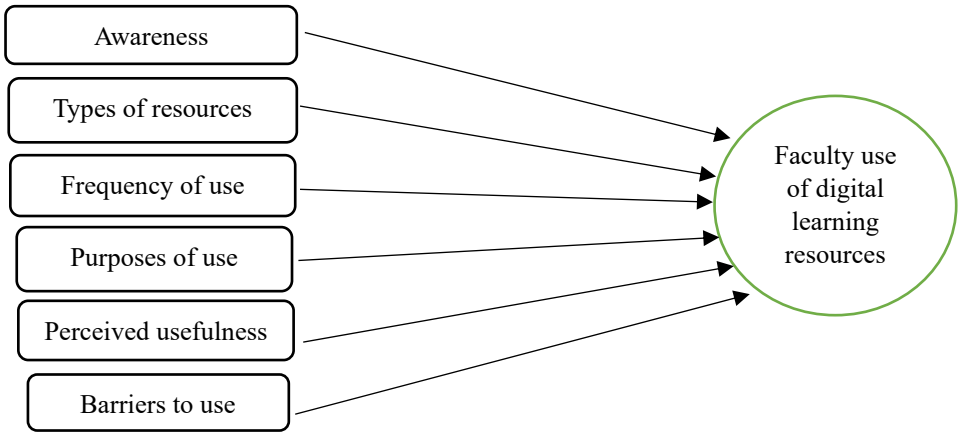


Fig No. 1: Graphic Representation of the Concept

Source: Proposed framework developed for the present study. The connecting lines identify dimensions to be examined; they do not represent established causal relationships.

Literature Review

McKerlich et al. (2013) conducted a study on the use and creation of open educational resources among faculty and staff at Athabasca University, Canada. A survey was used to collect information regarding the adoption of these materials in higher education. The results showed that 43% of the respondents were using open educational resources and 31% were involved in their creation. The authors suggested that both activities were important for understanding the adoption of open materials. The research was confined to one university and dealt with openly licensed educational content.

Mtebe & Raisamo (2014) looked at the problems faced by instructors in using open educational resources in higher education institutions of Tanzania. Information was gathered through semi-structured interviews with 92 instructors from 11 institutions and a review of institutional documents. Poor internet connectivity, inadequate computer facilities, limited technical skills and the absence of institutional policies were found to be major difficulties. The researchers also reported that lack of interest and insufficient time were not considered major barriers by the respondents. Their work was concerned with open educational resources rather than other forms of digital learning materials.

S. Gupta & Seth (2015) studied the awareness of social networking services among faculty members of government degree colleges in Jammu division. The researchers collected information from a sample of 300 teachers to understand their knowledge and involvement in using social networking platforms for academic activities. The research considered the role of these services in communication, information sharing and teaching. It also addressed difficulties experienced by respondents and suggested measures for improving awareness. The work was mainly concerned with social networking services rather than the wider range of digital learning resources used by faculty members.

Nazir (2015) analysed the use and adequacy of e-resources among research scholars and postgraduate students at the University of Kashmir. A questionnaire was distributed among 200 respondents from science and social science faculties. The findings indicated that lack of awareness and insufficient library assistance were important reasons for the low use of electronic materials. Students and research scholars from science subjects were more familiar with these resources than those from social science subjects. The investigation provided information on academic users but did not include teaching faculty as its main population.

Mishra & Singh (2017) in their study, explored faculty attitudes, motivation, perceived quality and barriers relating to open educational resources in India. The authors adopted a mixed-methods approach involving surveys, interviews and workshop activities at selected universities. A total of 117 usable survey responses and 28 interviews formed part of the research. Teachers generally expressed positive views towards creating and sharing educational materials, although their knowledge of open licensing was limited. Copyright concerns, lack of time and inadequate institutional support were also reported. The research mainly focused on openly licensed content and its use among higher education teachers.

Lakshmi (2021) assessed the readiness of higher education faculty members for e-learning. Data were collected from 421 teachers through a cross-sectional survey using a 62-item Likert scale. The author considered technological readiness, teaching preparation, resource availability and attitudes towards online education. The overall level of readiness was found to be satisfactory with higher scores in technological readiness than in pedagogical readiness. Teaching experience was also associated with differences in readiness scores. The research provided information on teachers' preparedness for e-learning rather than their regular use of different digital educational materials.

