E-Resources in the Engineering College Libraries of Kerala: Problems towards Sustainable Collection Development

ARCHANA S.N.,
DR. S. HUMAYOON KABIR

Introduction

Electronic resources have become a vital part of an academic library especially in universities and higher education institutions. The availability of electronic resources and the acceptance of the format among the academics are rising day by day. As far as engineering students are concerned, they are much techno-savvy and are more used to electronic resources. So it has become necessary for the libraries of engineering institutions to subscribe and provide access to electronic resources to satisfy its user community. Many studies have identified that academics are much preferring online journals and databases than their print counter-parts.

Background of the Study

In India, the Central Government is much concerned about the higher education sector and a lot of money is being spent for the purchase of learned resources to support the study and research activities carried out in the country. The government funded national level library consortia enables the academic community (even at graduate level) in the country to have access to costly databases and journals. As far as engineering education is concerned, the country has around 3393 Engineering Colleges (EC) established throughout the country.
under government, semi-government, aided and private self-financing sectors. To ensure the quality of education and resources in these institutions, the national apex body for technical education, the All India Committee for Technical Education (AICTE) has put forth certain norms and regulations. It is necessary for each institution to satisfy the norms regarding infrastructure, library facilities, faculty and staff positions, etc. to get an approval from the AICTE, for running courses. In the year 2012, the AICTE has provided a list of databases to the engineering institutions and made it mandatory to purchase 6 to 10 databases according to the number and type of courses offered by each college. Hence it has become necessary for each EC, be it in government, private or aided sector to set apart about 10 to 12 lakh rupees for the purchase of these databases for the year 2012. If this is to be continued, then each college will have to find such a large amount in each coming years. At this point, the present study attempts to analyse the availability of such resources in the ECs in Kerala and identify the problems faced by these colleges in building a sustainable collection of electronic resources.

**Engineering Colleges in Kerala**

Formal engineering education started in Kerala even before Indian independence. The first EC in Kerala was established in 1936 at Thiruvananthapuram by Sree Chithira Thirunal Balarama Varma, the then Maharaj of Travancore. Until 2001, the engineering education in the state was mainly public funded. There were 34 ECs in Kerala in 2000 which were established and run directly by the state government or autonomous bodies under state government and aided managements. After 2000, the state government decided to permit private managements to establish self-financing ECs across the state which in turn changed the technical education scenario of the state. For the last 10 to 12 years there has been an enormous increase in the growth of ECs in the state, which is depicted in the following diagram (Fig. 1).

![GROWTH OF ECs IN KERALA](image)

*Fig. 1: All these Colleges are Affiliated to the 6 Different Universities in Kerala.*
Library Facilities in the ECs in Kerala

An analysis of the websites of the ECs in Kerala provides a clear picture of the library facilities in these colleges. Most of the colleges have an average collection of textbooks, reference books, and periodicals with qualified staff to manage the services. The libraries are set up on the basis of the standards and norms put forward by the affiliating universities and AICTE. Regarding electronic collection and services, most of the colleges satisfy the AICTE norms.

Objectives of the Study

(a) To ascertain the availability of electronic resources in the ECs in Kerala with respect to the latest AICTE norms

(b) To analyse the budgetary allocation for e-resources by these colleges

(c) To identify the problems encountered by these libraries in maintaining a sustainable collection of e-resources.

Scope and Limitations of the Study

The outcome of the study has wide scope and national coverage since the national level policies and its impact are being focused in this paper. The study is limited to the engineering colleges affiliated to only one of the universities in Kerala, the M.G. University.

Methodology

The instrument used for collecting data was a structured interview schedule and interviews of the librarians in charge of the college libraries were taken. The author personally visited each and every college under study (a total of 22 colleges) to take the interviews and make observations. Only those colleges established before the year 2009 are covered in this study.

