

## Use of Open Access E-Books by the Undergraduate and Postgraduate Students of College of Agriculture, Vijayapur, Karnataka: A Study

**Dr. G. Kiran Kumar**

Assistant Librarian

College of Agriculture

Vijayapur, (UAS, Dharwad), Karnataka

***Abstract** - The e-books are an emerging technology which is likely to have a large impact in teaching and learning over the next couple of years. The study was conducted to investigate the use of open access e-books by the undergraduate and postgraduate students of College of Agriculture, Vijayapur, Karnataka. It highlights the use of various types of e-books, frequency and purpose of use of e-books, level of satisfaction towards use of e-books, use of various devices for accessing e-books, way of access to e-books, problems faced while accessing e-books, use of various features in utilizing e-books, opinion about how easy is it to read e-books and opinion about how the users read e-books. The interview and questionnaire method was used for the present study to collect the necessary data, keeping in view the objectives of the study and the collected data has been analyzed and presented in the form of tables. The article concluded with appropriate suggestions.*

**Keywords:** E-Books, Digital Books, E-Reading, E-Resources, Electronic Books.

### Introduction

Reading is one of the oldest habits of human civilization and possibly the only one without a worthy substitute. An electronic book is a book publication made available in digital form, consisting of text, images, or both, readable on the electronic devices. Although sometimes it is also defined as ‘an electronic version of a printed book’. The e-books can be read on dedicated e-reader devices, but also on any computer device that features a controllable viewing screen, including desktop computers, laptops, tablets and smart phones. Over the last several years, e-books have rapidly gained acceptance among academic libraries and their users. The e-book is an emerging technology which is likely to have a large impact in teaching and learning over the next two-to-three year time horizon (Johnson, Levine, Smith, and Stone, 2010). The core reasons the popularity and progression of e-books are due to widely known immediacy of access, updating capacity, storage capacity, low costs, connectivity, space saving and portability access anywhere at any time. The e-books also offer a range of benefits to both educators and students, including ease of accessibility and searching capabilities. Large numbers of studies have been carried out which have demonstrated the importance, the increase in use and the progressive penetration of e-books in the academic and scientific areas. The present study is carried out to know the use of open access e-books by the undergraduate and postgraduate students of College of Agriculture, Vijayapur, Karnataka.

### Objectives of the Study

The main objectives of the study are:

1. To determine the use of e-books for academic needs.
2. To know the types of e-books accessed by students.

3. To know the frequency and purpose of the use of e-books for academic needs.
4. To study the extent of use of e-books by the students and use of various features available in e-books.
5. To examine the way of access to e-books and to identify the type of problems faced while accessing e-books.
6. To know the users opinion about how easy is it to read e-books and to know how users read the e-books.

### Scope, Limitations and Methodology

The scope of the study is restricted to use of open access e-books by the undergraduate and postgraduate students of College of Agriculture, Vijayapur, Karnataka. The interview and questionnaire method was used for the present study to collect the necessary data, keeping in view the objectives of the study. A total of 258 samples of undergraduate and postgraduate students were taken, of which 237 undergraduate and postgraduate students responded. The rate of response amounted to 91.86%.

### Analysis and Interpretation of Data

The data collected were analyzed, interpreted and same has been presented in the form of tables below.

### Gender and Category Wise Distribution

The gender and category wise distribution of the students has been summarized in The Table-1. The Table-1 shows that, out of 237 students, 181 (76.37%) are undergraduate students and 56 (23.62%) are postgraduate students. Table-1 also depicts that out of 237 students, about 169 (71.30%) are male and 68 (28.69%) are female.

**Table-1: Gender and Category-Wise Distribution**

Category	UG Students (N=181)	PG Students (N=56)	Total (N=237)
Male	135(74.58)	34(60.71)	169(71.30)
Female	46(25.41)	22(39.28)	68(28.69)

Note: Figures in parentheses indicate percentage

### Use of Various Types of E-Books

The use of various types of e-books by the students has been summarized in Table-2. The Table-2 depicts that 203 (85.65%) of students use 'Textbooks', followed by 180 (75.94%) 'Reference sources/Books', 112 (47.25%) 'E-Tutorials/ Manuals', 93 (39.24%) 'Technical Books' and 38 (16.03%) of students use 'Proceedings of Seminars and Conferences' available as e-book.

