Information Sources and Channels Utilized Pattern of Sri Lankan School Teachers in Information Seeking

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ABSTARCT

Introduction: The purpose of this study is to investigate school teachers' preferred information sources, communication channels, format of information and language use when seeking information. It examined the frequency of use of information sources, the reasons to use such information sources and problems encounter while seeking information as well.

Design/methodology/approach: The population of the study consisted of school teachers in government schools in Sri Lanka. The sample consisted with 440 teachers and cluster sampling method was applied for the sample selection. A self-administered questionnaire was used as the main data collection tool and the received data were analyzed by using SPSS (21.0)

Findings: It is shown that the internet, professional books, library and the personal knowledge were the top four most preferred information sources used by the teachers. The quality, reliability and accessibility were the main attributes considered when selecting sources of information. Internet based services found to be the most preferred communication channel while they mostly prefer to use both formats and both languages (Sinhalese and English) and inadequate materials and unavailability of electronic resources in the school library were identified as the main problems encounter by the teachers when seeking information..

Originality: The study was unique in the sense that no study has previously been done in use of information resources for teaching purposes by school teachers in Sri Lanka and it provided an original contribution to the existing body of knowledge.

Paper type: Research paper

Key words: Information sources, Use of resources, School teacher, Teaching, Sri Lanka

1. Introduction

The examination of information resources usage of school teachers is indispensible in providing required information services to meet their information needs.Information sources can be defined as the physical or digital material that available in a various medium for proving possible information. (Ingwersen&Järvelin, 2005, p.387) Information can be acquired from virtually anywhere: it can be through books, journals, blogs, personal experiences, grey literature, newspapers, government publications, bibliographical databases, OPAC (Online Public Access Catalogue), opinions of experts, CD-ROMs, theses and dissertations, databases, electronic resources, encyclopedias, and web pages.

Information sources can also be distinguished as external and internal sources, human and documentary sources, or formal and informal sources of information. Information is accessed through various channels (e.g. mass media, and the internet) from various sources (e.g. colleagues, and text books). An information source contains relevant information whereas a channel guides the user to pertinent sources of information (Byström&Järvelin, 1995,p.193). These resources encompass the learning resources and relevant teaching materials that are available both in print and electronic format. These sources may be existed in different language as well. School teachers may need different types of information sources in different format and in different language which can be accessed through different communicationchannel.

School teachersrequire various types of knowledge base such as content knowledge; pedagogical knowledge, curriculum knowledge and learners background information (Shulman, 1987, p. 7) to perform well in teaching profession. Investigation of the way of obtaining the required knowledge and understanding the challenges or factors that impede for information seeking process of the teachers would be important because it provides valuable guidance for improvement of the existing information services. Having a better understanding of teachers' information resource usage, particularly preferences and frequency of use of information sources, will be the first step in being able to develop research-based information sources that will be utilized by them. Improving teachers' knowledge utilization of education research and information may result in better learning environments and educational success for learners as well.

On the other hand, when developing an appropriate information service for users, understanding of information resource usage and information seeking behavior of the target users is a must. Fourie (2006) suggested that examining the information usage and information seeking behaviour of a specific target group is the first step in planning information literacy and empowerment programs, and recommended that ongoing research needs to learn more about specific user groups. Loeber and Cristea (2003) recommended examining why users are seeking information in order to improve the design of information systems. Little is known about the information seeking needs and searching behaviours of pre-kindergarten through Grade-12 teachers. A better understanding of the information resource usage of teachers could lead to the development of better designed information systems to meet their information needs (Small *et al*., 1998). This may be attained only through appropriate research.

