Computer Application in Government aided College Libraries in Birbhum District, West Bengal: status, problems and prospects

Subhas Chandra Giri

Research Scholar, OPJS University, Rajasthan

Dr. Manisha Mudgal

Assistant Professor, Department of Library and Information Science, OPJS University, Rajasthan

Abstract

This study has been undertaken to explore the use of computer in undergraduate college library operations and services in the Birbhum district. The objective of this study is to know the application and progress of computer in college libraries and to identify the provision of infrastructure in college libraries. To conduct this study a large variety of data-gathering and analysis techniques have been adopted such as surveys, interviews, observations, and documentary analysis in college libraries in Birbhum district, West Bengal to collect the primary data. This study is based on 16 (Sixteen) Government aided college libraries in Birbhum district. The libraries of private and B.Ed. colleges have been excluded from this study. The data has been collected during the period of June 2022 to August 2022. It is found that the highest number (8 i.e., 14.29 %) of computer has been installed at Bolpur College library followed by Krishna Chandra College library (6 i.e., 10.71%) and Suri Vidyasagar College library (5 i.e., 8.93%). For the purpose of creating of library database only one (1) college library uses SOUL 2.0, seven (7) college libraries use Koha software and eight college libraries use locally prepared software. The study also shows that eleven college libraries have internet facilities for searching different information using the internet whereas five colleges have yet to implement internet facilities in college libraries.

Keywords: College library, Computer, Information and communication technology, Internet

1.   Introduction

Computer application is not a new concept today. In general, people have already got in touch with computer based operations and services in their various fields of daily life, such as banking services, railway reservations, etc. have experience with computer based services. Previously all these functions were done manually. From inception, libraries have performed all their activities by manual methods. Increasing demands and generating new information rapidly affect library services. The academic library is not out of those effects.

The efforts to mechanise computer applications in library operations and functions have been going on at least for the past 100 years. The technology was the main constraint in the initial years. The topic of technology and efficient management of libraries has been very extensive and studied

in this context. Libraries have always been the first to adopt and assimilate technological innovations. This shows that the field is most amenable to technology adoption.

2. Literature review

Chopra (1982) explained the changing needs of society and progress in the field of science and technology. He mentioned that the old concept of librarianship has been changed and now, the purpose of a library is to provide clients specific and exhaustive information within the minimum possible time. Almost every library job that is performed in a library needs automation for prompt results. The author highlighted all types of library automation available in Western European countries and therefore it underlined the growing necessity for automation in library and information work in India. In another study, Massil (1986) showed the type of work done by the library manpower and suggested areas of automation such as housekeeping operations and also examined all the problems faced and getting involved in library automation. The important issue suggested by the author is about the use of appropriate technology in libraries. In another article, Lathika (1995) described the utilisations of ICT to network libraries in the country. Computer facilities established in college and university libraries can be utilised for automating their library systems also. Bachhav (2016) described the status of library automation and problems faced by librarians such as the availability of suitable software for which libraries are to depend on commercial and local software which they also neatly explained. Further, the author stressed for effective and efficient use of information and communication technology in college libraries for the purpose of library automation. At the time of searching for 'computer application in college libraries in West Bengal' in Shodhganga database hosted by INFLIBNET, it was found that only one research work related to this topic has been awarded in the college libraries of North 24 Parganas in West Bengal.

3. Significance of this study

It is found that only one research work on this topic has been carried out in West Bengal to date. So, to explore the present status of computer application in government aided college libraries in Birbhum district, West Bengal this study has been taken into consideration.

4. Objectives of this study

The objectives of this study are:

i. To know the progress of computer application in government aided college libraries in Birbhum district, West Bengal;

ii. To examine the IT infrastructure available in the college libraries under study

iii. To study the problems faced by librarians in adopting computer application in their libraries

iv. To know the software used by the college libraries for its database

v. To find out the total collection has been entered into the database and

vi. To know the internet facility for searching documents in studied college libraries.

5. Methodology

The methodology covers the framing of questionnaire, determination of samples, data collection, data presentation and documentary analysis of sixteen college libraries in Birbhum district, West Bengal. Pertinent literature related to the topic has been traced and reviewed.

After collecting primary data, appropriate statistical tools and techniques i.e., table, histogram, bar-chart, pie-chart, etc. have been used to present and analyse the collected data.

6.   Scope and limitation

This study is based on 16 (Sixteen) government aided college libraries of Birbhum district. The libraries of private and B.Ed. colleges have been excluded from this study. The data has been collected during the period of June 2022 to August 2022.

