

**CURRENT STATE OF INFORMATION LITERACY
AWARENESS AND PRACTICES IN
INDONESIAN PRIMARY AND SECONDARY PUBLIC SCHOOLS:
JAKARTA**

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EXECUTIVE SUMMARY

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The aims of this study are:

1. to assess the awareness and practices of information literacy in public schools in Jakarta
2. to identify the role, readiness, and requirements of school libraries in promoting information literacy
3. to develop suggestion for appropriate action plans for the **involvement of school libraries** in the development of an information literate society

To achieve the above objectives, this study employed mostly survey methods. In addition, interviews were carried out only to confirm and enrich the survey's results.

Schools were selected using stratified sampling. The sampling criteria were the schools' performances in national final exams, since these were more related to information literacy awareness and practices than rural-urban criteria. Unfortunately, there were no national final exams for elementary schools. For these schools we used other criteria. From these schools we were able to obtain responses from 66 school principals, 199 teachers, and 60 persons in charge of libraries.

This study found out that there was still poor awareness and practices of information literacy in public schools under study. There were a lot of improvement of the schools' and libraries' visions, missions, curriculum, resources, and practices in this field.

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Thank you and May God Bless you all!

CHAPTER 1 INTRODUCTION

1.1 Background to Information Literacy

The vast advancement of ICT is speeding up knowledge cycles. A knowledge cycle includes the creation, dissemination, access, uses, and re-creation of knowledge across groups, institutions, nations, and disciplines. With the help of ICT, these activities can easily occur, regardless of time and space differences. As the result, knowledge develops so fast that it is difficult for anybody to keep abreast of the new knowledge even in his or her fields.

Within this information rich environment, having subject knowledge only is thus not adequate. Peoples need to learn also about 'how to learn'. They have to acquire a set of abilities to recognize what and when information is needed, identify and locate the needed information, use and communicate it ethically and effectively. This set of abilities is called information literacy which is actually the vehicle for autonomous and lifelong learning. Information literacy is thus much more important today than ever before.

1.2 The Need for the Survey

Despite the above situation, information literacy is unfortunately still a new concept for developing countries (incl. Indonesia). It tends also to be confused with ICT literacy. For example in Indonesia, when the Ministry of National Education states in its documents on competency-based curriculum that students at all levels should learn ICT; what they mean is actually more than ICT skills. It includes learning how to find information, process and use it for effective communication using various media (see for example Departemen Pendidikan Nasional, 2003).

Information literacy is a new concept for educators and librarians in Indonesia, although the new competency-based curriculum (which came into effect since July 2004) certainly requires information literacy to implement. They are not aware yet about its importance. Information literacy is not yet taught systematically and comprehensively in the schools. However, there is no research yet on this topic. Therefore, it is timely and necessary to conduct this study.

The Aims of the Survey

The aims of this study are:

4. to assess the awareness and practices of information literacy in public schools in Jakarta
5. to identify the role, readiness, and requirements of school libraries in promoting information literacy
6. to develop suggestion for appropriate action plans for the **involvement of school libraries** in the development of an information literate society.

1.3 Limitations

The term and concept of information literacy is still new to Indonesians, though this doesn't mean that it is not practiced at all. Information literacy is only partially understood and dealt with. In this situation, survey is certainly not the best method for identifying the awareness and practices of information literacy. Qualitative research methods are more able to reveal the information literacy awareness and practices.

CHAPTER 2 PROCEDURE

This chapter describes the research design, subjects, data collection methods and instruments, and the statistical treatment, of this study.

Research Design

To achieve the above objectives, this study employed mostly survey methods. In addition, interviews were carried out only to confirm and enrich the survey's results.