Moreover, it was identified from the literature that no studies have yet been conducted and this study was unique in the sense that no study has previously been done in use of information resources for teaching purposes by school teachers in Sri Lanka. The present study specifically focused on school teachers' preferences for the use of information sources, communication channels, format of information and language and this area of research had not been explored much before as far as the information science field is concerned. Therefore, the study was original in the field of information science and provided an original contribution to the existing body of knowledge. This study certainly will be a guide for policy makers availing better and effective ways that information can be provided and upgrade information services to meet school teachers' information needs that required for quality education in a country. The research outcomes could be used as guidelines for establishing efficient and effective information provision through libraries, web based services and information centers for the school teachers.

Consequently, the central focus of this study is to investigate the way of seek information by school teachers in Sri Lanka in order to have a better understanding of their preferences on use of information sources, communication channel, format, language and the obstacles that affected for their information seeking process. This type of information is imperative for designing and providing effective and efficient information services for them. (Kuhlthau, 2004, p.13) Therefore, investigating the usage of information sources by school teachers would certainly

help to understand their requirements properly and provide an appropriate information service to fulfill their information needs.

2. Research Objectives

The overall objective of this study is to gain insights into the information resources do teachers use when seeking information for teaching. The specific objectives of this study are:

1. To examine the preferred sources of information use by teacherswhen seeking information
2. To examine the frequency of use of information sources by the teachers
3. To find out the reasons to use such information sources
4. To study the preferred communication channel use by the teachers
5. To study the preferred information format do teachers prefer to use
6. To examine the preferred language do teachers prefer to use when seeking information
7. To identify problems encounter by the teachers when seeking information

3. Research Questions

The study aims to address the following research questions:

1. What are the preferred information sources do teachers uses in information seeking?

2. What is the frequency of use of information sources?

3. What are the reasons to use such information sources?

4. What communication channel, do teachers prefer to use when seeking information?

5. What information format do teachers prefer to use   when seeking information

6. What language do teachers prefer to use   when seeking information

7) What problems do the teachers encounter when seeking information?

4. Review of related literature

The review of related literature on teachers' information usage would helpto build the conceptual framework for the focus on information sources. In general, professionals pursue information from different sources for mastering specialized knowledge for performing their role and responsibilities in a standard manner. Therefore it is needed to identify the sources of information that used by the teachers to execute their professional tasks.

According to Meyers (Meyers et al., 2007, p.5), teachers used numerous sources of information to meet their information needs. Uwaifo and Eiriemiokhale (2013, p. 8) observed that teachers obtain varous benefits from the use of electronic information resources. In the same vein, Tanni (Tanni et al., 2008) established that both print and electronic information formats are used by the teachers and they used Google and Wikipedia more often than other internet sources.

Summers (Summers *et al*., 1983), found that the educators mostly depend on conventional sources like colleagues, libraries and text books which are available proximity. In the study conducted by Attafuah (2015) found that printed books and other monographs are the main sources of information used by the teachers because of their availability. In addition to that, these sources are helped for lesson planning and allowing teachers to provide quality notes for their learners.(Attafuah, 2015)

Consistent with the above studies, Sànchez and Valcàrcel (1999) and Nwokedi and Adah (2009) found that teachers mostly use text books which are prescribed forstudents and magazines and other text books if the information contain in the prescribed text books are not sufficient or the content of the text books are false or not acceptable. Moreover, teachers do modify or add to the content of text books by using their subject knowledge and expertise. (Sànchez and Valcàrcel , 1999)Similarly, Fazlul-Haq, (1976) also found that teachers mostly refer text books for lecture notes preparation and in order to obtain current information and latest advancement of subject knowledge they use journals, research reports and conference proceedings.

Conroy (Conroy et al., 2000) found that teachers seek information from various sources and the internet, CD-ROMs, Videos and the mass media are top most preferred by them. By confirming the above findings, Mundt (Mundt et al., 2006, p. 9) said that teachers use different types of information sources such as curriculum materials, colleagues, workshops, seminars and meeting notes. They further established that teachers communicate with students and use their personal notes and files as source of information for assessing students. Consistent with the above studies, Merchant and Hepworth (2002, p. 82) affirmed that print sources, particularly would help to strengthen a framework for the topic, enhance subject knowledge to be taught or for actual information. In addition to that, teachers use the internet, subject journals, magazines and mass

media (television and newspaper) to get current and extra information that not contained in text books.