7.   Data analysis and discussion

7.1   *Profile of the studied college libraries*

For the purpose of this study, sixteen (16) colleges under Birbhum district have been studied.

The table 1 shows the names of colleges with their foundation year.

Table 1: Name of the studied colleges with its establishment year

Sl. No.	Name of the Colleges	Year of Establishment
01.	Krishna Chandra College, Hetampur	1897
02.	Suri Vidyasagar College, Suri	1942
03.	Bolpur College, Bolpur	1950
04.	Rampurhat College, Rampurhat	1950
05.	Sambhunath College, Labpur	1963
06.	Abhedananda Mahavidyalaya, Sainthia	1965
07.	Chandidas Mahavidyalaya, Khujutipara	1972
08.	Birbhum Mahavidyalaya, Suri	1979
09.	Kabi Nazrul College, Murarai	1985
10.	Hiralal Bhakat College, Nalhati	1993
11.	S.Falguni Smriti Mahavidyalaya, Khayrasol	1995
12.	Punidevi Chaudhury Girls'College, Bolpur	2004
13.	T. Hansda L. Hemram Mahavidyalaya, Mallarpur	2006
14.	Kabi Joydev Mahavidyalaya, Illumbazar	2007
15.	Rajnagar Mahavidyalaya, Rajnagar	2009
16.	Lokepara Mahavidyalaya, Mayureswar	2010

Krishna Chandra College, Hetampur (1897) is the first college in Birbhum district. Suri Vidyasagar College is established in the year 1942, followed by Bolpur College, Bolpur (1950), Rampurhat College, Rampurhat (1950), Sambhunath College, Labpur (1963), Abhedananda Mahavidyalaya, Sainthia (1965), Chandidas Mahavidyalaya, Khujutipara (1972), Birbhum Mahavidyalaya, Suri (1979), Kabi Nazrul College, Murarai (1985), Hiralal Bhakat College, Nalhati (1993), Sailajananda Falguni Smriti Mahavidyalaya, Khayrasol (1995). These ten (10) colleges have been established during the time period from 1897 to 1995. It indicates that the legacy of the higher education system in Birbhum district started before the twentieth century. One college Whereas Punidevi Chaudhury Girls' College, Bolpur (2004), Turku Hansda Lepsa Hemram Mahavidyalaya, Mallarpur (2006), Kabi Joydev Mahavidyalaya, Illumbazar (2007), Rajnagar Mahavidyalaya, Rajnagar (2009) and Lokepara Mahavidyalaya, Mayureswar (2010) have been established beginning of the 21st century.

7.2 *Colleges with NAAC accreditation*

The Education Policy 1986 and National Educational Policy 2020 proposed the evaluation of higher educational institutions, especially colleges and universities. In this context, the UGC under its banner established National Assessment and Accreditation Council (NAAC-1994). Contextually, higher education, assessment and accreditation are broadly used for understanding the quality status of an institution. This is an autonomous body established by the University Grants Commission (UGC), Government of India to assess and accredit institutions of higher education in the country. Among the 16 Government aided colleges considered for the study in Birbhum district, West Bengal, the majority of colleges 10 (62.50%) are accredited but only 6 colleges (37.50%) are yet to be NAAC accreditation (37.50%). The data is presented in table 2.

Table 2: Grade wise distribution of NAAC accredited colleges in Birbhum district

Grades	A+	A	B++	B+	B	C++	C	Total	
								Yes	No
Nos.	Nil	Nil	1	3	6	Nil	Nil	10	6
(%)			6.25	18.75	37.50			62.50	37.50

Further the data is also distributed by their grading and ranking and the same is presented in It is found in this study that 6 (37.50%) of the Government aided colleges in Birbhum district, West Bengal, have an accreditation of B grade which reflects their shortcomings. Only 1(6.25%) of colleges have B++ grade, followed by 3 (18.75%) of the colleges with B+ grades. It can also emphasised that apart from other central facilities like computer centre and facilities for ICT in Library is also considered one of the central facilities by the NAAC evaluation studies. So the library has a role in the accreditation process hence the data are presented.

7.3 *Computer used in college library housekeeping and services of Birbhum district*

Computerisation of college libraries requires hardware; computer peripheral includes VDU, CPU, UPS, printer, scanner, etc. and software. The use of computer in college libraries of the Birbhum district has been initiated and directed by the college authorities. The above mentioned devices have been purchased and installed for the purpose of library services and operations. The study shows that it has differed from one college to another college. The status of no. of computers has been installed and its summary is shown in table 3.