**Table-2: Use of Various Types of E-Books**

Types of E-Books	UG Students (N=181)	PG Students (N=56)	Total (N=237)
Textbooks	156(86.18)	47(83.92)	203(85.65)
Reference Sources/ Books	137(75.69)	43(76.78)	180(75.94)
Technical Books	62(34.25)	31(55.35)	93(39.24)
Proceedings of Seminars and Conferences	11(06.07)	27(48.21)	38(16.03)
E-Tutorials/ Manuals	73(40.33)	39(69.64)	112(47.25)

Note: Figures in parentheses indicate percentage and because of multiple choice options the percentage is exceeded to more than 100%.

The Table-2 also depicts that 156 (86.18%) of undergraduate students and 47 (83.92%) of postgraduate students use ‘Textbooks’.

### Frequency of Use of E-Books

The frequency of use of e-books by the students has been summarized in Table-3. The Table-3 also depicts that 73 (30.80%) of students use e-books ‘Occasionally’, followed by 54 (22.78%) ‘Rarely’, 41 (17.29%) ‘Most Frequently’, 39 (16.45%) ‘Moderately’ and 30 (12.65%) of students use e-books ‘Frequently’.

**Table-3: Frequency of Use of E-Books**

Frequency	UG Students (N=181)	PG Students (N=56)	Total (N=237)
Most Frequently	22(12.15)	19(33.92)	41(17.29)
Frequently	19(10.49)	11(19.64)	30(12.65)
Moderately	32(17.67)	07(12.50)	39(16.45)
Occasionally	60(33.14)	13(23.21)	73(30.80)
Rarely	48(26.51)	06(10.71)	54(22.78)

Note: Figures in parentheses indicate percentage

The Table-3 also depicts that 60 (33.14%) of undergraduate students use e-books ‘Occasionally’ and 19 (33.92%) of postgraduate students use e-books ‘Most Frequently’.

### Purpose of Use of E-Books

The purpose of use of e-books by the students has been summarized in Table-4. The Table-4 shows that 167 (70.46%) of students use e-books for the purpose to ‘To keep up to date’, followed by 166 (70.04%) ‘For general reading related to subject’, 143 (60.33%) ‘For writing assignments’, 53 (22.36%) ‘To participate in seminars, conference, etc.’ and 52 (92.85%) of students use e-books for the purpose to ‘To submit project proposals and publish papers/ research work’.

**Table-4: Purpose of Use of E-Books**

Purpose	UG Students (N=181)	PG Students (N=56)	Total (N=237)
To keep up to date	116(64.08)	51(91.07)	167(70.46)
For general reading related to subject	121(66.85)	45(80.35)	166(70.04)
For writing assignments	108(59.66)	35(62.50)	143(60.33)
To participate in seminars, conference, etc.	16(8.83)	37(66.07)	53(22.36)
To submit project proposals and publish papers/ research work	00(00.00)	52(92.85)	52(92.85)

Note: Figures in parentheses indicate percentage and because of multiple choice options the percentage is exceeded to more than 100%.

The Table-4 also depicts that 121 (66.85%) of undergraduate students use e-books for the purpose of ‘General reading related to subject’ and 52 (92.85%) of postgraduate students use e-books for the purpose ‘To submit project proposals and publish papers/ research work’.

### Level of Satisfaction Towards Use of E-Books

The level of satisfaction towards use of e-books by the students has been summarized in Table-5. The Table-5 shows that 65 (27.42%) of students are ‘Not Satisfied’ with the use of e-books, followed by 51 (21.51%) of students are ‘Somewhat Satisfied’, 49 (20.67%) ‘Satisfied’, 44 (18.56%) ‘Moderately Satisfied’ and 28 (11.81%) of students are ‘Highly Satisfied’ with the use of e-books.

