Innovative Strategies for Implementation and Use of Embedded Library Services at Central Libraries of IITs in India

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ABSTRACT

To promote literacy, communication, and good participation in the 21st century, especially in research centres all over the world, "Indian Institutes of Technology" (IIT's in India) have created collaborative opportunities for researchers using e-skills, internet and social media, embedded library information services. "In other words, technology is not enough to bridge this gap, but instead, collaborative human partnerships are needed to harness the participatory power of this technology and provide context and learning spaces for people to enhance their digital and information literacy skill.

Embedded librarianship playing vital role. Embedded librarianship entered into libraries, especially academic and research libraries. Libraries employed Embedded librarianship to speed up their daily actions and reduce their functioning costs. In digital era, bulk of reading material is available in the electronic form which can be accessed through internet as well as intranet. The libraries of Indian Institute of India's are utilising Embedded librarianship for the modernisation of housekeeping operations as well as library resources and services. Advancement in the Embedded librarianship has changed the scenario of the libraries in the digital and research environment. The library professional embedded with research teams; they should provide Embedded library and information services for their users.

Keywords: EL Services, Embedded Library and Information Services, Virtual Classroom, Informationist, Embedded Librarianship, Embedded Librarian, IIT.

1. Introduction:

The present study was conducted on sixteen librarians and four hundred fourteen users (Faculty and Scientists) of the "Indian Institutes of Technology". A random selection of 16 IITs - professors and researchers; A random approach was used to obtain a representative population of embedded librarian service users. Sixteen filled questionnaires were received from librarians of IITs.

1.1 Methodology

The present study focuses on Embedded Librarianship in IITs India. The survey research method has been adopted for the collection of data. Questionnaires were used as a tool for data collection.

1.2 Statistical Tools and Techniques

"The present study is designed to assess the Embedded Librarianship in the Central Libraries of IITs; and to plot future direction for implementation "embedded Library and Information services" provided toFaculty and Scientists at IITs. To meet the specific objective and quantitative and qualitative research

methodologies along with a comprehensive literature has been employed." **(khan, 2012)**[1] The citation and references have been presented in accordance with the American Psychological Association (APA) style, 7th edition.

1.3 Objective of The Study:

The objectives of this research study are:

"To trace the genesis and growth in implementation and use of the embedded Library and Information services."

2. Mode of Access of E-Resources

Table 1. Shows that, Mode of Access of "Embedded Library and Information Services" in Embedded Users (Faculty & Scientists) of central libraries of IITs, where in old IITs, highest 204 (75.83%) Embedded Users (Faculty & Scientists) access Embedded Library and Information Services at 'Department'; 194 (72.19%) Embedded Users (Faculty & Scientists) access Embedded Library and Information Services at 'Central Library;154(57.25%)Embedded Users (Faculty & Scientists) access Embedded Library and Information Services at 'Personal Computer';147(54.64%)Embedded Users (Faculty & Scientists) access Embedded Library and Information Services at 'Mobile/Smart Phone';73(27.13%)Embedded Users (Faculty & Scientists) access Embedded Library and Information Services at 'Computer Centre';57(21.19%)Embedded Users (Faculty & Scientists) access Embedded Library and Information Services at 'What's app / What's app group'.

In new IIT's, highest 122 (84.13%) Embedded Users (Faculty & Scientists) access Embedded Library and Information Services at 'Central Library';97 (66.89%) Embedded Users (Faculty & Scientists access Embedded Library and Information Services at 'Department';52 (35.86%)Embedded Users (Faculty & Scientists) access Embedded Library and Information Services at 'Personal Computer';43 (29.65%)Embedded Users (Faculty & Scientists) access Embedded Library and Information Services at 'Mobile/Smart Phone';20 (13.79%)Embedded Users (Faculty & Scientists) access Embedded Library and Information Services at 'Computer Centre'; and 6 (4.13%)Embedded Users (Faculty & Scientists) access Embedded Library and Information Services at 'what's app /What's app group'.

It is concluded that:

1. 76.33% (316) Embedded Users (Faculty & Scientists) access Embedded Library and Information Services at 'Central Library'out of total 414 Embedded Users.
2. 72.71% (301) Embedded Users (Faculty & Scientists) access Embedded Library and Information Services at 'Department' out of total 414 Embedded Users.
3. 49.76%(206) Embedded Users (Faculty & Scientists) access Embedded Library and Information Services at 'Personal Computer' out of total 414 Embedded Users.
4. 45.89% (190) Embedded Users (Faculty & Scientists) access Embedded Library and Information Services at 'Mobile' out of total 414 Embedded Users.
5. 15.22% (63) Embedded Users (Faculty & Scientists) access Embedded Library and Information Services at 'What's app / What's app group' out of total 414 Embedded users.