Table 3: Computer used in libraries of Birbhum district colleges

Sl. No.	Name of the Colleges	No. of Computer used	Percentage (%)
1.	Abhedananda Mahavidyalaya, Sainthia	4	7.14
2.	Birbhum Mahavidyalaya, Suri	2	3.57
3.	Bolpur College, Bolpur	8	14.29
4.	Chandidas Mahavidyalaya, Khujutipara	4	7.14
5.	Hiralal Bhakat College, Nalhati	2	3.57
6.	Kabi Joydeb Mahavidyalaya, Illumbazar	4	7.14
7.	Kabi Nazrul College, Murarai	3	5.36
8.	Krishna Chandra College, Hetampur	6	10.71
9.	Lokpara Mahavidyalaya, Mayureswar	2	3.57
10.	Punidevi Chaudhury Girls'College, Bolpur	3	5.36
11.	Rajnagar Mahavidyalaya, Rajnagar	2	3.57
12.	Rampurhat College, Rampurhat	4	7.14
13.	S.F.Smriti Mahavidyalaya, Khayrasol	2	3.57
14.	Sambhunath College, Labpur	3	5.36
15.	Suri Vidyasagar College, Suri	5	8.93
16.	T.Hansda L.Hemram Mahavidyalaya	2	3.57
	Total	**56**	**100**

The table 3 reflects that the highest number (8 i.e. 14.29 %) of computer has been installed at Bolpur College library followed by Krishna Chandra College library (6 i.e. 10.71%) and Suri Vidyasagar College library (5 i.e. 8.93%), Abhedananda Mahavidyalaya library, Chandidas Mahavidyalaya library, Kabi Joydeb Mahavidyalaya library, Rampurhat College library have installed 4 computers each (4 i.e. 7.14%). Sambhunath College library, Kabi Nazrul College library and Punidevi Chaudhury Girls' College library have installed 3 computers each (3 i.e. 5.36%) and Birbhum Mahavidyalaya library, Hiralal Bhakat College library, Lokpara Mahavidyalaya library, Rajnagar Mahavidyalaya library, S.F.Smriti Mahavidyalaya library and T.Hansda L.Hemram Mahavidyalaya library have installed 2 computers each (2 i.e. 3.57%).

7.4 *Library management software used by the college libraries of Birbhum district*

The next important part of library automation is the software and data of sixteen studied college libraries have been discussed. The general-degree college libraries have been using various types of library management software. Some of the college libraries have been using locally prepared software because of the lower cost and some colleges are using standard library management software.

Table 4: Library management software installed in each college library of Birbhum district

Sl. No.	Name of the Colleges	Name of the Software	Type of Software
1.	Abhedananda Mahavidyalaya, Sainthia	Koha	Open Source
2.	Birbhum Mahavidyalaya, Suri	Local	Commercial
3.	Bolpur College, Bolpur	Koha	Open Source
4.	Chandidas Mahavidyalaya, Khujutipara	Koha	Open Source
5.	Hiralal Bhakat College, Nalhati	Local	Commercial
6.	Kabi Joydeb Mahavidyalaya, Illumbazar	Koha	Open Source
7.	Kabi Nazrul College, Murarai	Koha	Open Source
8.	Krishna Chandra College, Hetampur	CAMS 3.00	Commercial
9.	Lokpara Mahavidyalaya, Mayureswar	Local	Commercial
10.	Punidevi Chaudhury Girls'College, Bolpur	CAMS 4.00	Commercial
11.	Rajnagar Mahavidyalaya, Rajnagar	Local	Commercial
12.	Rampurhat College, Rampurhat	Koha	Open Source
13.	S.F.Smriti Mahavidyalaya, Khayrasol	Local	Commercial
14.	Sambhunath College, Labpur	SNCLMS1.00	Commercial
15.	Suri Vidyasagar College, Suri	Koha	Open Source
16.	T.Hansda L.Hemram Mahavidyalaya, Mallarpur	SOUL 2.0	Commercial

Table 4 shows that only one (1) college library uses SOUL 2.0, seven (7) college libraries use Koha software and eight college libraries use locally prepared software. These three software names are (i.e. SNCLMS 1.00, CAMPS 3.00 & CAMPS 4.00). It indicates that 6.25% of college libraries use SOUL 2.0 software, 50 % of college libraries use commercial software whereas 43.75% of college libraries use open source (Koha) software.

7.5 *Creation of library database and internet connection of college libraries of Birbhum district*

All the sixteen studied libraries have introduced Integrated Library Management Software (ILMS) for library operations. The present position of creation of library database and internet connections of college libraries of Birbhum district are given in table 5.