Population

The survey was carried out in public schools in Jakarta. There were 261 primary schools, 318 junior secondary schools, and 116 senior secondary schools in 2002-2003. These data were obtained from the following:

1. Regional Government's School Accreditation Body-District Office of Directorate General of Primary/Secondary Education
2. Regional Government – District Office of Directorate General of Primary/Secondary Education
3. Regional Government – District Office of Directorate General of Higher Education

School Samples and Sampling

Schools were selected using stratified sampling. The sampling criteria were the schools' performances in national final exams, since these were more related to information literacy awareness and practices than rural-urban criteria. Unfortunately, there were no national final exams for elementary schools. For these schools we used other criteria. The sampling procedures were as follows:

- Primary schools:

From the Regional Government's School Accreditation Body-District Office of Directorate General of Primary/Secondary Education, we received a list of elementary schools and their ranks based on the quality of their funding, pupils, community participation, and school environment and culture. Based on this list, we chose 10 schools from the upper, middle, and bottom part of the ranks.

- Junior secondary schools

Schools were ranked according to their student achievement in national final exams. We chose 10 schools that fell in the upper, middle, and

bottom part of the ranks. We also added 3 schools that were suggested by the Chair person of School Libraries Forum but though did not meet the above criteria.

- Senior secondary schools

Schools were ranked according to their student achievement in national final exams. Schools were also grouped according to their students' majors, namely, language, science, and social science. For each group, we chose 5 schools that fell in the upper, middle, and bottom part of the ranks. Schools selected twice were replaced by other schools fell next in the rank. We also add 5 schools to round up. However, mistakenly, there was a school that was selected twice (i.e., SMAN 110).

The list of selected schools should be attached to the research permit. This means we cannot change it and we also cannot carry out survey in the schools that were not on the list.

The following Table shows the sizes of school population, and the numbers of schools selected using the above criteria. The sample sizes of this study were above the 3% requirement. See the Appendix 1 for the lists of selected schools.

Table 1: Public Schools in Jakarta (2002/2003)

| | Primary | Junior Secondary | Senior Secondary | Total |
|---------------------|------------|------------------|------------------|--------------------|
| ∑ target population | 261* | 318** | 116*** | 695 |
| ∑ sample schools | 30 (11.5%) | 33 (10.4%) | 49 (42.2%) | 112 (16.1%) |

Sources: * Regional Government's School Accreditation Body-District Office of Directorate General of Primary/Secondary Education (2003),
 ** Final reports of 2004 final exams at junior high schools in Jakarta, published by the Regional Government – District Office of Directorate General of Primary/Secondary Education.
 *** Final reports of 2004 final exams at senior high schools in Jakarta, published by the Regional Government – District Office of Directorate General of Higher Education.

Instruments

This study started in January 2005 with the questionnaire preparation. Firstly, questionnaires were translated and tried out. Being aware of the newness of information literacy, we focused the pilot testing on finding out how far respondents' understanding was of each question containing this concept. As expected, again and again we met respondents who found it difficult to answer the questions. "I am confused, do not know what to answer" were the common responses they gave. We tried out the questionnaires with students from the teacher training colleges, teachers, and administrative staff in charge of libraries.

In order to improve their understanding of the questionnaires, we replaced all the term 'information literacy' with 'information searching and use skills' except that appeared in the question no.1. The question no. 1 stuck to the term 'information literacy' (*melek informasi*) to make sure about respondents' knowledge of this term. The second phase of pilot testing showed that respondents obviously had more to say about information searching and use skills than information literacy.

Due to our concentration on the term 'information literacy', we failed to identify respondents' inconsistencies of their answers during the pilot testing. We realised it only during the data entry process. Many inconsistent answers were caused by the lack of signposts such as 'if the answer is NO please jump to question no. ...'. In addition, the statement 'If Yes' was often interpreted as 'supposing the answer is YES'. It was not interpreted as 'when the answer is YES'.

For interviews, we developed interview guides based on the questionnaires. We asked the school principals on the importance of information literacy for the students' achievement, and on the information literacy status of the teachers and students. The questions to the teachers and librarians were about their efforts in the improvement of information literacy, and factors hindering these efforts.

Research Permits

As the study was carried out in public schools, we were required to obtain research permits from two departments, namely, the Regional Government – District Office of Directorate General of Primary/Secondary Education, and the Regional Government – District Office of Directorate General of Higher Education (for senior secondary schools research permit).

In order to obtain the research permit from the District Office of Directorate General of Higher Education, we had to provide the names of senior secondary schools we chose to survey. This means, we were not allowed to distribute the questionnaires to the schools that were not on the approved list. Fortunately, this requirement did not apply to research permits for primary and junior high schools.