Williams & Coles (2007) and Kirby &Bogotch (1996) indicated that most of the teachers depend on the resources of information that readily available in schools such as colleagues, practical events, newspaper and reports. Perrault (2007) stated that teachers use their personal notes, handouts, audio-visual materials and previous tests papers for lesson planning which are also readily available at schools. Consistent with the above studies,Diekema and Olsen (2011) established that the teachers found information for their teaching using a combination of physical and digital approaches, however, they did not use resources designated expressly for their use- their school library, relying on their own collection and immediate colleagues instead.

Shanmugam (1999) has investigated the information seeking behaviour of trainee teachers and he found that more than half of the teachers moderately expressed positive feelings for seeking information while they mostly preferred informal and interpersonal information sources to satisfy their information needs. The study conducted by Bitso (2011) among the geography teachers found that they mostly use face- to - face communication and telecommunication, particularly SMS from the mobile phone as communication channels. The geography teachers considered the internet as the prime source which provideslatest and diverse information that required for their teaching. (Bitso, 2011)

It is evident from the literature reviewed that the school teachers mostly used informal information sources such as colleagues, personal knowledge and they mostly used curriculum related materials such as text books prescribed for learners and other related sources for fulfill their professional information needs.

5. Methodology

The study population was in- service graduate school teachers in government schools in Sri Lanka and it was decided the cluster sampling as the appropriate technique to select the study sample as the graduate teachers who are scattered in various schools in different geographical

areas of the country. It was determined the sample size to be 382, according to the Krejcie and Morgan's' Table. However, this study has oversampled an additional of 15% samples to the required sampling size and a total of 440 were sampled and the sample was drawn from the teachers who follow postgraduate courses at the Department of Education, University of Peradeniya, Sri Lanka. A self-administered questionnaire specifically designed for the study was used as the main data collection tool for the study. Data collection was carried out during the early September 2017 and the collected data were using SPSS software package (version 21.0).

6. Data analysis, Findings and Discussions

In order to answer the research questions the researcher used descriptive statistics such as percentages, frequencies, means and standard deviations.

6.1 Demographic characteristics of the respondents

The questionnaires were distributed among 440 teachers and 318 returned and used in the data analysis and this gives a response rate of 72.27%. As it can be gleaned from the table 1, the majority of the sample (88 %,) was female and male comprised only 12%. With regard the age of the respondents, 57.5% of respondents were 31-40 years of age, with the remainder being 20-30 (20%,) or 41-50 (19.5%,) . Only 8 respondents (2.5%) were more than 50 years of age. It is further evident from Table 1, more than half of the respondents (52%) reported having been teaching profession for 1-5 years. Teachers who had been in the profession for 6-10 years made up 23.6% of the sample, followed by those who had been in the profession for more than ten years.(23.9%). Only 2 respondents reported that they have working in the profession less than 1 year.

Table 1: Demographic and professional characteristics of the respondents

1	Gender	Frequency	Percentage
	Male	39	12.3
	Female	279	87.7
	Total	318	100
2	Age	Frequency	Percentage
	20-30 years	65	20.4
	31-40 years	183	57.5
	41-50 years	62	19.5
	More than 50	8	2.5

	Total	318	100
3	**Work experience**	**Frequency**	**Percentage**
	Less than 1 year	2	0.6
	1-5 years	165	51.9
	6-10 years	75	23.6
	More than 10	76	23.9
	Total	318	100.0

6.2. Information Sources Used by School Teachers

The first research question of the study is: What are the preferred sources of information that use by teachers? To address this question the research participants were asked to indicate the preferred sources of information that used in information seeking. The respondents were asked to rate how much they preferred eight different information sources on a scale from 1 to 5, where 1 indicated "Not preferred at all" and 5 indicated "Most Preferred". The eight items identified as information sources were tested for its reliability, and the Cronbach's alpha value was 0.614 for the all sources of information.