3. Infrastructure Facilities for EL Services

Table 2. Exhibits that, availability of Infrastructure Facilities for Embedded Library and Information Services for Embedded Users (Faculty & Scientists) of central libraries of IITs, where in old IITs, highest 268 (99.63%) Embedded Users (Faculty & Scientists) of central libraries of IITs avail 'Computers

(Computer Labs)'Infrastructure Facilities available for Embedded Library and Information Services;243 (90.33%)Embedded Users (Faculty & Scientists) of central libraries of IITs avail 'Systems with Internet facilities 'Infrastructure Facilities available for Embedded Library and Information Services;

240 (89.22%)Embedded Users (Faculty & Scientists) of central libraries of IITs avail 'Printers' Infrastructure Facilities available for Embedded Library and Information Services;and227(84.38%) Embedded Users (Faculty & Scientists) of central libraries of IITs avail 'U.P.S. (Back up facility)' Infrastructure Facilities available for Embedded Library and Information Services.

In new IITs, 268 (99.31%) Embedded Users (Faculty & Scientists) of central libraries of IITs avail 'Computers (Computer Labs)' Infrastructure Facilities available for Embedded Library and Information Services;123 (84.83%) Embedded Users (Faculty & Scientists) of central libraries of IITs avail 'Printers' Infrastructure Facilities available for Embedded Library and Information Services;114 (78.62%) Embedded Users (Faculty & Scientists) of central libraries of IITs avail 'Systems with Internet facilities' Infrastructure Facilities available for Embedded Library and Information Services; and 88 (60.69%) Embedded Users (Faculty & Scientists) of central libraries of IITs avail 'U.P.S. (Back up facility)' Infrastructure Facilities available for Embedded Library and Information Services.

It is observed that:

1. 99.52% (412) Embedded Users (Faculty & Scientists) of central libraries of IITs avail 'Computers (Computer Labs)' Infrastructure Facilities available for Embedded Library and Information Services out of total 414 Embedded users.

2. 87.68% (363) Embedded Users (Faculty & Scientists) of central libraries of IITs avail 'Printers' Infrastructure Facilities available for Embedded Library and Information Services out of total 414 Embedded users.

3. 86.23% (357) Embedded Users (Faculty & Scientists) of central libraries of IITs avail 'Systems with Internet facilities' Infrastructure Facilities available for Embedded Library and Information Services out of total 414 Embedded users. And

4. 76.9% (315) Embedded Users (Faculty & Scientists) of central libraries of IITs avail 'U.P.S. (Back up facility)' Infrastructure Facilities available for Embedded Library and Information Services out of total 414 Embedded users.

4. Purpose of Embedded Library Services

Figure: 1. and Table 3. shows that, Purpose of Embedded Library and Information Services for Embedded Users (Faculty & Scientists) of central libraries of IITs, where in old IITs, highest 227 (84.39%) Embedded Users (Faculty & Scientists) of central libraries of IITs, 'Research work' is purpose of use of Embedded Library and Information Services;211 (78.44%) Embedded Users (Faculty & Scientists) of central libraries of IITs, 'Research Project' is purpose of use of Embedded Library and Information Services; 150 (55.76%) Embedded Users (Faculty & Scientists) of central libraries of IITs, 'To update knowledge' is purpose of use of Embedded Library and Information Services;124 (46.10%) Embedded Users (Faculty & Scientists) of central libraries of IITs, 'Writing Research Paper' is purpose of use of Embedded Library and Information Services; 88 (32.71%) Embedded Users (Faculty & Scientists) of central libraries of IITs, 'For teaching' is purpose of use of Embedded Library and Information Services;71 (26.39%) Embedded Users (Faculty & Scientists) of central libraries of IITs, 'Preparing for Tests and Assignments' is purpose of use of Embedded Library and Information Services; and 41 (15.24%) Embedded Users (Faculty & Scientists) of central libraries of IITs, 'M. Phil, PhD Research work' is purpose of use of Embedded

Library and Information Services.

In New IITs, highest 104 (71.72%) Embedded Users (Faculty & Scientists) of central libraries of IITs, 'Research work' is purpose of use of Embedded Library and Information Services; 78 (53.79%) Embedded Users (Faculty & Scientists) of central libraries of IITs, 'Research Project' is purpose of use of Embedded Library and Information Services;64 (44.14%) Embedded Users (Faculty & Scientists) of central libraries of IITs, 'To update knowledge' is purpose of use of Embedded Library and Information Services;58 (40.00%) Embedded Users (Faculty & Scientists) of central libraries of IITs, 'For teaching' and 'Writing Research Paper' are purpose of use of Embedded Library and Information Services;13 (8.97%) Embedded Users (Faculty & Scientists) of central libraries of IITs, 'Preparing for Tests and Assignments' is purpose of use of Embedded Library and Information Services; and 11 (7.59%) Embedded Users (Faculty & Scientists) of central libraries of IITs, 'M. Phil, PhD Research work' is purpose of use of Embedded Library and Information Services.