The AICTE Norms Regarding the Subscription of Online Databases

Before getting on to the analysis part, it is pertinent to have a look at the AICTE norms regarding the subscription of e-journal packages by the ECs for getting approval in 2012-13. In page 125-126 of the AICTE handbook 2012-13, the AICTE has appended a list of e-journal packages along with its annual subscription rates and instructed the colleges to purchase 2-6 packages mandatorily and some more packages on different subjects depending on the courses offered by each college. A number of colleges and associations opposed this and as a result of a lot of complaints and petitions filed at different courts in the country, the AICTE revised the list and instructed the colleges to purchase a minimum of 3 mandatory packages and other optional packages depending on the nature and number of courses offered. The list of the databases communicated to the colleges by AICTE is given in the table (Table 1) below.
Table 1: List of e-journal Packages to be Subscribed by all ECs
Conducting UG/PG Courses

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Publisher</th>
<th>Subject Areas</th>
<th>e-content</th>
<th>Annual Subscription Price Per Institute</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>IEEE</td>
<td>CE+CS+EEE+ Telecommunications and related disciplines</td>
<td>IEEE- ASPP (145 e-Journals)</td>
<td>$4980</td>
</tr>
<tr>
<td>2.</td>
<td>Springer</td>
<td>EEE and CS</td>
<td>(134 e-Journals)</td>
<td>€2000</td>
</tr>
<tr>
<td>OR</td>
<td>Wiley-Blackwell</td>
<td>CS+ Data System+ Telecommunication &amp; related discipline</td>
<td>30 Journals</td>
<td>$2300</td>
</tr>
<tr>
<td>3.</td>
<td>ASME</td>
<td>Mechanical Engineering</td>
<td>ASME e-Journals Package (25 e-Journals)</td>
<td>$2156</td>
</tr>
<tr>
<td>4.</td>
<td>Springer</td>
<td>Mechanical Engineering</td>
<td>(46 e-Journals)</td>
<td>€1000</td>
</tr>
<tr>
<td>OR</td>
<td>Wiley-Blackwell</td>
<td>Mechanical, Electrical and Electronics Engineering</td>
<td>14 Journals</td>
<td>$2050</td>
</tr>
<tr>
<td>5.</td>
<td>ASCE</td>
<td>Civil Engineering</td>
<td>ASCE e-Journals Package</td>
<td>$2520</td>
</tr>
<tr>
<td>OR</td>
<td>Wiley-Blackwell</td>
<td>Civil Engineering</td>
<td>18 Journals</td>
<td>$2075</td>
</tr>
<tr>
<td>7.</td>
<td>J-GATE</td>
<td>J-GATE Engineering and Technology (JET)</td>
<td>4700 Indexed, free full text 1700</td>
<td>Rs. 60000 + Taxes</td>
</tr>
</tbody>
</table>
However, the institutions subscribing to DELNET/INDEST were exempted from the subscription of these packages. But this amendment came only by the end of March 2012. By this time a lot of colleges purchased the packages.

Analysis

Status and Availability of E-Resources

A list of different databases pertaining to the field of engineering were presented before the respondents and asked to mention the items subscribed by their colleges. It was generally found that 86% (19) colleges provide access to electronic databases to its users and the remaining 14% (3) colleges do not have any electronic resource. It was also observed that out of the 19 colleges mentioned above 18 colleges subscribes to the databases proposed by the AICTE, where as 1 college subscribe a database which is out of the list provided by the AICTE. In other words, 82% (18) of the colleges under study subscribe to the different e-journal packages mentioned in the AICTE handbook. The current status of availability of electronic databases in these colleges with respect to the number of packages being subscribed is depicted in the following diagram (Fig. 2).
It is evident from the diagram that 59.1% (13) of the colleges subscribe to 6 or more databases, 9.1% (2) college subscribes to 5 databases and 4.6% (1) college subscribes to 3 databases. 13.6% (3) colleges subscribe to a single database and the remaining 13.6% (3) colleges do not subscribe to any database.