The descriptive statistics for each item (frequencies, means, and standard deviations) of preferred sources are presented in Table 2 below.

Table 2 Descriptive Statistics of Preferred Information Sources (Multiple responses allowed)

	Source	NPA	NP	NUT	PR	SP	Total	*Mean	SD*
1	Internet	2(0.6)	4(1)	31(10)	116(37)	151(48)	304	4.35	.769
2	Professional books	00	6(2)	44(14)	145(46)	112(35)	307	4.18	.745
3	Library	00	9(3)	42(13)	143(45)	113(36)	307	4.17	.771
4	Personal knowledge	00	4(1)	34(11)	171(54)	95(30)	304	4.17	.669
5	Workshops /conferences	5(2)	7(2)	62(20)	138(44)	94(30)	306	4.01	.866
6	Magazines/ newsletters	00	14(4)	59(19)	161(51)	73(23)	307	3.95	.782
7	Newspapers	6(2)	13(4)	52(16)	160(50)	76(24)	307	3.93	.872

8	Colleagues	10(3)	32(10)	122(38)	122(38)	18(6)	304	3.35	.869
Scale: (1) NPA= Not Preferred at All, (2) NP= Not Preferred, (3) NUT= Neutral, (4) PR = Preferred, (5) SP= Strongly Preferred. Mean*= Mean score ,SD*= Standard Deviation									

Source: Primary data

As it can be gleaned from the Table 2, eighty five percent of respondents (N=267) reported that they prefer or strongly prefer to use the internet while 91% of them either prefer or strongly prefer to use professional book as source of information with having high mean scores of 4.35 and 4.18 respectively. More than eighty percent of the respondents (81%) prefer to use library followed by, 84% of prefer to use their personal knowledge or experience as source of information with having 4.17 mean score.

Moreover, seventy four percent of the respondents prefer to use workshops, magazines and newspapers as sources of information with having means scores of 4.01, 3.95 and 3.93 respectively. In terms of colleagues, only 44% of the respondents marked their preference while 13% were not preferred and 38% were neutral which gave insight that colleagues are not considered as important source of information.

The least preferred information source among the sources mentioned in the survey was a colleague (Mean 3.35) which is contradictory with previous research findings that found colleagues as the most preferred source of information of school teachers. (Williams & Coles, 2007: Khan &Shafique, 2011: Diekema& Olsen, 2014) From the analysis it could be concluded that teachers mostly preferred to use the internet than other information sources.

6.3 Frequency of Use of Information Resources

The second research question is: What is the frequency of use of information sources? To address this question, the respondents were asked to mark the frequency oftheir use of information resources and they were asked to choose the frequency level for each source from a five-point Likert scale ranging from "Never" to "Always". Table 3 provides descriptive statistics about the frequency of use of information resources by the teachers.

As shown in Table 3, fourty five percent of the respondents (N=144) frequently and 29% (N=29) always use professional books with having 3.98 mean score while 73% (N=231) of them either frequently or always use the Internet for seeking information. Other than the professional books and the internet the breakdown of the outcomes revealed that the teachers use library (41%) more frequently as method for sought information. Moreover, fourty six percent (N=145) of the respondents more frequently and 16% (N=52) always used their own knowledge as information source whilst 41% (N=130) and 17% (N=53) respectively used newspapers as source of information. In addition to that 44% (N=140) of the respondents frequently and 13% (N=42) always use magazines or newsletters as source of information. When compared to other resources colleagues and workshops were not much frequently used by the teachers.

