MANAGEMENT OF OBSOLETE GREY LITERATURE IN ENGINEERING RESEARCH INSTITUTIONS

By

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ABSTRACT

[Paper depicts the findings of the survey research covering 65 engineering institutions which are recognised as research centres in the state of Karnataka, India. Responses have been sought from research supervisors and research scholars as to the extent of the use of obsolete grey collections. Opinions have also been captured from the chief librarians of the 65 research institutions as regards the ways of managing the obsolete grey literature. Study focuses on : Demand for GL in engineering sciences and technology ;Grey Literature collection in English and Foreign languages ;Weeding-out of obsolete grey literature ; Reasons for weeding out of old GL collections and Extent of the use of old GL collections.

The findings also project the practical methods followed by various libraries as to the weeding out process. The study is based on the opinions expressed by 1270 researchers, which account for 84.6% of the total population. The summary or core of findings eventually shows that 66.4% of the research supervisors and research scholars hold the view that old collection of GL is of vital source for their research and has to be retained along with active collections in the libraries.]

[KEY WORDS: Grey Literature, Obsolescence; Grey Literature, Weeding out; Grey Literature, Engineering Institution Libraries]

Introduction

Grey literature is gaining importance in the sphere of research and development in engineering sciences and technology. Grey resources are produced in limited number of copies and are circulated in a limited circle of users. However, the researchers rely upon them to a greater extent. This trend of producing limited number of copies and not marketed through normal book selling channels makes the researchers rely upon regional libraries (RL).

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In the present study, an attempt is made to study the use pattern of GL, especially the use of old collections of GL available in the engineering institutions in the State of Karnataka. 65 institutions have been recognized as research centres by the Visvesvaraya Technological University. The study also aims at identifying the necessity of weeding out process followed in these libraries and the method of maintaining the weeded out / relegated GL collections.   Questionnaires were administered to the following respondents to obtain relevant data/ opinion on the topic of study.

1. The Chief Librarians of the 65 engineering institutions which are recognized as research centres.

2. 340 faculty members who are the research supervisors engaged in research activity in these 65 institutions and

3. 930 research scholars who are actively engaged in either full time or part time research, leading to the award of doctoral degree.

The percentage of total response in the present study is 84.6.

Table 1 here below depicts 9 disciplines identified for research and the number of institutions engaged in research in these disciplines.

Table 1
Institutions Engaged in various Disciplines of Research

Sl. No.	Disciplines of Research	No. of Institutions	Percentage
01	Civil Engineering	26	19.6
02	Mechanical Engineering	31	23.3
03	Electrical Engineering	17	12.8
04	Electronics and Comm. Engineering	18	13.6
05	Computer Science and Engineering	15	11.2
06	Chemical Engineering	06	4.5
07	Textile and Silk Technology	03	2.2
08	General Science	06	4.5
09	Business Administration	11	8.3
	Total	**133**	**100**

Among the disciplines, mechanical engineering and civil engineering departments are more in number representing 23.3% and 19.6% respectively. However, textile and silk technology subject is offered for research only in 3 institutions representing 2.2%.

Table 2

GL collection in the Libraries

Sl. No.	Category of GL	Number	Percentage
01	Theses	793	0.6
02	Dissertations	79845	60.6
03	Institutional Publications	9499	7.2
04	Trade Literature	3021	2.3
05	Technical Reports	22181	16.8
06	Proc. of CSW	16456	12.5
	Total	**131795**	**100%**

Table 2 shows the collection of GL in the 65 engineering institutions. Six categories of GL is identified for the study and the table depicts that the total collection in these institution libraries is 131795. The collection of dissertations being the highest in number account for 60.6%. Technical reports and proceedings of conferences, seminars and workshops are in considerable percentage representing 16.8% and 12.5% respectively in the total holdings of the grey literature covering the 65 institutions. The theses volumes are 796 in number representing just 0.6% because prior to the year 2003-04 the theses were submitted to the state universities for the award of doctoral degree. Since the year 2004 the theses volumes have been submitted to VTU. Hence, the number is the least among the categories of GL considered for the study.

Table 3

Libraries Possessing GL Collection in Foreign Languages

S. No	Libraries Possessing GL in Foreign Languages	Govt. Institutions	Aided Institutions	Private Institutions	Total
01	Positive Response	2 33.3%	Nil	9 18.0%	11 16.9%
02	Negative Response	4 66.7%	9 100%	41 82.0%	54 83.1%
	Total	6 100%	9 100%	50 100%	65 100%

Table 3 depicts the number of libraries which possess GL collection in foreign languages. 11 institutions possess GL in foreign languages which account for 16.9%. Among the government institutions, 33.3% possess GL in foreign languages. From this it is clear that GL collection in foreign languages is not given priority in majority of the institutions. It is only Indian Space Research Organization and Indian Institute of Astro-physics which come under government organization possess adequate and relevant collection of GL in foreign languages. In rest of the institutions, the GL in foreign languages is not the felt need. There are 9 private institutions which possess GL in foreign languages. However, the relevancy and up- datedness is not appreciated.