Another observation is that out of the 3 colleges subscribing to single database, 2 of them subscribes IEEE-ASPP package and the other one subscribes Proquest database. But all the 3 colleges have a membership in DELNET consortium. From the other group of 3 colleges that does not subscribe to any electronic database, only 1 college has a membership in the DELNET consortium.

The availability of different electronic databases is shown in the following table (Table 2).

Table 2

<table>
<thead>
<tr>
<th>Name of Database</th>
<th>ASCE</th>
<th>ASTM</th>
<th>ASME</th>
<th>ELSEVIER</th>
<th>IEEE</th>
<th>JGATE</th>
<th>WILEY (CSE)</th>
<th>WILEY (MECH &amp; EEE)</th>
<th>MGH</th>
<th>SPRINGER (ECE &amp; CSE)</th>
<th>SPRINGER (MECH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Colleges Subscribing</td>
<td>9</td>
<td>12</td>
<td>10</td>
<td>13</td>
<td>17</td>
<td>13</td>
<td>3</td>
<td>2</td>
<td>12</td>
<td>9</td>
<td>4</td>
</tr>
</tbody>
</table>

**Budgetary Allocation for E-resources**

An analysis of the budgetary allocation for electronic resources under various colleges, shows that in the year 2012-13, most of the colleges have set apart an amount ranging from 9 lakhs to 12.5 lakhs for the purchase of electronic resources. The detailed representation of the budgetary allocation is given in the fig 3.

![Budget allocation for electronic resources](image)
Problems Encountered in Maintaining a Sustainable Collection of E-resources

Financial Burden

As it is evident from the study that the colleges were forced to find an additional fund of upto 13 lakh rupees for the current year subscription of databases, most of the college librarians expressed their fear regarding this financial burden in the coming years. As far as self-financing colleges are concerned this burden will normally be placed on the shoulders of the students.

Perpetual Access

It is a matter of fact that the annual subscription rate for electronic databases pertains to the access for a particular subscription period and no perpetual access will be provided to these contents if one stops the subscription. Hence even after spending such a huge amount by these institutions perpetual access is not guaranteed and hence the building of a sustainable collection of electronic resource remains a far dream.

IEEE-ASPP Package

Until the last year, through the INDEST-AICTE consortium, all of these institutions were allowed to subscribed to IEL-ONLINE database. But this year the consortium took off this facility (except for its core members) and the AICTE has insisted to purchase another package of IEEE, the IEEE-All Society Periodical Publications, whose price is comparatively lesser than that of IEL online. But for the colleges running M.Tech courses, this package proved to be insufficient. The librarians of these colleges reported the complaints from post graduate students and faculty members, and some of the managements decided to purchase the full database (IEL). In such cases they had to spend more than two lakh rupees in addition. For those who have not opted this, their students were forced to access the e-resources of other college/university libraries to satisfy their needs.

Other Problems

- Some of the librarians opined that the electronic resources are under used in their colleges and it is a waste to spend such a large amount in this regard.
- It was opined by a number of librarians that a proper usage study is needed to analyse the use of different databases so that the under used packages may be avoided in future.
- Another important problem identified is that many of the librarians especially in the government and aided sectors are kept away from the procedures of this subscription of electronic resources. In such institutions the teachers of certain departments are involved in the acquisition of databases. So the required data for this study has been collected from those teachers. The librarians of such colleges personally feel insulted in this regards.
Conclusion

Electronic resources undoubtedly have established its presence and position in today's academic libraries. In this study a sincere attempt has been made by the author to analyse the status and availability of e-resources in the ECs of Kerala. The author would like to suggest that, the authoritative agency like AICTE should give a little more exhaustive list of databases in various branches of engineering, instead of giving a short list, and permit the institutions to choose the required items. In such a situation the prices will come down. Another suggestion is that instead of making each college subscribe these numbers of databases, a cost-effective model based on resource sharing may be initiated so that more number of e-content can be made available at lesser rate.

REFERENCES

2. Ibid., p.125-126.