Table 3: Frequency of Use of Information Resources

	Source	Never	Rarely	Occasionally	Frequently	Always	Total	Mean	SD
1	Professional books	3(0.9%)	14(4%)	60(19%)	144(45%)	91(29%)	312	3.98	0.867
2	Internet	6(2%)	25(8%)	50(16%)	137(43%)	94(30%)	312	3.92	0.976
3	Library	6(2%)	23(7%)	80(25%)	129(41%)	74(23%)	312	3.78	0.956
4	Personal knowledge	3(0.9%)	23(7%)	89(28%)	145(46%)	52(16%)	312	3.71	0.865
5	Newspaper	7(2%)	33(10%)	87(27%)	130(41%)	53(17%)	310	3.61	0.965
6	Magazine or newsletter	00	42(13%)	88(28%)	140(44%)	42(13%)	312	3.58	0.885
7	A colleague	5(1.6%)	40(13%)	160(50%)	83(26%)	22(7%)	312	3.45	2.59
8	A presentation, work-shop, training or conference	27(8.5%)	47(15%)	86(27%)	104(33%)	44(14%)	308	3.30	1.153

Source: Primary data

6.4. Reason for Using Information Sources

 The third research question is: What are the reasons to use such information sources? To address this question, respondents were asked to provide reasons for preferring one source of information

over the other. The respondents were asked to rate how much they agreed on nine reasons on a scale from 1 to 5, where 1 indicated "Strongly Disagree" and 5 indicated "Strongly Agree". Descriptive statistics of their responses are presented in Table 4.

Table 4: Descriptive Statistics of Reasons of Use Information Sources

	Reason	SDA	DA	NU	AG	SA	RS*	MN*	SD*
1	Because these resources are applicable for teaching	00	13(4%)	71(22%)	135(43%)	81(26%)	300	3.95	0.824
2	Because these resources are quality	00	12(4%)	86(27%)	148(47%)	57(18%)	303	3.83	0.776
3	Because these resources are reliable	2(0.6%)	23(7%)	92(29%)	126(40%)	62(20%)	305	3.73	0.892
4	Because these resources are easy to access	6(2%)	11(4%)	117(37%)	112(35%)	59(19%)	305	3.68	0.893
5	Because these resources are relevant	00	24(8%)	110(35%)	124(39%)	47(15%)	305	3.64	0.836
6	Because these resources are current	2(0.6%)	41(13%)	112(35%)	121(38%)	31(10%)	307	3.45	0.871
7	Because these resources are familiar	12(4%)	39(12%)	96(30%)	124(39%)	32(10%)	303	3.41	0.976
8	Because these resources are readily available in school	19(6%)	45(14%)	116(37%)	104(33%)	23(7%)	307	3.22	0.994
9	Because these resources are affordable	21(7%)	60(19%)	109(34%)	99(31%)	16(5%)	305	3.10	1.000
Scale : (1) SDA= Strongly Disagree; (2)DA= Disagree; (3) NU= Neutral; (4) AG= Agree; (5) SA= Strongly Agree; RS*= Number of Responses: MN*= Mean Score; SD*= Standard Deviation									

Source: Primary data

As revealed in the Table 4, sixty nine percent of the respondents (216) either agree or strongly agree with the statement that stated they consulted those sources because these are applicable for

teaching followed by 65% of the respondents (N=205) mentioned that they consulted these resources because of the quality while 60% (N=188) used the resources because of the reliability.

In addition, hundred and seventy one (171), representing 54% of the respondents indicated that they consulted those sources because of easy access and relevant to their teaching activities while 49% and 48% consulted these resources because they were familiar and also were current respectively. (Table 4) The results further revealed that 40% of the respondents either agree or strongly agree on the statement that stated these resources were consulted because they are readily available in school and 36 % indicated their agreement on statement on these resource were used because of affordability.