**Table-5: Level of Satisfaction Towards Use of E-Books**

Level of Satisfaction	UG Students (N=181)	PG Students (N=56)	Total (N=237)
Highly Satisfied	13(07.18)	15(26.78)	28(11.81)
Satisfied	32(17.67)	17(30.35)	49(20.67)
Moderately Satisfied	35(19.33)	09(16.07)	44(18.56)
Somewhat Satisfied	40(22.09)	11(19.64)	51(21.51)
Not Satisfied	61(33.70)	04(07.14)	65(27.42)
Note: Figures in parentheses indicate percentage.			

The Table-5 also depicts that 61 (33.70%) of undergraduate students are ‘Not Satisfied’ with the use of e-books and 17 (30.35%) of postgraduate students are ‘Satisfied’ with the use of e-books.

### Use of Various Devices for Accessing E-Books

The use of various devices for accessing e-books by the students has been summarized in Table-6. The Table-6 shows that 165 (69.62%) of students access e-books from ‘Smartphone’, followed by 157 (66.24%) ‘Desktop’, 117 (49.36%) ‘Laptop’, 36 (15.18%) ‘Kindle’ and 13 (05.48%) of students access e-books from ‘Other devices like I-Pod/Tablet etc’.

**Table-6: Use of Various Devices for Accessing E-Books**

Devices Used for Accessing E-Books	UG Students (N=181)	PG Students (N=56)	Total (N=237)
Desktop	136(75.13)	21(37.50)	157(66.24)
Laptop	69(38.12)	48(85.71)	117(49.36)
Kindle	17(09.39)	19(33.92)	36(15.18)
Smart Phone	121(66.85)	44(78.57)	165(69.62)
Other Devices like I-Pad/Tablet etc.	04(02.20)	09(16.07)	13(05.48)
Note: Figures in parentheses indicate percentage and because of multiple choice options the percentage is exceeded to more than 100%.			

The Table-6 also depicts that 136 (75.13%) of undergraduate students access e-books from ‘Desktop’ and 48 (85.71%) of postgraduate students access e-books from ‘Laptop’.

### Way of Access to E-Books

The way of access to e-books by the students has been shown in Table-7. The Table-7 depicts that 225 (94.93%) of students access e-books ‘Freely available e-books over internet’, followed by 158 (66.66%) ‘Access to e-books subscribed by the University library’, 44

(18.56%) 'Complimentary Copies', 38 (16.03%) 'Self Purchase' and 29 (12.23%) of students access e-books 'By friends Login-Id and Password'.

**Table-7: Way of Access to E-Books**

Way of Access to E-Books	UG Students (N=181)	PG Students (N=56)	Total (N=237)
Self Purchase	21(11.60)	17(30.35)	38(16.03)
Access via friends Login ID and Password	17(9.39)	12(21.42)	29(12.23)
Freely available e-books over internet	172(95.02)	53(94.64)	225(94.93)
Access to e-books subscribed by the University library.	109(60.22)	49(87.50)	158(66.66)
Complimentary Copies	26(14.36)	18(32.14)	44(18.56)
Note: Figures in parentheses indicate percentage and because of multiple choice options the percentage is exceeded to more than 100%.			

The Table-7 also depicts that 172 (95.02%) of undergraduate students and 53 (94.64%) of postgraduate students access e-books 'Freely available e-books over internet'.

### Problems Faced While Accessing E-Books

The problems faced while accessing e-books by the students has been summarized in Table-8. The Table-8 shows that 135 (56.96%) of students face problem while accessing e-books due to 'Slow internet connectivity', followed by 122 (51.47%) 'E-Books of recent years not purchased / subscribed', 121 (51.05%) 'Many of the e-books contents are not much relevant to our needs', 76 (32.06%) 'Compatibility with various devices', 54 (22.78%) 'Downloading Error of e-book', 47 (19.83%) 'E-books file do not open' and 28 (11.81%) of students face problem while accessing e-books due to 'Server not accessible'.