It is concluded that:

1. 79.95% (331) Embedded Users (Faculty & Scientists) of central libraries of IITs, 'Research work' is purpose of use of Embedded Library and Information Services out of total 414 Embedded users.

2. 20.29% (84) Embedded Users (Faculty & Scientists) of central libraries of IITs, 'Preparing for Tests and Assignments' is purpose of use of Embedded Library and Information Serviceout of total 414 Embedded users.

3. 69.81% (289) Embedded Users (Faculty & Scientists) of central libraries of IITs, 'For Research project' is purpose of use of Embedded Library and Information Services out of total 414 Embedded users.

4. 35.27% (146) Embedded Users (Faculty & Scientists) of central libraries of IITs, 'For teaching' is purpose of use of Embedded Library and Information Services out of total 414 Embedded users.

5. 43.96% (182) Embedded Users (Faculty & Scientists) of central libraries of IITs, 'Writing Research Paper' is purpose of use of Embedded Library and Information Services out of total 414 Embedded users.

6. 51.69% (214) Embedded Users (Faculty & Scientists) of central libraries of IITs, 'To update knowledge' is purpose of use of Embedded Library and Information Services out of total 414 Embedded users.

7. 12.56% (52) Embedded Users (Faculty & Scientists) of central libraries of IITs, 'M. Phil, PhD Research work' is purpose of use of Embedded Library and Information Services out of total 414 Embedded users.

5. Delivered Embedded Library Services

Figure: 2. and Table No. 4. shows that, who are delivered Embedded Library Services at central libraries of IITs in India. Where in the old IITs, highest226 (84.01%)Embedded Users (Faculty & Scientists) of central libraries of old IITs 'Librarian-Library and Information Science Qualified Staff' are delivered Embedded Library Services; 183 (68.03%)Embedded Users (Faculty & Scientists) of central libraries of old IITs 'Library Support Staff' are delivered Embedded Library Services; 31 (11.52%) Embedded Users (Faculty & Scientists) of central libraries of old IITs 'Webmaster' are delivered Embedded Library Services; 13 (4.83%)Embedded Users (Faculty & Scientists) of central libraries of old IITs 'Vendor' are delivered Embedded Library Services; 10 (3.72%)Embedded Users (Faculty & Scientists) of central libraries of old IITs 'Faculty/Scientists' are delivered Embedded Library Services; and 6

(2.23%)Embedded Users (Faculty & Scientists) of central libraries of old IITs 'Self-Employment' are delivered Embedded Library Services.

In new IITs, highest 125 (86.21%) Embedded Users (Faculty & Scientists) of central libraries of IITs 'Librarian-Library and Information Science Qualified Staff' are delivered Embedded Library Services; 73 (50.34%) Embedded Users (Faculty & Scientists) of central libraries of IITs 'Library Support Staff' are delivered Embedded Library Services; 2 (1.38%) Embedded Users (Faculty & Scientists) of central libraries of IITs 'Webmaster' are delivered Embedded Library Services; and1 (0.69%) Embedded Users (Faculty & Scientists) of central libraries of IITs 'Faculty/Scientists', 'Vendor' and 'Self-Employment' are delivered Embedded Library Services.

Thus, such a conclusion is:

1. 84.78% (351) Embedded Users (Faculty & Scientists) of central libraries of IITs 'Librarian-Library and Information Science Qualified Staff' are delivered Embedded Library Services out of 414 total Embedded Users.
2. 61.84% (256) Embedded Users (Faculty & Scientists) of central libraries of IITs 'Library Support Staff' are delivered Embedded Library Services out of 414 total Embedded Users.
3. 7.97% (33)Embedded Users (Faculty & Scientists) of central libraries of IITs 'Webmaster' are delivered Embedded Library Services out of 414 total Embedded Users.
4. 3.38% (14) Embedded Users (Faculty & Scientists) of central libraries of IITs 'Vendor' are delivered Embedded Library Services out of 414 total Embedded Users.
5. 2.66% (11) Embedded Users (Faculty & Scientists) of central libraries of IITs 'Faculty/Scientists' are delivered Embedded Library Services out of 414 total Embedded Users.
6. 1.69% (7) Embedded Users (Faculty & Scientists) of central libraries of IITs 'Self-Employment' are delivered Embedded Library Services out of 414 total Embedded Users.

6. Training for use of Embedded Library Services

Figure: 3. and Table 5. shows that, Training for use of Embedded Library and Information Services for Embedded Users (Faculty & Scientists) of central libraries of IITs where in old IITs, 128 (47.58%)Embedded Users (Faculty & Scientists) of central libraries of IITs, 'Training required' for use EL Services.