Table 5: Creation of library database and internet connected college libraries of Birbhum District

Sl. No.	Name of the Colleges	Entry in Database	Internet Facilities
1.	Abhedananda Mahavidyalaya, Sainthia	24500	Yes
2.	Birbhum Mahavidyalaya, Suri	1090	No
3.	Bolpur College, Bolpur	35580	Yes
4.	Chandidas Mahavidyalaya, Khujutipara	22860	Yes
5.	Hiralal Bhakat College, Nalhati	18560	No
6.	Kabi Joydeb Mahavidyalaya, Illumbazar	650	Yes
7.	Kabi Nazrul College, Murarai	15950	Yes
8.	Krishna Chandra College, Hetampur	25850	Yes
9.	Lokepara Mahavidyalaya, Mayureswar	1530	No
10.	Punidevi Chaudhury Girls'College, Bolpur	9750	Yes
11.	Rajnagar Mahavidyalaya, Rajnagar	870	No
12.	Rampurhat College, Rampurhat	32590	Yes
13.	S.F.Smriti Mahavidyalaya, Khayrasol	11410	No
14.	Sambhunath College, Labpur	28550	Yes
15.	Suri Vidyasagar College, Suri	41409	Yes
16.	T.Hansda L.Hemram Mahavidyalaya, Mallarpur	5500	Yes

Table 5 describes that the highest number of books has been entered into the database by Suri Vidyasagar College library (41409) followed by Bolpur College library (35580), Rampurhat College library (32590), Sambhunath College library (28550), Krishna Chandra College library (25850), Abhedananda Mahavidyalaya library (24500), Chandidas Mahavidyalaya library (22860), Hiralal Bhakat College library (18560), Kabi Nazrul College library (15960), Sailajananda Falguni Smriti Mahavidyalaya library (11410), Punidevi Chaudhury Girls' College library (9750), Turku Hansda Lapsa Hemram Mahavidyalaya library (5500), Lokepara Mahavidyalaya library (1530), Birbhum Mahavidyalaya library (1090), Rajnagar Mahavidyalaya library (670) and Kabi Joydeb Mahavidyalaya library (650). Eleven college libraries have internet facilities to search and retrieve documents from the different databases and the remaining five colleges are yet to be introduced to internet facilities. A visual presentation of book databases of college libraries in Birbhum district has been depicted in figure 1.
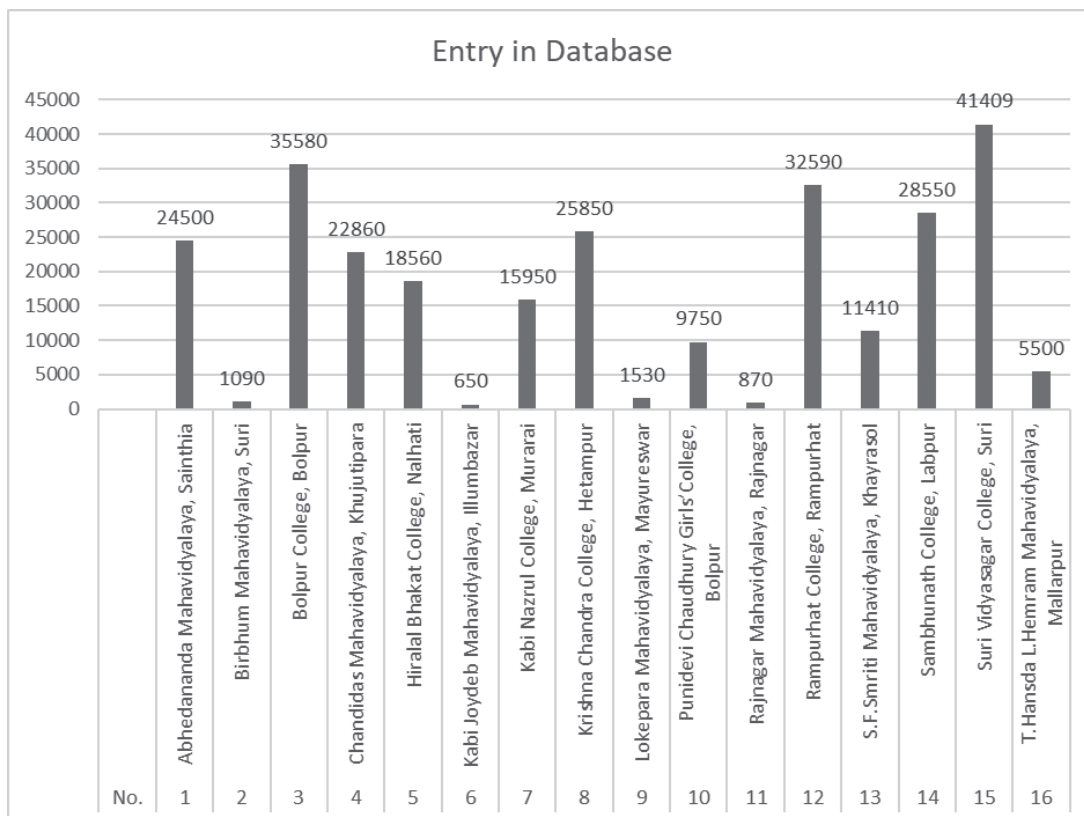
Figure 1: Books entered into the database of college libraries