**Table-8: Problems Faced While Accessing E-Books**

Problems Faced	UG Students (N=181)	PG Students (N=56)	Total (N=237)
E-books file do not open	36(19.88)	11(19.64)	47(19.83)
Many of the e-books contents are not much relevant to our needs	102(56.35)	19(33.92)	121(51.05)
Server not accessible	22(12.15)	06(10.71)	28(11.81)
E-Books of recent years not purchased / subscribed	84(46.40)	38(67.85)	122(51.47)
Compatibility with various devices	62(34.25)	14(25.00)	76(32.06)
Downloading Error of e-book	41(22.65)	13(23.21)	54(22.78)
Slow internet connectivity	96(53.03)	39(69.64)	135(56.96)
Note: Figures in parentheses indicate percentage and because of multiple choice options the percentage is exceeded to more than 100%.			

The Table-8 also depicts that 102 (56.35%) of undergraduate students face problem while accessing e-books due to 'Many of the e-books contents are not much relevant to their needs'

and 39 (69.64%) of postgraduate students face problem while accessing e-books due to 'Slow internet connectivity'.

### Use of Various Features in utilizing E-books

The use of various features in utilizing e-books by the students has been summarized in Table-9. The Table-9 depicts that 222 (93.67%) of students use the feature of 'Search' in e-books, followed by 205 (86.49%) 'Table of Content', 158 (66.66%) 'Download', 144 (60.75%) 'Note taking', 105 (44.30%) 'Index', 98 (41.35%) 'Copy and Paste', 84 (35.44%) 'Highlighting', 74 (31.22%) 'Printing', and 57 (24.05%) of students use the feature of 'Bookmarks' in e-books.

**Table-9: Use of Various Features in utilizing E-books**

Features of E-Books	UG Students (N=181)	PG Students (N=56)	Total (N=237)
Search	168(92.81)	54(96.42)	222(93.67)
Table of Content	153(84.53)	52(92.85)	205(86.49)
Index	79(43.64)	26(46.42)	105(44.30)
Download	113(62.43)	45(80.35)	158(66.66)
Copy and Paste	72(39.77)	26(46.42)	98(41.35)
Printing	53(29.28)	21(37.50)	74(31.22)
Note taking	117(64.64)	27(48.21)	144(60.75)
Highlighting	62(34.25)	22(39.28)	84(35.44)
Bookmarks	38(20.99)	19(33.92)	57(24.05)
Note: Figures in parentheses indicate percentage and because of multiple choice options the percentage is exceeded to more than 100%.			

The Table-9 also depicts that 168 (92.81%) of undergraduate colleges and 54 (96.42%) of postgraduate students use the feature of 'Search' in e-books.

### Opinion about how Easy is it to Read E-Books

The opinion about how easy is it to read e-books by the students has been summarized in Table-10. The Table-10 depicts that 65 (27.42%) of students opine towards opinion about how easy is it to read e-books as 'Neutral', followed by 40 (16.87%) opine as 'Easy', 37 (15.61%) 'Very Difficult', 25 (10.54%) 'Very Easy', 24 (10.12%) 'Difficult', 23 (09.72%) 'Somewhat Difficult' and 23 (09.72%) of students opine towards opinion about how easy is it to read e-books as 'Somewhat Easy'.

**Table-10: Opinion about how Easy is it to Read E-Books**

Opinion	UG Students (N=181)	PG Students (N=56)	Total (N=237)
Very Difficult	32(17.67)	05(08.92)	37(15.61)
Difficult	21(11.60)	03(05.35)	24(10.12)
Somewhat Difficult	19(10.49)	04(07.14)	23(09.70)
Neutral	58(32.04)	07(12.50)	65(27.42)
Somewhat Easy	12(06.62)	11(19.64)	23(09.70)
Easy	26(14.36)	14(25.00)	40(16.87)
Very Easy	13(07.18)	12(21.42)	25(10.54)
Note: Figures in parentheses indicate percentage.			