In new IITs, 107 (73.80%) Embedded Users (Faculty & Scientists) of central libraries of IITs, 'Training required' for use EL Services.

It is observed that:

1. 56.76% (235) Embedded Users (Faculty & Scientists) of central libraries of IITs 'Training required' for use of Embedded Library Services, out of 414 total Embedded Users.
2. 43.24%(179) Embedded Users (Faculty & Scientists) of central libraries of IITs 'Training Not required' for use of Embedded Library Services, out of 414 total Embedded Users.

7. Types of Training for use of Embedded Library Services

Table 6. exhibit that, Types of Training for use of Embedded Library and Information Services for Embedded Users (Faculty & Scientists) of central libraries of IITs where in old IITs, highest75 (27.88%)Embedded Users (Faculty & Scientists) of central libraries of IITs, 'Personal' type oftraining required for use EL Services; 27 (10.04%)Embedded Users (Faculty & Scientists) of central libraries of IITs, 'Seminar' type of training required for use EL Services;23 (8.55%)Embedded Users (Faculty &

Scientists) of central libraries of IITs, 'Model/Self-help lessons' type of training required for use EL Services; and17 (6.32%)Embedded Users (Faculty & Scientists)of central libraries of IITs, 'Classroom sessions' type of training required for use EL Services.

In new IITs, highest 66 (45.52%) Embedded Users (Faculty & Scientists) of central libraries of IITs, 'Personal' type of training required for use EL Services;20 (13.79%)Embedded Users (Faculty & Scientists) of central libraries of IITs, 'Classroom sessions' type of training required for use EL Services;19 (13.10%) Embedded Users (Faculty & Scientists) of central libraries of IITs, 'Seminar' type of training required for use EL Services;and12 (8.28%)Embedded Users (Faculty & Scientists) of central libraries of IITs, 'Model/Self-help lessons' type of training required for use EL Services.

It is concluded that:

1. 34.06% (141) Embedded Users (Faculty & Scientists) of central libraries of IITs, 'Personal' type of training required for use EL Services, out of 414 total Embedded Users.
2. 11.11% (46) Embedded Users (Faculty & Scientists) of central libraries of IITs, 'Seminar' type of training required for use EL Services, out of 414 total Embedded Users.
3. 8.94% (37) Embedded Users (Faculty & Scientists) of central libraries of IITs, 'Classroom sessions' type of training required for use EL Services, out of 414 total Embedded Users.
4. 8.45% (35) Embedded Users (Faculty & Scientists) of central libraries of IITs, 'Model/Self-help lessons' type of training required for use EL Services, out of 414 total Embedded Users.

8. EL Service Relationship Get starts

Figure: 4. and Table 7. Shows that, "Embedded Library and Information Service" relationship starts at central libraries of IITs where in old IITs, highest 183 (68.03%) Embedded Users (Faculty & Scientists) responded, "Embedded Library and Information Service" relationship starts by 'Chief Librarian initiated EL service relationship at central libraries of IITs;70 (26.02%)Embedded Users (Faculty & Scientists) responded, "Embedded Library and Information Service" relationship starts by 'External circumstances forced to initiated EL service relationship; and 16 (5.95%)Embedded Users (Faculty & Scientists) responded, "Embedded Library and Information Service" relationship starts by 'Users or Group of Research Team' initiated EL service relationship ' at central libraries of IITs.

In new IITs, 111 (76.55%) Embedded Users (Faculty & Scientists) responded, "Embedded Library and Information Service" relationship starts by 'Chief Librarian initiated EL service relationship at central libraries of IITs; 28 (19.31%) Embedded Users (Faculty & Scientists) responded, "Embedded Library and Information Service" relationship starts by 'External circumstances forced to initiated EL service relationship; and 6 (4.14%) Embedded Users (Faculty & Scientists) responded, "Embedded Library and Information Service" relationship starts by 'Users or Group of Research Team' initiated EL service relationship ' at central libraries of IITs.

It is observed that:

1. 71.02% (294) Embedded Users (Faculty & Scientists) responded, "Embedded Library and Information Service" relationship starts by 'Chief Librarian initiated EL service relationship at central libraries of IITs; out of 414 Embedded Users (Faculty & Scientists).
2. 23.67% (98)Embedded Users (Faculty & Scientists) responded, "Embedded Library and Information Service" relationship starts by 'External circumstances forced to initiated EL service relationship; out of 414 Embedded Users (Faculty & Scientists).
3. 5.31% (22) Embedded Users (Faculty & Scientists) responded, "Embedded Library and Information

Service" relationship starts by 'Users or Group of Research Team' initiated EL service relationship ' at central libraries of IITs; out of 414 Embedded Users (Faculty & Scientists).