Baddar & Khan (2023) attempted to find out the factors influencing teachers' intention to use digital resources in classroom teaching. A questionnaire was administered to 276 teachers working in 3 public universities of the Kashmir region. The responses were studied through descriptive statistics, correlation and regression analysis. Perceived competence, usefulness, ease of use and peer influence were identified as important factors associated with teachers' intention to use digital resources. Perceived competence had the strongest influence, whereas social image did not have a significant effect. The work was restricted to selected public universities and focused on intention rather than actual frequency of resource use.

(Gupta et al.,2023) studied the experiences and perceptions of students, teachers and institutional leaders regarding online education in Jammu city. The researchers adopted a qualitative approach and gathered information through interviews with 100 students, 40 faculty members and 10 institutional leaders. The participants described problems relating to teaching preparation, student participation and the availability of suitable facilities for online learning. The research also discussed the need for training and institutional assistance. As the investigation concerned online education during the COVID-19 period, its focus differed from the regular use of digital learning resources in teaching and other academic activities.

Wahid et al., (2026) sought to identify the information-searching abilities of faculty members in 4 selected universities of Jammu and Kashmir. The authors used a questionnaire to obtain responses from randomly selected participants. Their knowledge of information sources, search techniques and retrieval tools was assessed through statistical analysis. The results indicated that respondents could not answer certain basic information-searching questions correctly. The researchers recommended awareness programmes for improving these skills. The investigation concentrated on information retrieval and did not provide a wider account of digital learning resource utilization.

Rani (2024) assessed the awareness and use of e-resources among users of selected engineering college libraries in Jammu division. The survey included 570 respondents: 500 students, 65 faculty members and five librarians. Student and faculty analyses were based on 565 respondents. The study covered available e-resources, levels of awareness, preferred materials and user satisfaction. The results indicated that respondents preferred e-resources over printed materials. The research was restricted to engineering college libraries and included both students and teachers.

Srinivas & Yadav (2025) in their research considered the preparedness of Indian higher education institutions for online teaching and instructional design. Responses were obtained from 848 faculty members belonging to different states and union territories. The findings pointed towards gaps in internet facilities, learning management systems, institutional policies and training arrangements. Only 29.1% of the institutions were reported to have implemented learning management systems. The researchers suggested better infrastructure and faculty training to support online education. Their work was mainly concerned with institutional readiness and instructional design.

Kouser & Shoket (2025) analysed the availability of institutional websites and e-content in government degree colleges of Jammu region. The researchers adopted content analysis and collected information from 72 colleges. The results showed that eight institutions did not have official websites and 23 out of the remaining 64 colleges had no separate section for e-content. The availability of digital materials also varied across academic subjects. The research was concerned with institutional websites and educational content rather than the actual use of these materials by faculty members.

Muthuraj & Prabhu (2025) made an attempt to understand faculty awareness and utilization of e-resources at Sri Ramakrishna Engineering College, Coimbatore. A descriptive and analytical survey design was adopted and information was collected through a structured questionnaire from faculty members belonging to 13 departments. The research covered familiarity with electronic platforms, preferred resources, pattern of use and difficulties experienced during access. The authors reported variations in awareness and utilization and the need for improved support facilities. Since the investigation was undertaken in one engineering college, it provided institution-specific information on e-resource use.

Suganthi & Muthurasu (2026) focused on the utilization of e-resources among students of Alagappa University College of Education, Karaikudi. Of 98 questionnaires distributed to students, 96 valid responses were analysed. Their study included awareness, types of materials accessed, frequency and purposes of use. E-books, e-journals, online databases, institutional repositories and digital learning platforms were discussed in the article. The work covered a single college of education and included both students and faculty members. It therefore addressed a different respondent population and institutional setting from the present faculty-centred research.

Lakshmi & Majid (2026) explored the factors influencing e-learning readiness among academic staff of higher education institutions in Jammu and Kashmir. Data were collected from 281 respondents and analysed through confirmatory factor analysis and structural equation modelling. The findings identified facilitating conditions, self-efficacy and pedagogical attitude as important factors associated with e-learning readiness. The research focused on faculty preparedness for online education rather than the types, frequency and academic purposes of using digital learning resources.