The Table-10 also depicts that 58 (32.04%) of undergraduate students opine towards opinion about how easy is it to read e-books as ‘Neutral’ and 14 (25.00%) of postgraduate students opine towards opinion about how easy is it to read e-books as ‘Easy’.

### Opinion about how the Users Read E-Books

The opinion about how the users read e-books has been summarized in Table-11. The Table-11 depicts that 232 (97.89%) of students opine about how the users read e-books as they ‘Search the e-book for what they need’, followed by 206 (86.91%) ‘Read the chapter/pages they interested in’, 141 (59.49%) ‘Read the first few pages’, 88 (37.13%) ‘Read from start to end’, 78 (32.91%) ‘Skim-read chapter beginnings’ and 10 (04.21%) of students opine about how the users read e-books as they ‘Read title/ subtitles/ introduction and refer references given in the books’.

**Table-11: Opinion about how the Users Read E-Books**

Opinion	UG Students (N=181)	PG Students (N=56)	Total (N=237)
Read from start to end	76(41.98)	12(21.42)	88(37.13)
Read the first few pages	132(72.92)	09(16.07)	141(59.49)
Skim-read chapter beginnings	52(28.72)	26(46.42)	78(32.91)
Read the chapter/pages I am interested in	159(87.84)	47(83.92)	206(86.91)
Search the e-book for what I need	178(98.34)	54(96.42)	232(97.89)
Others like reading titles/ subtitles/ introduction/ refer references	07(03.86)	03(05.35)	10(04.21)
Note: Figures in parentheses indicate percentage and because of multiple choice options the percentage is exceeded to more than 100%.			

The Table-11 also depicts that 178 (98.34%) of undergraduate students and 54 (96.42%) of postgraduate students opine about how the users read e-books as they ‘Search the e-book for what they need’.

### Recommendations and Suggestions

Based on the result the study following recommendations and suggestions are made for further improvements in use of open access e-books by the undergraduate and postgraduate students of College of Agriculture, Vijayapur, Karnataka .

- The students should be trained in using advance search options for retrieval of relevant e-books.
- The students should further improve their e-books searching skills to make better use of largely available open access e-books over internet.
- Publishers should provide user manual for better utilization of open access and licensed e-books.
- University/ college libraries should subscribe large number of e-books for users and make user aware of subscribed e-books in the library and e-books freely available over the internet.

- University/ college libraries should organize seminar and workshops for students at regular interval of time to keep them in phase with emerging techniques in electronic publishing.
- The members of faculty and library staffs should try to inculcate e-book reading habit among students.

## **Conclusion**

The e-books provide quickly access of information to vast diversified users. The various studies have been carried out which have demonstrated the importance, the increase in use and the progressive penetration e-books in the academic and research institutions. The e-books are also familiar to most of the academic institutions. The e-book allows libraries to continue to acquire new content despite tighter budgets and limited physical space. In addition, publishers have made electronic books more attractive through big deal type offers that provide large collections of content at attractive prices. Now the students have to change their mindset to read not only print books, but also inculcate the habit of reading e-books to maximum extent.

## **References**

1. Johnson, L., Levine, A., Smith, R., and Stone, S. (2010). The 2010 Horizon Report. Austin, TX: The New Media Consortium.
2. Rickman, J. T., Von Holzen, R., Klute, P. G., and Tobin, T. (2009). A campus-wide e-textbook initiative. *Educause Quarterly Magazine*, 32, 2009.
3. Kiran Kumar, G and Kumbar, Mallinath (2015). Use of Electronic Information Resources and Search Pattern by the Faculty of Autonomous Engineering Colleges in Karnataka: A Survey. *SRELS journal of Information Management*, 52(4), 259-266.
4. Soules, Aline (2009). E-books and user assumptions. *Serials E-Book Supplement*, 22(3), 1-5.
5. Anuradha, K.T. and Usha, H.S. (2006). Use of e-books in an academic and research environment: A case study from the Indian Institute of Science, Program, 40 (1), 48-62. Retrieved from <https://doi.org/10.1108/00330330610646807>

