

An Analysis of Documents Used by Electronics and Communication Engineering Students at Echelon Institute of Technology

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Introduction

In developing countries like India, Circulation and loan of documents from a library collection is a vital medium for the dissemination of information and knowledge. Circulation of books for home reading maximizes the use of library resources, and helps to meet user needs for research, publication, and instructional activities. Circulation of data is one way of assessing a library. Since circulation of printed material remains important in India, It is appropriate to analyze circulation as a way of guiding the acquisition of books. The growth of information in terms of quality and quantity, the varied subjects of interest to users, increasing costs and limited fiscal resources force librarians to use data for making rational decisions. The present investigation uses circulation records to study the books borrowed from the college library of Echelon Institute of Technology by Electronics and Communication Engineering students.

Echelon Institute of Technology (EIT) is the private Engineering College in the NCR and the state of Haryana, established in 2007, sponsored by Echelon Educational and Welfare Society, Faridabad, Haryana, India. The college has undergraduate course in Electronics Communication Engineering, Mechanical Engineering, Information Technology and Computer Science and Engineering. The college library has 9,000 volumes, 60 National and International journals, DELNET-Database and Library database with Opac, Internet and wi-fi facilities.

Objectives

The following are the objectives of the present study:

- To find the number of books used by Second-year Electronics and Communication Engineering students.
- To determine the authorship patterns, range of publication data's, and countries of publication of circulated books.
- To prepare a ranked list of most frequently used books.
- To prepare a ranked list of publishers.

Hypotheses

The following hypotheses have been formulated for testing-

- Most books used have a single author and are in the field of Electronics and Communication Engineering.
- Female students use more books than male students.
- All students prefer the newest books.
- Students use Indian publications more than those form other countries.

Scope and Limitation

The present study examines books borrowed by Second-year Electronics and Communication Engineering students of Echelon Institute of Technology, Library, Faridabad, during 2008-2009. It is also limited to borrowed books .Data pertaining to the use of textbooks and reference books within the library is excluded from the study.

Methodology

Undergraduate students in four areas of Engineering as well as Teaching and Non-Teaching Staff, have access to the library. The investigator selected only Second-year undergraduate students of Electronics and Communication Engineering for this study. The total sample consists of 120 Second -year Electronics and Communication Engineering students, And used the borrowing data of 100 students, based on the entries in their personal borrowing books. Out of these 100 students, 60 are male and 40 are female.

Analysis

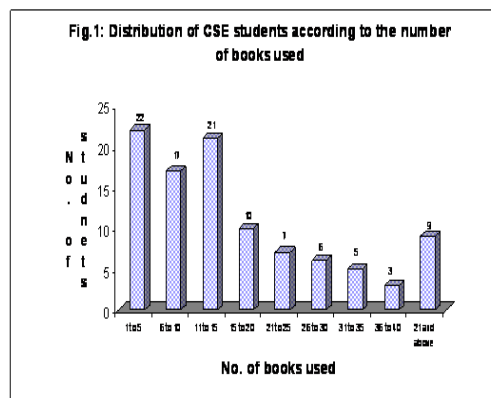
Table-1. Books used by gender

Gender	Number of Students	Number of books borrowed	Percentage	Average
Male	60	1442	78.24	22
Female	40	401	21.76	12
Total	100	1843	100	18

Most books (78.24%) were borrowed by male students, with the remaining books (21.76%) borrowed by female students. An average of 18 books was borrowed per student per year.

Table-2. Distribution by number of books used

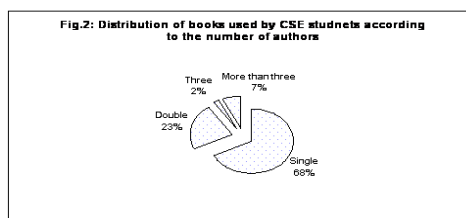
S.No	Number of books	Students	
		Number	%
1	1 – 5	22	22
2	6 – 10	17	17
3	11 – 15	21	21
4	16 – 20	10	10
5	21 – 25	7	7
6	26 – 30	6	6
7	31 – 35	5	5
8	36 – 40	3	3
9	41 and above	9	9
	Total	100	100



Seventy percent of students have used twenty or fewer books.

Table 3. Distribution of books by number of authors

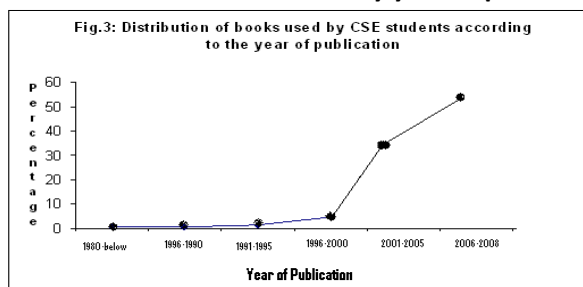
S.No	Author	Books	
		Number	%
1	Single	1251	67.88
2	Double	422	22.9
3	Three	39	2.12
4	More than three	131	7.1
	Total	1843	100



A large majority of the books used by Electronics and Communication Engineering students were written by a single author.