The results gave an insight that the main reasons for the teachers' preferences were the quality (65%)and the reliability (60%) of the information sources. Other reasons were easy access (54%), relevancy (49%) and currency & familiarity. (48%)

6.5. Preferred Communication Channel Used when Seeking Information

The fourth sub-question of the second key research question is: What communication channel, do teachers prefer to use in information seeking? To address this question, the respondents were asked to indicate the communication channels used to obtain information to fulfill their information needs and the results are reflected in Table 5.

Table 5: Preferred Communication Channel (Multiple responses allowed)

	Preference	Frequency	Percentage
	Mode of communication*		
1	Internet based (email, Facebook, web chats, wikis, blogs	283	89.0
2	Media (Radio, TV, Newspaper etc.)	266	83.6
3	Cell phone / mobile	265	83.3
4	Face to face discussions	264	83.1
5	Telephone	211	66.4
6	Letters (Postal mail)	112	35.2

N=318		

Note: Multiple responses allowed

Source: Primary data

As depicts in the Table 5, the majority of respondents (89%, N=283) indicated that they mostly prefer to use internet based communication modes such as email, Facebook, web chats, wikis, blogs etc. when seeking professional information. There was an indication of preference of the internet based services by the teachers and the internet access was emphasized under preferred information sources.

The results further revealed that more than 83% of the respondents would prefer to use media, mobile and face to face discussions as communication channel whereas only 66% (N=211) of them prefer to use telephone(fixed lined). From all communication channels, postal mail (letters) was the least preferred communication channel that would give an insight that teachers might be aware of prospects of digital communication as method of communication channel than traditional ones.

6.6. Preferred Information FormatUsed when Seeking Information

The fifth research question is: What information format do teachers prefer to use when seeking information? To address this question, the respondents were asked to mark the preferred format of information that would prefer to search for information. Table 6 presents the preferred information format that used by the teachers when seeking information.

Table 6: Preferred Information Formats

	Format of information	Frequency	Percentage
1	Print only	36	11.3
2	Electronic only	22	6.9
3	Both Formats	247	77.7
	No response	13	4.1
	Total	318	100

Source: Primary data

As revealed in Table 6, the majority (78%, N=247) would prefer to use both electronic as well as print formats when seeking information. Of the respondents, eleven percent (N=36) would prefer to use print format only whereas seven percent (N=22) prefer to use electronic format only.

6.7. Preferred Language Used when Seeking Information

The sixth research question of the study is: What language do teachers prefer to use when seeking information? To address this question, the respondents were asked to mark their preferences on language which used when seeking information and Table 7 indicates the preferred language used by the teachers when seeking information.

Table 7: Preferred Languages Used when Seeking Information

	Preferred language	Frequency	Percentage
1	Sinhalese only	137	43.1
2	English only	18	5.7
3	Both Sinhalese & English	153	48.1
4	No response	10	3.1
	Total	318	100
N=318			

Source: Primary data

As it can be gleaned in the Table 7, majority of the respondents (48%, N=153) use both languages (Sinhalese and English) simultaneously while 43% (N=137) prefer to use Sinhalese (their native language) when searching for information. Only 5.7% (N=18) of the respondents would prefer to use English for searching information and 3% (N=10) of them refrained from responded.

6.8   Problems Encounter when Seeking Information

The seventh research question of the study is:What problems do the teachers encounter when seeking information? In order to address the question, the respondents were asked to indicate the specific problems encountered while seeking information. This study revealed that the teachers mentioned variation of barriers that influenced their informationseeking and the Table 8 presents

the top most ten barriers or problems that were encountered   by the teachers when seeking information.

As it is evident from the Table 8, the majority (86%) of teachers mentioned the lack of relevant materials in the library, followed by 80% mentioned the lack of information on available resources and 78% mentioned the non-availability of e-resources as the problems they faced when seeking information. Moreover, just over three fourth (77%) of the respondents said that the lack of internet access followed by unavailability of required materials (76.7%), lack of computer hardware and software in the school (76.4%) and difficult to find information from existing resources (76.1%) asthe problems they faced when seeking information.