9. Conclusion:

Embedded Library staff Developing, building, and maintaining relationships, which is a direct path to a true partnership; service delivery where users' needs are met in a timely and consistent individualized manner; maintaining presence among professors, scientists and research students and attending working groups of these users; An embedded librarian is responsible for providing embedded library services by going to the locations where they are working; and becoming acquainted with the discipline in which you are embedded.

The growth in implementation of "embedded Library and Information services" by Library and Information professionals in IIT's in India is satisfactory.

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Table: 1. Mode of Access of E-Resources

Mode of Access of E-Resources	Old IITs (N=7)								New IITs (N=9)										Grand Total
	IIT KGP 48	IITB 40	IITK 49	IITM 14	IITD 46	IITG 37	IITR 35	Total	IITBBS 10	IITGN 34	IITRPR 12	IITI 10	IITBHU 36	IITPKD 12	IITTP 8	IITISM 15	IITGOA 8	Total	Grand Total
Central Library	31	24	42	14	34	27	22	194 (72.19)	8	28	11	7	25	12	8	15	8	122 (84.13)	316 (76.33)
Department	41	24	41	10	24	32	32	204 (75.83)	6	32	7	4	29	6	3	8	2	97 (66.89)	301 (72.71)
Personal Computer	40	37	17	8	32	7	13	154 (57.25)	4	10	2	8	12	2	1	11	2	52 (35.86)	206 (49.76)
Computer Centre	18	11	10	2	18	10	4	73 (27.13)	0	5	2	0	9	1	2	1	0	20 (13.79)	93 (22.46)
Mobile/ Smart Phone	34	31	23	4	32	13	10	147 (54.64)	5	11	0	2	11	4	1	8	1	43 (29.65)	190 (45.89)
What's app / What's	17	11	13	2	8	5	1	57 (21.19)	0	1	0	0	2	0	0	3	0	6 (4.13)	63 (15.22)

app group																		

(Figures within parenthesis are percentage)

Table: 2. Infrastructure Facilities for EL Services

Infrastructure Facilities for EL Services	Old IITs (N=7)								New IITs (N=9)											
	IITKGP 48	IITB 40	IITK 49	IITM 14	IITD 46	IITG 37	IITR 35	Total	IITBBS 10	IITGN 34	IITRPR 12	IITI 10	IITBHU 36	IITPKD 12	IITP 8	IITISM 15	IITGOA 8	Total	Grand Total
Computers (Computer Labs)	48	40	49	14	46	37	34	268 (99.63)	10	34	12	9	36	12	8	15	8	144 (99.31)	412 (99.52)
Printers	44	37	43	14	41	35	26	240 (89.22)	7	29	8	9	28	11	8	15	8	123 (84.83)	363 (87.68)
Systems with Internet facilities	47	37	42	14	41	35	27	243 (90.33)	6	30	8	10	20	9	8	15	8	114 (78.62)	357 (86.23)
U.P.S. (Back up facility)	44	34	39	12	37	35	26	227 (84.38)	6	29	8	9	15	4	2	15	8	88 (60.69)	315 (76.9)

(Figures within parenthesis are percentage)

Table: 3. Purpose of Embedded Library Services

Purpose of Embedded Library Services	Old IITs (N=7)								New IITs (N=9)										Grand Total
	IITKGP 48	IITB 40	IITK 49	IITM 14	IITD 46	IITG 37	IITR 35	Total	IITBBS 10	IITGN 34	IITRPR 12	IITI 10	IITBHU 36	IITPKD 12	IITTP 8	IITISM 15	IITGOA 8	Total	
Research work	42	28	44	14	35	35	29	**227 (84.39)**	9	31	9	9	23	5	3	12	3	**104 (71.72)**	**331 (79.95)**
Preparing for tests and assignments	12	10	15	4	11	10	9	**71 (26.39)**	0	4	0	1	3	3	1	0	1	**13 (8.97)**	**84 (20.29)**
For Research project	42	34	36	13	37	23	26	**211 (78.44)**	9	21	5	9	16	4	1	13	0	**78 (53.79)**	**289 (69.81)**
For teaching	11	14	17	9	14	12	11	**88 (32.71)**	6	10	6	5	14	8	1	2	6	**58 (40.00)**	**146 (35.27)**
Writing Research Paper	23	17	26	9	18	15	16	**124 (46.10)**	6	11	5	8	15	1	2	9	1	**58 (40.00)**	**182 (43.96)**

To update knowledge	14	20	36	5	29	27	19	**150 (55.76)**	5	11	5	7	11	2	6	9	8	**64 (44.14)**	**214 (51.69)**
M. Phil, PhD Research work	4	3	15	0	5	11	3	**41 (15.24)**	0	2	0	2	3	0	4	0	0	**11 (7.59)**	**52 (12.56)**

(Figures within parenthesis are percentage)