Table 4

User-wise Frequency of Access and use of GL

S. No.	Frequency	Research Supervisor	Research Scholars	Total
01	Most frequently	20 (5.9%)	67 (7.2%)	87 (6.8%)
02	Frequently	189 (55.6%)	519 (55.8%)	708 (55.8%)
03	Moderately	98 (28.8%)	279 (30.0%)	377 (29.7%)
04	Occasionally	31 (9.1%)	64 (6.9%)	95 (7.5%)
05	Not at all	2 (6.0%)	1 (0.1%)	3 (0.2%)
	Total	340 (100%)	930 (100%)	1270 (100%)

Table 4 projects the extent of access and use of GL collection available in the engineering institutions. It is really encouraging to note that 62.6% of the researchers use GL collections either frequently or most frequently. Just 7.5% of the researchers have expressed that they need GL occasionally, only 3 respondents among 1270, representing mere 0.2% opine that they seldom need grey literature for their research. From this it can be concluded that a large segment of respondents rely upon GL for research purposes.

Table 5

Response on the Use of Old Collection of GL

S. No.	Response on use of old GL collection	Research Supervisor	Research Scholars	Total
01	Positive, yes, useful	277 (81.5%)	661 (71.1%)	938 (73.9%)
02	Negative, No. not useful	63 (18.5%)	269 (28.9%)	332 (26.1%)
	Total	340 (100%)	930 (100%)	1270 (100%)

As regards use of old collection of GL in the engineering institutions, it is highlighting that 81.5% of the research supervisors and 71.6% of the research scholars access old collections. Among the entire population of respondents, 73.9% have offered positive response stating that old collection is of use for research. A small segment comprising 26.1% opines that old collection of GL is not at all useful. From this it can be inferred that old collections of GL is useful according to the opinion expressed by the researchers.

Table 6

Extent of Obsolete GL collections in the Libraries

Category of GL	Extent of Obsolescence				
	100%	75%	50%	25%	Nil
Theses	5	6	21	25	8
Dissertations	4	18	20	11	12

Institution Publications	4	15	19	17	10
Trade Literature	7	21	21	13	3
Technical Reports	2	7	24	22	10
Proc. of CSW	3	7	18	25	12

Table 6 furnishes the extent of obsolete collection according to the librarians working in the 65 libraries of the research institutions. The data in the table depicts that dissertations and trade literature collection are outdated to a considerable extent. 42 librarians hold the view that dissertations available are outdated in the range between 50%, 100%, and 49 librarians are of the opinion that the trade literature collection is out dated in the range between 50% and 100%. It is also clear that theses, technical reports and proceedings of conferences, and seminars and workshops are not outdated in the higher range according to the contention of the respondent librarians. Therefore, it is worthwhile to weed out/ relegate dissertations and trade literature from time tot time in order to make provision for easy access to the active collection (recent additions).

Table 7

Weeding out / Relegation of Obsolete GL

S. No	Response on weeding out	Govt. Institutions	Aided Institutions	Private Institutions	Total
01	Positive Response	Nil	4 (44.4%)	9 (18.0%)	13 (20.0%)
02	Negative Response	6 (100%)	5 (55.6%)	41 (82.0%)	52 (80.0%)
	Total	6 100%	9 100%	50 100%	65 100%

Table 7 projects response of librarians on the weeding out process. 13 librarians representing 20.0% have offered positive response stating that they periodically weed out old / obsolete collections of GL. The remaining 52 librarians representing 80.0% have responded negatively. Again, among the librarians of the aided institutions, 44.4% weed out old GL collections

periodically.   From this it is clear that considerable percentage of institutions which are getting government aid, weed out the old collections of GL.

Table 8

Weeding out of Obsolete GL
(as per year of establishment of the institutions)

S. No	Response on weeding out	Year of Establishment			
		1980	1981-2000	2001-2010	Total
01	Positive Yes weed out	9 (32.1%)	2 (11.8%)	2 (10.0%)	13 (20.0%)
02	Negative Don't weed out	19 (67.9%)	15 (88.2%)	18 (90.0%)	52 (80.0%)
	Total	28 (100%)	17 (100%)	20 (100%)	65 (100%)

Table 8 shows response of librarians on weeding out process. The data in the table is furnished is as per the year of establishment of the institutions. It is clear from the table those 9 libraries which were established prior to 1987 weed out old collection of GL periodically.   The institutions which were established prior to 1981 possess large number of GL collections and hence the need to weed out from time to time.   As the recently established institutions possess limited number of GL collection, the necessity of regular weeding out process does not arise.

Table No. 9

Opinion on Weeding out of Obsolete GL

S. No	Response	Govt. Institutions	Aided Institutions	Private Institutions	Total
01	Yes, weed out	12 (41.4%)	105 (28.4%)	302 (34.7%)	419 (33.0%)
02	No. Don't weed out	17 (58.6%)	266 (71.6%)	568 (65.3%)	857 (67.0%)
	Total	29 (100%)	371 (100%)	870 (100%)	1270 (100%)

As regards opinion of researchers on the weeding out process, a large segment representing 67.0% has responded negatively.   According to them the old collection of GL is of value for research. 33.0% have given positive

response favouring periodical weeding out process. The researchers from government institutions are in favour of regular weeding out process. The respondents from government institutions who have offered positive response account for 41.4%. On the other hand, the respondents from aided institutions who have offered positive response account for just 28.4%. Hence, majority of the researchers opine that old collections of GL need to be retained and they should not be either relegated or weed out as they also form vital source of information for research.