Table 8: Descriptive Statistics of problems encounter(Multiple responses allowed)

	Problem/ barrier	**Frequency**	**Percentage**
1	Lack of relevant materials in the school's library	274	86.2
2	Lack of information about available sources	254	79.9
3	Non availability of electronic resource (e-journals)	248	78.0
4	Lack of access to the internet	245	77.0
5	Required materials are not available	244	76.7
6	Lack of computer hardware & software	244	76.4
7	Difficult in finding information from existing resources	243	76.1
8	Latest information sources are not available/ outdated material	240	75.5
9	Lack of time to search information	240	75.5
8	Information sources are very expensive	225	70.8

Source: Primary data

As explicit further in the Table 8, more than 75% of the respondents said that the library collection consisted with outdated materials and did not have enough time in their day time to search for information. The next most frequent hindrance was related to the cost. Teachers felt that resources were expensive, more than seventy of the respondents (N=225) agreed on that.

7. Conclusion

School teachers in Sri Lanka used wide array sources of information to fulfill their professional information needs. The results established that the most preferred information source of the teachers were professional books and the next preference mentioned was the internet. Next to the books and the internet, teachers mostly preferred to use library as source of information while they used their personal knowledge or experience as source to gain knowledge .The results further identified the workshops, magazines and newspapers also used as preferred sources of information by the teachers.

The findings of the study further revealed that the quality, reliability and easy access were the main factors that considered by the teachers when selecting sources of information to fulfill their information needs. When it comes to information channels, the teachers have a higher preference for the internet based communication modes such as email, Facebook, web chats, wikis, blogs etc. while mass media and mobile were next preference as communication channel. With regard to the information format, most of the teachers preferred to use both formats i.e. print and electronic for seeking information. In the same vein, in terms of preferred language, most of the teachers prefer to use both languages i.e. Sinhalese and English when seeking information.

With regarding the problems, the inadequate materials and unavailability of electronic resources in the school library were identified as the main problems that encounter by the teachers when seeking information. Moreover, the lack of access to the internet, lack of computer hardware &software and difficult in finding information were reported as the most hindrances that encounter by the majority of the respondents.

8. Recommendations of the Study

In consideration the findings of this study, the following recommendations are offered for enhancing the information seeking activities of the teachers, particularly in the school environment. School libraries should be enhanced to empower teachers with the benefit of using information resources in all formats and be proficient in library use. In order for resource development for the library following actions would be considered:

- The government should setup a suitable mechanism to supply latest information sources particularly the books that contain current information as well as different perspectives for the school libraries in regular manner.

- Therefore it is needed to upgrade the school library with necessary information resources and services by empowering school libraries with required knowledge and skills for teachers.

- It is needed to have some core journals for different disciplines for the use of teachers. There should be a mechanism to subscribe some key journals that would enable access for the teachers, because the journals provide current and scholarly information.

- Expanding and updating current collections, especially electronic journals and databases in order to take advantage of the growing online information environment. This can be achieved by adding electronic databases to the list of databases that are subscribed to by the library administration and same time it should make awareness on electronic resources and evaluate of them for the teaching among school teachers.

- A well-articulated and sustained effort is required to provide ICT facilities in Sri Lankan schools and make more accessible to teachers by providing computers with internet access in school libraries.

- Library should develop innovative marketing strategies to promote services offered by the library to the teachers. This would promote communication between the library and the teachers, helping the teachers become aware of what services are available to them as a distinct user group. This would lead to efficient use of the library's information sources and services.

- Establish special division /unit under the Ministry of Education for development of school libraries specially collection development on print and e-resources.

- Clustering of schools for information resource sharing and formulation of a school library consortium for sharing resource is recommended. For that purpose formation of resource

centers for each district to serve a cluster of schools with aiming for resource sharing among schools in the country is needed.

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