Table 4. Distribution of books by year of publication

S.No	Year	Books	
		Number	%
1	Below 1980	13	0.71
2	1986 - 1990	14	0.76
3	1991 - 1995	29	1.57
4	1996 - 2000	89	4.83
5	2001 - 2005	182	38.9
6	2006 - 2008	981	53.23
	Total	1308	100



More than half the books used were published between 2006 and 2008, and nearly 80 percent during the Last ten years.

Table-5. Distribution of books by country of publication

S.No	Country	Books		Cumulative	
		Number	%	Number	%
1	India	1436	77.92	1436	77.92
2	U.S.A	195	10.58	1631	88.5
3	U.K	111	6.07	1742	94.52
4	Singapore	34	1.84	1776	96.36
5	Japan	26	1.41	1802	97.77
6	Russia	21	1.14	1823	98.91
7	New Zealand	9	0.49	1832	99.4
8	Australia	5	0.27	1837	99.67
9	Netherlands	4	0.22	1841	99.89
10	Germany	2	0.11	1843	100

More than three quarters of the books used were published in India.

Table 6. Distribution of books by type of publisher

S.No	Publisher	Books	
		Number	Percentage
1	Indian	1436	77.92
2	Foreign	407	22.08
	Total	1843	100

Going along with the results displayed in the previous table, Table 6 shows that more than three quarters of the books used were published by Indian publishing companies.

Table 7. Distribution of books by ranked list of publishers

S.No.	Name of the Publisher	Rank	Used		Cumulative	
			Number	%	Number	%
1	Pearson Education Asia	1	429	23.28	429	23.28
2	Prentice Hall of India Private Limited	2	267	14.49	696	37.77
3	Tata McGraw Hill Publishing Company Limited	3	242	13.13	938	50.9
4	Mc Graw Hill International Book Company	4	177	9.6	1115	60.5
5	BPB Publications	5	78	4.23	1193	64.73
6	Narosa Publishing House	6	68	3.69	1261	68.42
7	John Wiley and Sons Incorporation	7	58	3.15	1319	71.57
8	Galgotia Publications Private Limited	8	45	2.44	1364	74.01
9	Vikas Publishing House	9	42	2.28	1406	76.29
10	Shorff Publishers and Distributors Private Limited	10	38	2.06	1444	78.35
11	Penguin Books	11	29	1.57	1473	79.92
12	Techmedia	12	25	1.36	1498	81.28
13	Sun Microsystems	13	25	1.36	1523	82.64
14	Wiley Eastern/New Age International Private Limited Publishers	14	23	1.25	1546	83.89
15	Macmillan Publishing Company	15	13	0.71	1559	84.6
16	SciTech Publication (India) Private Limited	15	13	0.71	1572	85.31
17	Envisec	16	12	0.65	1584	85.96
18	Harpper Collins Publishers	16	12	0.65	1596	86.61
19	Dhanpat Rai & Sons	17	11	0.6	1607	87.21
20	IDG Books World Wide	17	11	0.6	1618	87.81
21	Cambridge University Press	18	10	0.54	1628	88.35
22	Khanna Publishers	19	9	0.49	1637	88.84

23	Wrox Press Limited	20	8	0.43	1645	89.27
24	S.Chand and Company Limited	20	8	0.43	1653	89.7
25	Arrow Publications	20	8	0.43	1661	90.13
26	LMC	21	7	0.38	1668	90.51
27	Prentice Hall International	21	7	0.38	1675	90.89
28	St. Martin	21	7	0.38	1682	91.27
29	Panram Pub.	22	6	0.33	1688	91.6
30	Bantam	23	5	0.27	1693	91.87
31	Kidarnath and Badarnath	23	5	0.27	1698	92.14
32	Oxford University Press	23	5	0.27	1703	92.41
38	6 publishers 4 each	24	24	1.3	1727	93.71
50	12 publishers 3 each	25	36	1.95	1763	95.66
59	9 publishers 2 each	26	18	0.98	1781	96.64
121	62 publishers 1 each	27	62	3.36	1843	100

Most books that were used were from Pearson Education Asia, followed by Prentice Hall of India (14.49%), Tata McGraw Hill (13.13%), McGraw Hill International (9.60%), and BPB Publications (4.23%)

701 titles and 1,843 volumes were used during the year were used by more students than any other. The top five titles account for 11.55 percent of total borrowing and the 50 titles listed in the table account for 40.68 percent.

Conclusions and Recommendations

There are some conclusions that can be drawn from this data, which could be used to guide acquisition of new material. Students used an average of 18 books during their final year of study. Males used more than females on average (22 vs. 12). Most books had a single author and were published during the ten years preceding the study. In addition, most books were published in India, with Pearson Education Asia being the leading publisher.

Suggestions for Further Research

Studies of a similar nature could be carried out on the use of books by other departments of the college, and at other College Libraries in India. This would add authenticity and a basis for comparative analysis before drawing generalizations and conclusions for optimal use of library resources. Studies could also be undertaken on the use of books by faculty members of this and other college libraries in India.

Reference-

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