Research gap

Previous studies have covered different aspects of e-resources, online education, faculty awareness, digital skills and e-learning readiness in higher education. Research conducted in Jammu and Kashmir has also focused on social networking services,

information-searching abilities, institutional e-content and teachers' experiences with online learning. However, the available literature provides limited information on the actual use of different digital learning resources by faculty members across higher education institutions of Jammu division. The present study is designed to understand faculty awareness, types of resources used, frequency, academic purposes, perceived usefulness and difficulties faced by teachers in government colleges, private colleges and public universities.

Scope of the Study

The study was designed to look into the awareness and use of digital learning resources among faculty members of higher education institutions in Jammu division. It covers government colleges, private colleges and public universities in respect of different types of digital learning resources, frequency and purposes of use as well as their perceived usefulness and difficulties faced during utilization. The study can be extended to other regions in order to understand faculty practices and the use of digital learning resources for teaching, research and other academic activities.

Objectives

- To study the awareness of digital learning resources among faculty members of higher education institutions in Jammu division.
- To study the types, frequency and purposes of using digital learning resources by faculty members.
- To assess the perceived usefulness of digital learning resources in teaching and other academic activities.
- To study the difficulties faced by faculty members in accessing and using digital learning resources.

Research Methodology

During the research, an investigation was undertaken to meet the objectives of the study. The nature of this research is descriptive. A structured questionnaire was designed to collect data through five-point response scales. The research was undertaken with the objective of recording in a meaningful manner the awareness and use of digital learning resources among faculty members. In order to fulfil the objectives, the design of the study was planned as follows: sampling design: the area of study primarily focused on Jammu division and covered four government colleges, four private colleges and two public universities. Population: the target population comprised faculty members working in government colleges, private colleges and public universities of Jammu division. Sampling method: convenience sampling was used for the collection of data from available faculty members within the selected institutions. Sample size: a sample size of 252 was taken for the collection of data to achieve the objectives of this research. The sample comprised 98 faculty members from government colleges, 44 from private colleges and 110 from public universities. All 252 records were retained for item-wise analysis, with unanswered items recorded as missing responses. The number of valid responses varied across items.

Data collection

The primary data were collected with the aid of a structured questionnaire, which consisted of faculty profile questions and 23 study items to collect information related to awareness, types of digital learning resources, frequency and purposes of use, perceived usefulness and difficulties. Awareness was recorded on a five-point scale ranging from Not at all aware (1) to Extremely aware (5). Frequency of use was recorded as Never (1), Rarely (2), Sometimes (3), Often (4) and Always (5). Perceived usefulness and difficulties were measured through a five-point agreement scale: Strongly agree (5), Agree (4), Neither agree nor disagree (3), Disagree (2) and Strongly Disagree (1). The secondary information was also compiled online from other sources such as published research articles and relevant official websites.

Statistical Tools

The analysis of the data was carried out with the help of IBM SPSS statistics, Version 32. The tools chosen were frequency and percentage analysis and descriptive statistics including mean, standard deviation and variance. Percentages for the study items were calculated on the basis of valid responses, excluding missing responses.

Data Analysis

Demographic variables such as gender, age, designation, institution type, management and district were presented in table-1. It could be observed that 56.3% of respondents were female and 43.7% were male. The largest proportion (39.3%) belonged to the age group of 35-44 years, while 62.3% were assistant professors. Government colleges accounted for 38.9% of respondents and 82.5% were from institutions under government management, further, the largest proportion (40.5%) worked in institutions located in Jammu district.

Table 1: Demographic Profile of Respondents

Factor	Options	Frequency	Percentage
Gender	Female	142	56.3
	Male	110	43.7
	Total	252	100
Age	Under 35	94	37.3
	35-44	99	39.3
	45-54	45	17.9
	55 and above	14	5.6
	Total	252	100
Designation	Assistant Professor	157	62.3
	Associate Professor	41	16.3
	Lecturer	12	4.8
	Professor	42	16.7
	Total	252	100
Institution Type	Central Public University	50	19.8
	Private College	44	17.5
	Government College	98	38.9
	State Public University	60	23.8
	Total	252	100
Management	Government	208	82.5
	Private	44	17.5
	Total	252	100
District	Jammu	102	40.5
	Kathua	31	12.3
	Ramban	18	7.1
	Samba	63	25.0
	Udhampur	38	15.1
	Total	252	100

Note: percentages may not total exactly 100 due to rounding.