We started applying for research permits from mid-February 2005. It took about one month to obtain the research permits. The research permit for primary and junior high schools was issued on 14 March 2005, and senior high schools on 21 March 2005.

Data Gathering

Survey

As research permits were issued only at the end of March 2005, there was less time for data collection. In order to collect enough data within one month, so that there would be enough time for data entry and processing, we used private couriers to distribute and collect back the questionnaires. Unfortunately, April-June 2005 was the time for the schools to prepare and implement various types of school exams. As the result, some schools were not able to return the questionnaires, and if they did, the questionnaires were returned after the deadline. Table 2 shows the return rates of the questionnaires. More than a half of the selected schools returned the questionnaires.

Table 2: Return Rates

| | Primary | Junior Secondary | Senior Secondary | Total |
|----------------------------|----------|------------------|------------------|------------|
| ∑ schools received quests. | 30 | 33 | 49 | 112 |
| ∑ schools returned quests. | 18 (60%) | 21 (63.6%) | 27 (55.1%) | 66 (58.9%) |

Each school received a set of questionnaires consisting one copy of questionnaire type A and C, and three copies of questionnaires type B. They were recommended to involve teachers from humanity, social sciences, and natural sciences. Table 7 shows the numbers of respondents.

Characteristics of Participating Schools

The following tables show more about each type of schools examined.

Table 3: Number of Students

| Schools | Mean | N | Std. Deviation |
|----------------|----------|----|----------------|
| Primary | 317.9412 | 17 | 106.87403 |
| Junior Second. | 892.9000 | 20 | 302.15331 |
| Senior Second. | 822.7778 | 27 | 217.54829 |
| Total | 710.5938 | 64 | 327.89379 |

Note: Two school principals did not provide information on student sizes.

On average, the participating primary schools had less than a half of secondary schools' pupils. There were almost 900 pupils in the reported junior secondary schools. They were taken care of by the following number of teachers.

Table 4: Number of Teachers

| Schools | Mean | N | Std. Deviation |
|----------------|-------|----|----------------|
| Primary | 13.00 | 17 | 4.062 |
| Junior Second. | 53.40 | 20 | 15.278 |
| Senior Second. | 62.48 | 27 | 13.874 |
| Total | 46.50 | 64 | 24.113 |

Note: Two school principals did not provide information on number of teachers.

Table 5 shows that primary school teachers were responsible for more pupils than their colleagues in the participating secondary schools. One teacher in primary schools served for 24 primary school students; whilst in secondary schools about 15 students.

Table 5: Student-Teacher Ratios

| Schools | Mean | N | Std. Deviation |
|----------------|---------|----|----------------|
| Primary | 24.5395 | 17 | 5.10638 |
| Junior Second. | 16.4766 | 20 | 3.53879 |
| Senior Second. | 13.1190 | 27 | 1.60545 |
| Total | 17.2018 | 64 | 5.77084 |

According to Table 6, the schools studied had been founded for 25 or more years. The oldest ones were senior secondary school participants.

Table 6: Year of Schools

| Schools | Mean | N | Std. Deviation |
|----------------|---------|----|----------------|
| Primary | 25.6250 | 16 | 7.89831 |
| Junior Second. | 29.7059 | 17 | 10.82107 |
| Senior Second. | 32.6923 | 26 | 13.09891 |
| Total | 29.9153 | 59 | 11.44294 |

Note: Seven school principals did not provide information on the years of the schools' establishment.

Characteristics of Respondents

From these schools we were able to obtain responses from 66 school principals, 199 teachers, and 60 persons in charge of libraries. Their distributions were as follows:

Table 7: Number of Respondents

| | Primary | Junior Secondary | Senior Secondary | Total |
|--------------|------------|------------------|------------------|-------------------|
| ∑ principals | 18 (27.3%) | 21(31.8%) | 27(40.9%) | 66 (100%) |
| ∑ teachers | 51 (25.6%) | 66 (33.2%) | 82 (41.2%) | 199 (100%) |
| ∑ librarians | 15 (25%) | 18 (30%) | 27 (45%) | 60 (100%) |

There were 3 primary schools and 3 junior secondary schools who did not return the questionnaires type C. They perhaps did not have libraries. However, although there were 60 librarians participating in this study from different schools, 4 librarians said that there were no libraries in their schools. They were from primary schools. In these schools, there were probably no reading rooms available except one or two cupboards to store books.