Table: 4. Delivered Embedded Library Services

"Indian Institutes of Technology"		Delivered Embedded Library Services					
		1	**2**	**3**	**4**	**5**	**6**
		Librarian-LIS Qualified Staff	**Webmaster**	**Library Support Staff**	**Faculty/ Scientists**	**Vendor**	**Self-Employment**
Old IITs (N=7)	**IITKGP 48**	47	9	26	2	1	1
	IITB 40	34	9	28	3	2	1
	IITK 49	39	5	27	1	3	1
	IITM 14	14	1	12	0	0	0
	IITD 46	40	2	34	2	5	2
	IITG 37	28	3	32	1	2	1
	IITR 35	24	2	24	1	0	0
Total=		**226 (84.01%)**	**31 (11.52%)**	**183 (68.03%)**	**10 (3.72%)**	**13 (4.83%)**	**6 (2.23%)**
New IITs (N=9)	**IITBBS 10**	9	1	6	0	0	0
	IITGN 34	28	0	31	0	0	0
	IITRPR 12	10	0	4	0	0	0
	IITI 10	10	0	6	1	1	1
	IITBHU 36	25	0	22	0	0	0
	IITPKD 12	12	0	3	0	0	0
	IITTP 8	8	0	0	0	0	0
	IITISM 15	15	1	1	0	0	0
	IITGOA 8	8	0	0	0	0	0
Total=		**125 (86.21%)**	**2 (1.38%)**	**73 (50.34%)**	**1 (0.69%)**	**1 (0.69%)**	**1 (0.69%)**
Grand Total=		**351**	**33**	**256**	**11**	**14**	**7**

	(84.78%)	(7.97%)	(61.84%)	(2.66%)	(3.38%)	(1.69%)

(Source: Compile by Researcher)

Table: 5. Training for use of Embedded Library Services

"Indian Institutes of Technology"		Training Require for use of EL Services	
		Yes	No
Old IITs (N=7)	IITKGP48	12	36
	IITB 40	14	26
	IITK 49	27	22
	IITM 14	8	6
	IITD 46	24	22
	IITG 37	23	14
	IITR 35	20	15
Total=		128 (47.58%)	141 (52.42%)
New IITs (N=9)	IITBBS 10	6	4
	IITGN 34	25	9
	IITRPR 12	10	2
	IITI 10	7	3
	IITBHU 36	28	8
	IITPKD 12	8	4
	IITTP 8	7	1
	IITISM 15	8	7
	IITGOA 8	8	0
Total=		107 (73.80%)	38 (26.20%)
Grand Total=		235 (56.76%)	179 (43.24%)

(Source: Compile by Researcher)

Table: 6. Types of Training for use of Embedded Library Services

"Indian Institutes of Technology"		Types of Training Require			
		Personal training	Classroom sessions	Seminar	Model/Self-help lessons
Old IITs (N=7)	IITKGP48	5	1	2	3
	IITB 40	2	1	2	9
	IITK 49	15	3	6	4
	IITM 14	5	0	1	2
	IITD 46	16	2	4	1
	IITG 37	13	4	5	1
	IITR 35	16	1	3	0
Total=		75 (27.88%)	17 (6.32%)	27 (10.04%)	23 (8.55%)
New	IITBBS 10	5	0	0	1
	IITGN 34	10	4	4	4

IITRPR 12	6	2	2	0
IITI 10	4	2	1	0
IITBHU 36	17	3	4	3
IITPKD 12	5	2	0	0
IITTP 8	4	2	1	0
IITISM 15	4	0	1	3
IITGOA 8	4	2	2	0
Total=	**66 (45.52%)**	**20 (13.79%)**	**19 (13.10%)**	**12 (8.28%)**
Grand Total=	**141 (34.06%)**	**37 (8.94%)**	**46 (11.11%)**	**35 (8.45%)**

(Source: Compile by Researcher)

Table: 7. EL Service Relationship Get starts

"Indian Institutes of Technology"		EL Service Relationship Get starts		
		1	2	3
		Users or Group of Research Team' initiated EL service relationship	Librarian or library manager initiated the service relationship	External circumstances forced the service relationship
Old IITs (N=7)	**IITKGP48**	0	43	5
	IITB 40	5	23	12
	IITK 49	3	30	16
	IITM 14	1	8	5
	IITD 46	5	31	10
	IITG 37	0	23	14
	IITR 35	2	25	8
Total=		**16 (5.95%)**	**183 (68.03%)**	**70 (26.02%)**
New IITs (N=9)	**IITBBS 10**	0	9	1
	IITGN 34	0	22	12
	IITRPR 12	1	7	4
	IITI 10	0	9	1
	IITBHU 36	0	32	4
	IITPKD 12	2	9	1
	IITTP 8	2	1	5
	IITISM 15	0	15	0
	IITGOA 8	**1**	**7**	**0**
Total=		**6 (4.14%)**	**111 (76.55%)**	**28 (19.31%)**
Grand Total=		**22 (5.31%)**	**294(71.02%)**	**98 (23.67%)**