Objective 1: To study the awareness of digital learning resources among faculty members of higher education institutions in Jammu division. To address this objective, the responses were analysed as follows:

Table 2: Respondents' Awareness of Digital Learning Resources

S. No.	Awareness Level	Frequency	Percentage
1.	Not at all aware	11	4.4
2.	Slightly aware	36	14.3
3.	Moderately aware	79	31.3
4.	Very aware	86	34.1
5.	Extremely aware	40	15.9
	Total	252	100

Table 3: Awareness of SWAYAM, NPTEL and e-PG Pathshala

S. No	Awareness Level	Frequency	Percentage
1.	Not at all aware	17	6.8
2.	Slightly aware	71	28.3
3.	Moderately aware	88	35.1
4.	Very aware	55	21.9
5.	Extremely aware	20	8.0

	Total valid responses	251	100
	Missing	1	
	Total	252	100

Note: Percentages are based on 251 valid responses. One response was missing out of 252 respondents.

Table-2 represents that 34.1 % of respondents were very aware of digital learning resources whereas 4.4% were not at all aware of them. 31.3% were moderately aware, 15.9% were extremely aware and 14.3% were slightly aware. Table-3 indicates that respondents reported different levels of awareness of SWAYAM, NPTEL and e-PG Pathshala, in which 35.1% were moderately aware, 28.3% were slightly aware, 21.9% were very aware, 8.0% were extremely aware and the remaining 6.8% were not at all aware.

Objective 2: To study the types, frequency and purposes of using digital learning resources by faculty members. For this purpose, the following analysis was performed:

Table 4: Use of Digital Learning Resources

Digital Learning Resources	Never (%)	Rarely (%)	Sometimes (%)	Often (%)	Always (%)	N
E-books/e-textbooks	-	11.9	50.4	27.4	10.3	252
E-journals/ scholarly articles	65.1	31.0	4.0	-	-	252
Instructional videos	8.3	27.0	39.3	16.7	8.7	252
Digital presentation/lecture notes	31.7	34.9	24.6	8.7	-	252
Online course materials	-	-	24.6	49.2	26.2	252

Table 5: Purposes of Use

Purposes	Never (%)	Rarely (%)	Sometimes (%)	Often (%)	Always (%)	N
Preparing lectures	2.8	3.6	16.7	52.8	24.2	252
Explaining concepts	9.5	27.0	46.4	11.9	5.2	252
Student assessment	9.5	27.0	49.2	12.7	1.6	252
Research	-	-	1.7	38.8	59.5	242
Professional development	11.4	17.9	25.6	29.7	15.4	246

Note: values represent valid percentages calculated separately for each item. Research had 10 missing responses and professional development had 6. Percentages may not total exactly 100 due to rounding.

Table-4 represents that 50.4% of respondents sometimes used e-books/e-textbooks whereas 65.1% never used e-journals/scholarly articles. Instructional videos were sometimes used by 39.3%, while 34.9% rarely used digital presentations/lecture notes and 49.2% often used online course materials. Table-5 indicates that 52.8% often used digital resources for preparing lectures, 46.4% sometimes used them for explaining concepts and 49.2% sometimes used them for student assessment. For research, 59.5% always used digital resources, whereas 29.7% often used them for professional development.

Table 6: Descriptive Statistics of Resource Use and Purposes

Variables	N	Mean	Std. Deviation	Variance
E-books/e-textbooks	252	3.36	.823	.678
E-journals/ scholarly articles	252	1.39	.564	.318
Instructional videos	252	2.90	1.056	1.114
Digital presentation/lecture notes	252	2.10	.952	.906
Online course materials	252	4.02	.714	.510
Preparing lectures	252	3.92	.894	.798

Explaining concepts	252	2.76	.961	.923
Student assessment	252	2.70	.868	.753
Research	242	4.58	.527	.278
Professional development	246	3.20	1.231	1.515

The frequency of using digital learning resources by faculty members is shown in table-6, which indicates the mean values, standard deviation and variance for the variables. Based on a five-point frequency scale ranging from never (1) to always (5), the highest mean score was found for research (4.58), followed by online course materials (4.02) and preparing lectures (3.92). The lowest mean score was recorded for e-journals/scholarly articles (1.39), indicating comparatively infrequent use.