With the help of computer and ICT applications in college libraries, provides ample scope for its members to upload or download information data from the different websites in fields of interest through the internet.

The summary of the internet connection is shown in the table 6.

Table 6: Whether the library internet connected?

Responses	Internet connected or not	Percentage (%)
Yes	11	68.75
No	05	31.25
	Total	100

Table 6 reveals that 11 (68.75%) college libraries have been connected to internet and 5 (31.25%) college libraries have been applied for Internet connection and it is in the installation stage. Now the West Bengal Government has sent the G.O. regarding the implementation of internet connection in colleges. So, the colleges have to take initiative for the internet connection and library will also be included in it.

8.   Major findings

In case of computer used in college library for housekeeping operations and services, it is found that the highest number (8 i.e. 14.29 %) of computer has been installed at Bolpur College library followed by Krishna Chandra College library (6 i.e. 10.71%) and Suri Vidyasagar College library (5 i.e. 8.93%), Abhedananda Mahavidyalaya library, Chandidas Mahavidyalaya library, Kabi Joydeb Mahavidyalaya library, Rampurhat College library have installed 4 computers each (4 i.e. 7.14%). Sambhunath College library, Kabi Nazrul College library and Punidevi Chaudhury Girls' College library have installed 3 computers each (3 i.e. 5.36%) and Birbhum Mahavidyalaya library, Hiralal Bhakat College library, Lokpara Mahavidyalaya library, Rajnagar Mahavidyalaya library, S.F.Smriti Mahavidyalaya library and T.Hansda L.Hemram Mahavidyalaya library have installed 2 computers each (2 i.e. 3.57%).

For the purpose of creating of library database only one (1) college library uses SOUL 2.0, seven (7) college libraries use Koha software and eight college libraries use locally prepared software. These three locally made software are (i.e. SNCLMS 1.00, CAMPS 3.00 & CAMPS 4.00). It indicates that 6.25% of college libraries use SOUL 2.0 software, 50% of college libraries use commercial software whereas 43.75% of college libraries use open source (Koha) software.

Eleven colleges have internet facilities for searching different information using internet whereas five colleges have yet to implement internet facilities in college libraries.

At the time of survey, it was also found that there are different types of problems faced by the librarian for the hassle free implementation of computer in library; these are lack of funding, lack of trained professional library staff and sometimes negative attitude of the authority, etc.

9.   Conclusion

The use of computer in college library is easy to install at present and comfortable to handle. It requires managerial skills and technological knowledge. Computer application in college libraries will create new job opportunities and higher salaries. The recognition of professional staff will lead to job satisfaction. The social cost of the proposed systems will be only the initial investment annual maintenance cost and training expenditure of the library staff, but this will do a great deal in the development of college library services.

Prediction for the future is more complicated and international information sharing and collaboration are greatly facilitated with the introduction of computer and communication technologies. The information and communication technology has changed the complexion of the academic library. Librarians will have a hard task to lead and run the system without these skills.

References

Ali, Amjad (2021). *Information Technology and Libraries.* New Delhi: Ess Ess Publications.

Bachav, N. (2016). Automation of college libraries in Maharashtra : a survey of Nasik district college libraries. *SRELS Journal of Information Management,* 53(3), 243-247.

Chopra, H. R. (1982). Automation in libraries in West European countries and its implementation in developing countries. *International Library Movement,* 4(2), 4.

Lathika, K. (1995). UGC Assistance for provision of computer in university and college libraries. In R. R. Nair (Ed.), *Academic Library Automation* (pp. 154-156). New Delhi: Ess Ess Publishers.

Massil, S. W. (1986). The place for automation in libraries in developing countries. *Journal of Library and Information Science,* 11(1), 38 - 44.