Table 10

Periodicity of the Weeding out Process

S. No	Periodicity	Govt. Institutions	Aided Institutions	Private Institutions	Total
01	Annually	Nil	Nil	1 (11.1%)	1 (7.7%)
02	Once in 3 years	Nil	Nil	3 (33.3%)	3 (23.1%)
03	Once in 5 years	Nil	1 (25.0%)	2 (22.3%)	3 (23.1%)
04	Once in 10 years	Nil	3 (75.0%)	3 (33.3%)	6 (46.1%)
	Total	Nil	4 (100%)	9 (100%)	13 (100%)

Table 10 depicts periodicity of the weeding out process in the 13 institutions. One of the institutions representing 7.7% weed out obsolete GL collection annually. 23.1% weed out once in 3 years. Another segment of 23.1% weeds out once in 5 years. Further, a large segment of the institutions representing 46.1% weed out once in 10 years. From this it is clear that the necessity of weeding out of old collection of GL is not noticed among the large number of libraries of engineering institutions.

Table 11

Reasons for Weeding out of GL collections

S. No	Reasons for weeding out of GL	Govt. Institutions	Aided Institutions	Private Institutions	Total
01	Lack of space	Nil	4	8	12

S. No.				(100%)	(88.5%)	(92.3%)
02	Out dated contacts	Nil		2 (50%)	1 (11.1%)	3 (23.0%)
03	Unused by the members	Nil		3 (75.0%)	1 (11.1%)	4 (30.7%)

With reference to the reasons for the weeding out process, 20% of the librarians quote the reason of lack of space in their libraries, 23.0% state the reason that the contents of the old volumes of GL are out dated. Yet another segment of respondent librarians representing 30.7% opines that the old collections are unused by the library members. Yet another reason expressed by the librarians is that there is need to make provision for browsing active collections (recent additions) in the library, which account for 72.3%. Therefore, a large majority of the librarians opines that weeding out is on account of making adequate space for browsing active collections of grey literature.

Table 12

Response on Scatter of GL at Different Places

S. No.	GL is scattered and difficult to trace	Research Supervisor	Research Scholars	Total
01	Yes	56 (16.5%)	182 (19.6%)	238 (18.7%)
02	No	284 (83.5%)	748 (80.4%)	1032 (81.3%)
	Total	340 (100%)	930 (100%)	1270 (100%)

Table 12 shows response of researchers on the scatter of GL in the libraries. Only a small percentage of researchers representing 18.7% opine that the GL is scattered in their libraries and difficult to trace. However, a large segment of researchers representing 81.3% find it comfortable as regards the organization of GL and there is no difficulty in locating the needed GL collections. Hence, it can be inferred that a large majority of the respondents find it easy to locate GL in the engineering institute libraries.

Table 13

Training Requirement Projected by Librarians

S. No.	Response on training need	No. of Librarians
01	Positive	57 (87.7%)
02	Negative	8 (12.3%)
	Total	65 (100%)

As regards training requirement of librarians, an overwhelming majority representing 87.7% intends to attend training in order to efficiently manage GL collections. A small portion of librarians amounting to 12.3% does not need any training at all.

Table 14

Extent of Training Needed for Librarians

S. No.	Year of Establishment of Engineering Institutions.	Highly	Moderately	Slightly	Total
01	Till 1980	20 (80%)	4 (16%)	1 (4%)	25 (100%)
02	1981 to 2000	9 (64.3%)	4 (28.6%)	1 (7.1%)	14 (100%)
03	2001 to 2010	12 (6.7%)	6 (33.3%)	Nil	18 (100%)
	Total	41 (100%)	14 (100%)	2 (100%)	57 (100%)

Further, table 14 depicts the extent of training needed by the librarians. However, 20 librarians of the institutions which were established prior to 1981 have expressed that they need intensive training. This group of respondents account for 80% among old institutions. Further, 14 librarians need training to a moderate extent. Therefore, it can be deduced that a large majority of the librarians need intensive training.

SUMMARY OF FINDINGS AND RECOMMENDATIONS:

➢ 62.6% of the researchers frequently access GL

- Trade literature and dissertations form major part of obsolete collections in the libraries
- 73.9% of the users also use old collections of GL for research
- 33% of the researchers recommend for weeding out process
- Only 20% of the libraries weed out old GL collections periodically. Majority of these libraries were established prior to the year 1981
- 72.3% of these libraries weed out to accommodate active collection. 20% move obsolete collections to secondary sequence.
- Dissertations of students and trade literature lose value in time and may be weeded out periodically.
- Theses, technical reports and proceedings of CSW form vital source for research. Sharing of the Proceedings of CSW is the felt need among the researchers. These sources may be taken up on priority for digitization and resource sharing programs.

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