Objective 3: To assess the perceived usefulness of digital learning resources in teaching and other academic activities. For this objective, faculty responses were examined using percentage analysis and descriptive statistics.

Table 7: Perceived Usefulness

Statements	Strongly Disagree (%)	Disagree (%)	Neither agree nor disagree (%)	Agree (%)	Strongly Agree (%)	N
Efficient preparation of teaching materials	-	0.4	11.9	38.9	48.8	252
Clear explanation of concepts	-	-	15.5	35.7	48.8	252
Access to up-to-date academic information	-	0.4	7.1	44.0	48.4	252
Usefulness for academic work	-	-	2.4	50.4	47.2	252
Providing supplementary learning materials	-	-	1.6	56.3	42.1	252
Adapting materials to students' learning needs	-	-	3.6	49.6	46.8	252

Table-7 indicates that 48.8% of respondents strongly agreed regarding efficient preparation of teaching materials, and an equal percentage strongly agreed regarding clear explanation of concepts. Further, 48.4% strongly agreed regarding access to up-to-date academic information. For providing supplementary learning materials, 56.3% agreed, while 50.4% agreed regarding usefulness for academic work and 49.6% agreed regarding adapting materials to students' learning needs.

Table 8: Descriptive Statistics of Perceived Usefulness

Variables	N	Mean	Std. Deviation	Variance
Efficient preparation of teaching materials	252	4.36	.703	.495
Clear explanation of concepts	252	4.33	.731	.534
Access to up-to-date academic information	252	4.40	.640	.409
Usefulness for academic work	252	4.45	.544	.296
Providing supplementary learning materials	252	4.40	.523	.274

Adapting materials to students' learning needs	252	4.43	.564	.318

The perceived usefulness of digital learning resources is shown in table-8, which indicates the mean values, standard deviations and variances for the variables. The highest mean score was found for usefulness for academic work (4.45), whereas the lowest was for clear explanation of concepts (4.33). Based on a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5), all item means were above the neutral score of 3, indicating that respondents' perceptions of usefulness were favourable.

Objective 4: To study the difficulties faced by faculty members in accessing and using digital learning resources.

Table 9: Difficulties in Using Digital Learning Resources

Difficulties	Strongly agree (%)	Disagree (%)	Neither agree nor disagree (%)	Agree (%)	Strongly Agree (%)	N
Internet Problems	9.0	21.3	27.9	25.8	16.0	244
Unavailability of suitable devices	28.2	36.7	23.8	11.3	-	248
Access Charges	10.9	-	24.8	32.2	32.2	230
Insufficient practical training	7.3	5.7	10.5	42.1	34.4	247
Lack of time to find suitable resources	20.7	36.3	42.2	0.8	-	251

Note: Values represent valid percentages calculated separately for each item. Missing responses were: internet problems (n = 8), Unavailability of suitable devices (n = 4), access charges (n = 22), insufficient practical training (n = 5), and lack of time (n = 1). Percentages may not total exactly 100 due to rounding.

Table-9 indicates that 42.1% of respondents agreed that insufficient practical training made digital resources difficult to use, while 34.4% strongly agreed. Regarding access charges, 32.2% agreed and an equal percentage strongly agreed that these limited their use. Further, 25.8% agreed that internet problems restricted their use, whereas 36.7% disagreed regarding device unavailability and 42.2% were neutral regarding lack of time.

Table 10: Descriptive Statistics of Difficulties

Variables	N	Mean	Std. Deviation	Variance
Internet Problems	244	3.18	1.201	1.443
Unavailability of suitable devices	248	2.18	.971	.943
Access Charges	230	3.75	1.221	1.491
Insufficient practical training	247	3.91	1.153	1.329
Lack of time to find suitable resources	251	2.23	.781	.610

The difficulties faced by faculty members are shown in table-10, which indicates the mean values, standard deviation and variance for the variables. The highest mean score was found for insufficient practical training (3.91), followed by access charges (3.75) and internet problems (3.18). Device unavailability (2.18) and lack of time (2.23) recorded lower mean scores, indicating weaker agreement with these difficulties.