Sex

Table 8: School Principals by Sex

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|--------|-----------|---------|---------------|--------------------|
| Valid | Male | 44 | 66.7 | 68.8 | 68.8 |
| | Female | 20 | 30.3 | 31.3 | 100.0 |
| | Total | 64 | 97.0 | 100.0 | |
| Missing | | 2 | 3.0 | | |
| Total | | 66 | 100.0 | | |

Most of the respondent school principals were male (66.7%). Two respondents did not reveal their sex. Males apparently still dominated the principal position. A contrary picture was found among the teacher respondents (see Table 5).

Table 9: Teachers by Sex

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|--------|-----------|---------|---------------|--------------------|
| Valid | Male | 87 | 43.7 | 44.4 | 44.4 |
| | Female | 109 | 54.8 | 55.6 | 100.0 |
| | Total | 196 | 98.5 | 100.0 | |
| Missing | | 3 | 1.5 | | |
| Total | | 199 | 100.0 | | |

There were more female teacher respondents than males. This is somehow confirmed the existing gender division of labor. Teachers were still perceived more as female jobs than the other way around. A more obvious picture of this gender labor division was found among the respondent librarians. There were only 30% males in charge of libraries in the schools studied.

Table 10: Librarians by Sex

| | | Frequency | Percent |
|---------|--------|-----------|---------|
| Valid | Male | 17 | 28.3 |
| | Female | 40 | 66.7 |
| | Total | 57 | 95.0 |
| Missing | | 3 | 5.0 |
| Total | | 60 | 100.0 |

Subjects Taught by the Respondent Teachers

The teachers involved in this study dealt with various subjects, namely, Indonesian language, English language, biology, mathematics, chemistry, history, sociology, electronics, performing arts, history, economics, computers, physics, guidance and counseling, etc. There are 40 respondents teaching all subjects. This was a common practice in primary schools.

Interviews

Interviews were conducted on May 2005 with the help of Mr. Bambang Dwi Prasetyo (a junior secondary school teacher and the Chair Person of Indonesian School Library Forum), and Mrs. Hanna Latuputty (Head of Library of British International School). Mr. Bambang interviewed the principals, teachers, and librarians from public schools that were considered to have good libraries (5 junior and 2 senior secondary schools), whilst Mrs. Hanna interviewed the principal and teachers of her school. Both of them were at that time also busy with their main jobs.

Data Analyses

Data were analysed using SPSS 9.0 for Windows. The frequency and percentage of responses were mostly used to identify the respondents' awareness and practices of information literacy. Information literacy awareness is explained using their responses to questions no. 1&3 (questionnaires A-C), and no. 18-19 (questionnaire B). Cross-tabulations with types of schools were executed when necessary.

Information literacy practices were explained using the ACRL's guidelines for best practices in information literacy (ACRL, 2003). The guideline suggests that information literacy practices are reflected in the mission statement, administrative and institutional support, staffing, information literacy activities (uses of active learning techniques, collaboration between subject teachers and librarians in an information literacy programme), and programme assessment.

Table 11: Data Analyses Framework

| Info. Literacy Awareness and Practices | Quest. A | Quest. B | Quest. C |
|--|------------------------|-----------------|-----------------|
| Information literacy awareness | 1, 3 | 1, 3, 18, 19 | 1, 3 |
| Mission, policy, goal statement | 4-6, 36 | | |
| Administrative and institutional support for libraries and information literacy | 8, 17-18, 22-23, 34-35 | | 14, 32-38 |
| Support from outside | 37-41 | | |
| Library facilities | 29-32 | | 21-27 |
| Staffing for information literacy programme | 2,7,9-11, 19-21,33 | 2, 12 | 2, 4, 28-31 |
| Information literacy activities | 12-16, 24 | 4-11, 12 | 5-13, 15 |
| Programme assessment | 25-28 | 13-17 | 16-20 |

The aims no. 2&3 were obtained from the discussion of the above information literacy practices components.