(Source: Compile by Researcher)

Figure: 1. Multiple bar diagram showing the Purpose of Embedded Library Services
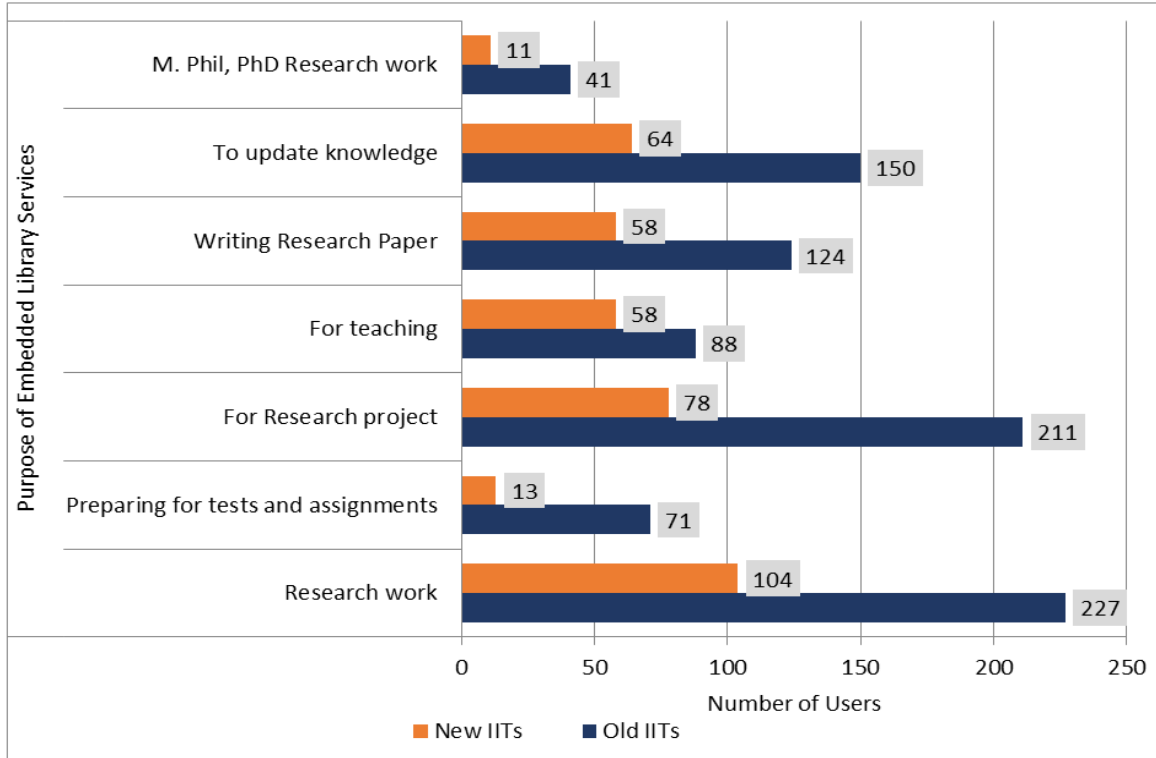
Figure: 2. Multiple bar diagram showing the Delivered Embedded Library Services