Discussion

After the completion of this research work, it was understood that faculty members in the selected higher education institutions of Jammu division possessed varying levels of awareness of digital learning resources. While 34.1% were very aware of resources related to their subjects, 35.1% of valid respondents were moderately aware of platforms such as SWAYAM, NPTEL and e-PG Pathshala. The reported frequency of use also varied across resource types and academic purposes. It was also found that online course materials were often used by 49.2% of respondents, whereas e-books/e-textbooks were sometimes used by 50.4%. Digital resources were always used for research by 59.5% of valid respondents and often used for preparing lectures by 52.8%. However, 65.1% never used e-journals/scholarly articles. These findings indicate that frequent use for certain academic purposes coexisted with limited use of particular resource types. The low reported use of e-journals requires closer examination of their availability, relevance and conditions of access.

This research has also revealed positive perceptions of the usefulness of digital learning resources in teaching and other academic activities. The mean scores of the six usefulness statements ranged from 4.33 to 4.45, with usefulness for academic work recording the highest mean. Respondents generally recognised their usefulness for preparing teaching materials, explaining concepts, accessing updated academic information, providing supplementary materials and adapting content to students' learning needs. These findings reflect faculty perceptions of academic support provided by digital resources.

The respondents did, however, report difficulties in accessing and using these resources. Insufficient practical training recorded the highest mean score of 3.91, followed by access charges at 3.75 and internet problems at 3.18. unavailability of suitable devices and lack of time received lower mean scores of 2.18 and 2.23, respectively. This indicates that the difficulties were not equally endorsed by respondents. Practical training, affordable access and reliable connectivity therefore deserve particular attention within the selected institutions. Training and connectivity difficulties are consistent with the skills and internet barriers reported by Mtebe & Raisamo (2014). Mishra & Singh (2017) also identified inadequate institutional support. Both studies concerned open educational resources, while the present study covers digital learning resources more broadly.

Digital learning resources need to be given greater exposure through subject-specific orientation programmes and practical workshops. Adequate institutional support should be provided to help faculty locate relevant materials, evaluate academic content and use educational platforms effectively. Libraries could strengthen guidance on accessing e-journals, subscription resources and suitable openly available academic materials. Training activities could also demonstrate how digital resources can be incorporated into classroom explanation, student assessment and professional development.

The study contributes regional evidence on faculty awareness and reported use of digital learning resources across selected government colleges, private colleges and public universities in Jammu division. It documents positive views of usefulness alongside uneven use across resource types and academic purposes, and identifies practical training and access-related difficulties as priorities for institutional support.

With appropriate training and improved access arrangements, wider academic use of digital learning resources could be encouraged. The findings are based on self-reported responses obtained through convenience sampling in selected institutions and should be interpreted within this setting. Further research could examine differences between types of institutions and assess how reported practices relate to teaching and learning outcomes.

Conclusion

The conclusion of this research work is that faculty members in the selected higher education institutions of Jammu division generally perceived digital learning resources as useful for teaching and other academic activities, although their awareness and reported use varied. Other results show that online course materials were used more frequently than e-journals/scholarly articles. For example, 49.2% of respondents often used online course materials, whereas 65.1% never used e-journals/scholarly articles. Research and lecture preparation were prominent purposes of use. The mean scores for perceived usefulness ranged from 4.33 to 4.45, indicating positive views of their academic usefulness. However, the limited use of particular resource types shows that these views coexisted with uneven reported use. This indicates the need for a more in-depth understanding of faculty practices and the conditions under which different resources are accessed and used.

Further, insufficient practical training recorded the highest difficulty mean of 3.91, followed by access charges at 3.75 and internet problems at 3.18. Unavailability of suitable devices and lack of time received lower mean scores of 2.18 and 2.23, respectively. These results have practical implications for higher education institutions in planning faculty support. Subject-specific workshops, affordable access arrangements, reliable connectivity and library guidance could support wider academic use of digital learning resources.

While some difficulties received lower ratings, additional research is required to understand the reasons for limited use of particular resources, especially e-journals. Further studies could also examine differences in faculty practices across different types of institutions and explore how digital resource use relates to teaching and learning outcomes. Since the present research used self-reported responses and convenience sampling, its findings should be interpreted within the context of the selected institutions. In the end, this research work provides useful regional information on faculty awareness, reported use, perceived usefulness and

difficulties and offers practical recommendations for institutions wishing to strengthen academic support for digital learning resources.

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