CHAPTER 3 FINDINGS

This chapter discusses the awareness and practices of information literacy in the selected public schools, according to the school principals, teachers, and persons in charge of school libraries ('librarians' for short). As previously mentioned, the discussions are grouped according to the following:

1. information literacy awareness
2. information literacy practices
 - 2.1 vision/mission/goal/policy statements
 - 2.2 administrative and institutional supports for information literacy and libraries
 - 2.3 supports from outside
 - 2.4 library facilities
 - 2.5 staffing for information literacy programs
 - 2.6 information literacy activities
 - 2.7 program assessments

3.1 Information Literacy Awareness

School Principals' Awareness

There were 8 school principals who did not answer the question concerning their knowledge of information literacy concept. Although information literacy was still a new concept, surprisingly, there were more principals who claimed to know the concept than those who did not. Their number was three times than those who did not know.

Table 12: School Principals' Knowledge of Information Literacy Concept

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-------|-----------|---------|---------------|--------------------|
| Valid | Yes | 44 | 66.7 | 75.9 | 75.9 |
| | No | 14 | 21.2 | 24.1 | 100.0 |
| | Total | 58 | 87.9 | 100.0 | |
| Missing | | 8 | 12.1 | | |
| Total | | 66 | 100.0 | | |

Similar pictures were found at the school levels. In junior secondary schools, more than 80% principals claimed to know the information literacy concept. In other schools the percentages were less but still high.

Table 13: School Principals' Knowledge of Information Literacy Concept by School Levels

| School Levels | Information Literacy Knowledge | Total |
|---------------|--------------------------------|-------|
| | | |

| | | Yes | No | |
|----------------|------------------|-------|-------|--------|
| Primary | Count | 12 | 5 | 17 |
| | % within schools | 70.6% | 29.4% | 100.0% |
| Junior Second. | Count | 16 | 3 | 19 |
| | % within schools | 84.2% | 15.8% | 100.0% |
| Senior Second. | Count | 16 | 6 | 22 |
| | % within schools | 72.7% | 27.3% | 100.0% |
| Total | Count | 44 | 14 | 58 |
| | % within schools | 75.9% | 24.1% | 100.0% |

However, the picture changed when the school principals had to explain which abilities were included in the concept of information literacy. More than 50% principals did not include 'the ability to locate information efficiently and effectively', 'the ability to evaluate information critically' and 'the ability to use information ethically and legally' in the information literacy concept. This might explain why there were more school principals (52%) who did not agree that information literacy was the ability to carry out all of the listed activities effectively.

Table 14: Information Literacy Elements According to School Principals

| | Yes | | No | | Total | |
|---|-------|------|-------|------|-------|-------|
| | Count | % | Count | % | Count | % |
| The ability to recognize when information is needed | 38 | 61.3 | 24 | 38.7 | 62 | 100.0 |
| The ability to identify needed information | 41 | 66.1 | 21 | 33.9 | 62 | 100.0 |
| The ability to identify the sources | 35 | 56.5 | 27 | 43.5 | 62 | 100.0 |
| The ability to locate information efficiently and effectively | 27 | 43.5 | 35 | 56.5 | 62 | 100.0 |
| The ability to access information efficiently and effectively | 36 | 58.1 | 26 | 41.9 | 62 | 100.0 |
| The ability to evaluate information critically | 27 | 43.5 | 35 | 56.5 | 62 | 100.0 |
| The ability to organize and integrate information into existing knowledge | 38 | 61.3 | 24 | 38.7 | 62 | 100.0 |
| The ability to use information ethically and legally | 30 | 48.4 | 32 | 51.6 | 62 | 100.0 |
| The ability to communicate information | 43 | 69.4 | 19 | 30.6 | 62 | 100.0 |
| To carry out all of the above activities effectively | 30 | 48.4 | 32 | 51.6 | 62 | 100.0 |

Note: Four school principals did not answer this question.

These findings certainly need further studies to obtain insight into the school principals' understanding of information literacy (in Indonesia: 'information searching and use'). We need to find out, for example, why they exclude even the ability to locate, evaluate, and use information. The adverbs 'efficiently,

effectively, critically' accompanying the listed verbs could be one of the reasons for excluding the abilities from information literacy.