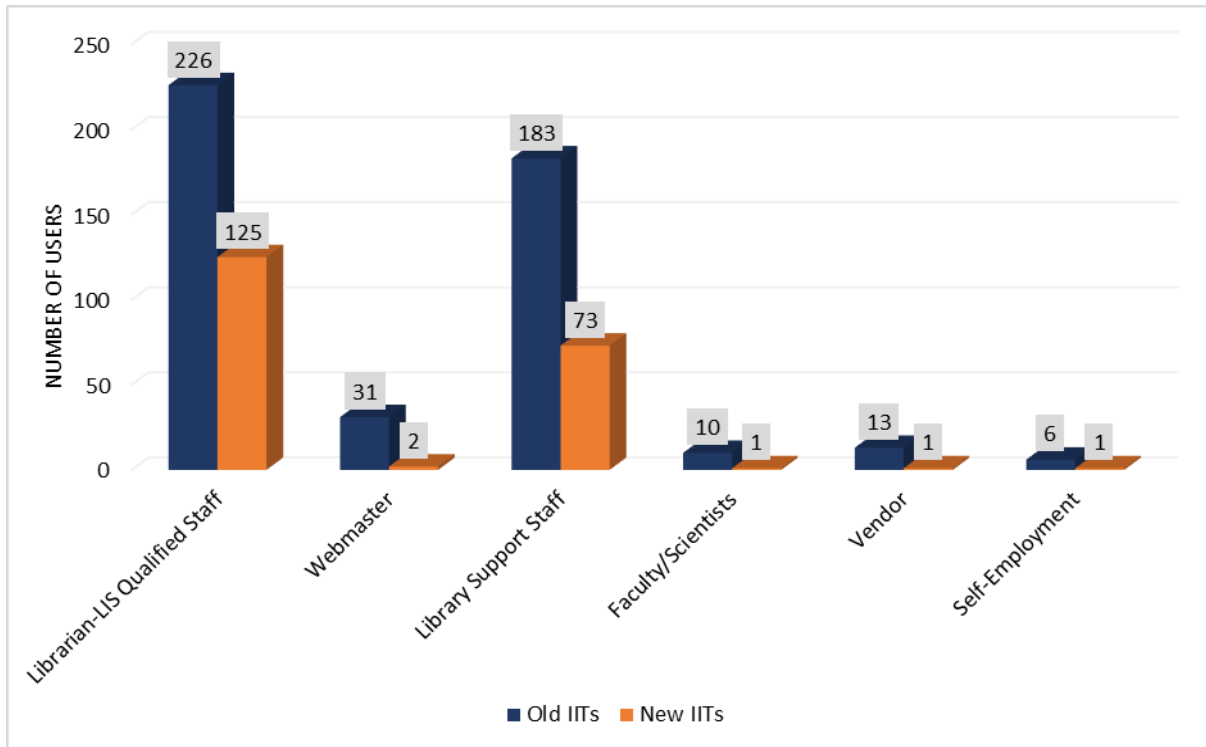
Figure: 3. Multiple bar diagram showing the Training for use of Embedded Library Services
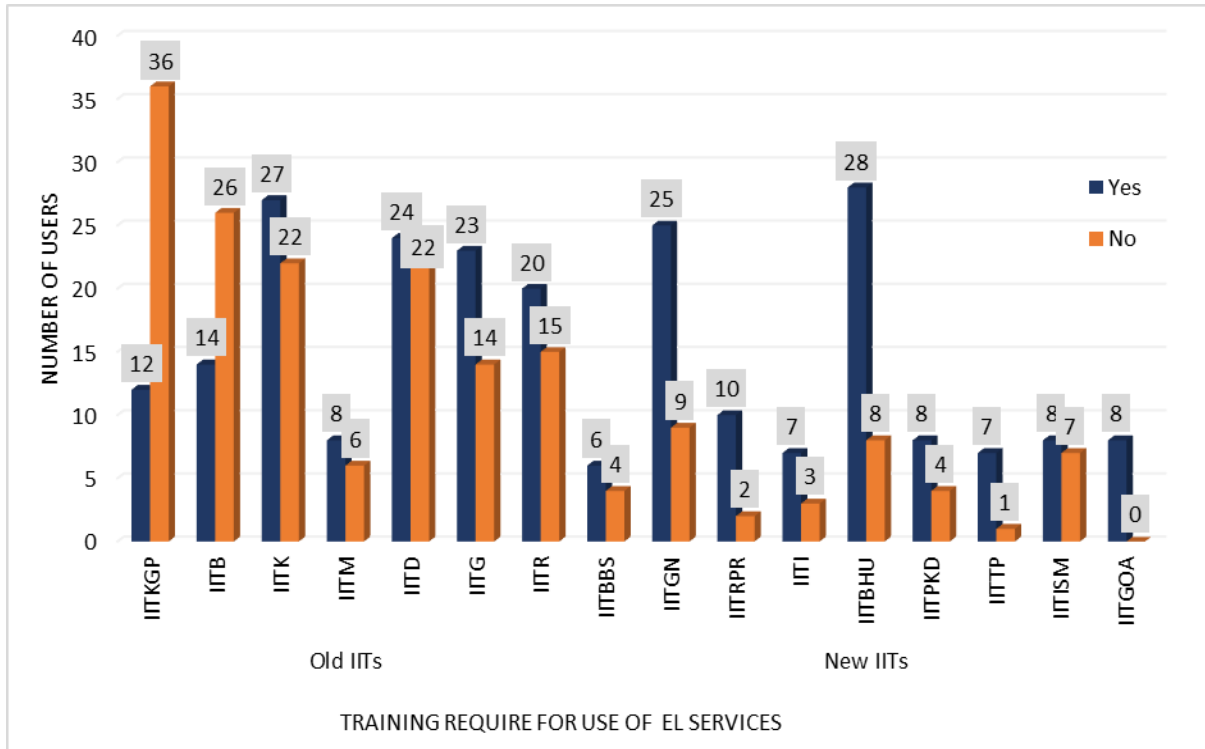

Figure: 4. Multiple bar diagram showing EL Service Relationship Get starts