Teachers

Among the participating teachers, we also found that there were more teachers who claimed to know the concept of information literacy than those who did not. However, the difference was not as big as among the school principals. The number of teachers who knew the concept was two times the number of those who did not know. A similar picture was found also in junior secondary schools.

Table 15: Teachers' Knowledge of Information Literacy Concept

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-------|-----------|---------|---------------|--------------------|
| Valid | Yes | 133 | 66.8 | 69.6 | 69.6 |
| | No | 58 | 29.1 | 30.4 | 100.0 |
| | Total | 191 | 96.0 | 100.0 | |
| Missing | | 8 | 4.0 | | |
| Total | | 199 | 100.0 | | |

In primary and senior secondary schools, there were less than 30% teachers who did not know the information literacy concept.

Table 16: Teachers' Knowledge of Information Literacy Concept by School Levels

| | | Teachers' knowledge of information literacy | | Total |
|----------------|------------------|---|-------|--------|
| School Levels | | Ya | Tidak | |
| Primary | Count | 36 | 14 | 50 |
| | % within schools | 72.0% | 28.0% | 100.0% |
| Junior Second. | Count | 41 | 22 | 63 |
| | % within schools | 65.1% | 34.9% | 100.0% |
| Senior Second. | Count | 56 | 22 | 78 |
| | % within schools | 71.8% | 28.2% | 100.0% |
| Total | Count | 133 | 58 | 191 |
| | % within schools | 69.6% | 30.4% | 100.0% |

However, more than 50% teacher respondents did not think that 'the ability to locate, access, use, and communicate information' belonged to the information literacy concept. There were even 71% teachers who excluded 'the ability to evaluate information critically' from the information literacy concept. Only 40% thought that information literacy was the ability to carry out all the listed activities effectively.

Table 17: Information Literacy Elements According to Teachers

| | Yes | No | Total |
|--|-----|----|-------|
| | | | |

| | Count | % | Count | % | Count | % |
|---|-------|------|-------|------|-------|-------|
| The ability to recognize when information is needed | 109 | 55.9 | 86 | 44.1 | 195 | 100.0 |
| The ability to identify needed information | 111 | 56.9 | 84 | 43.1 | 195 | 100.0 |
| The ability to identify the sources | 93 | 47.7 | 102 | 52.3 | 195 | 100.0 |
| The ability to locate information efficiently and effectively | 87 | 44.6 | 108 | 55.4 | 195 | 100.0 |
| The ability to access information efficiently and effectively | 85 | 43.6 | 110 | 56.4 | 195 | 100.0 |
| The ability to evaluate information critically | 57 | 29.2 | 138 | 70.8 | 195 | 100.0 |
| The ability to organize and integrate information into existing knowledge | 90 | 46.2 | 105 | 53.8 | 195 | 100.0 |
| The ability to use information ethically and legally | 89 | 45.6 | 106 | 54.4 | 195 | 100.0 |
| The ability to communicate information | 104 | 53.3 | 91 | 46.7 | 195 | 100.0 |
| To carry out all of the above activities effectively | 78 | 40.0 | 117 | 60.0 | 195 | 100.0 |

Note: Four teachers did not answer the question.

Although the participating teachers' understanding of information literacy concept still needed improvement, almost all of them agreed that their schools should advocate information literacy. We need to find out why these discrepancies.

Table 18: Should Schools Advocate Information Literacy?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-------|-----------|---------|---------------|--------------------|
| Valid | Yes | 183 | 92.0 | 97.3 | 97.3 |
| | No | 5 | 2.5 | 2.7 | 100.0 |
| | Total | 188 | 94.5 | 100.0 | |
| Missing | | 11 | 5.5 | | |
| Total | | 199 | 100.0 | | |

The reasons for refusing the schools' advocacy of information literacy were that 'it has been practiced already' (3 persons), 'it is faster for students to obtain the knowledge of information sources from outside than from schools' (1 person), and 'the procedure is too complicated' (1 person).

Those who agreed with schools' advocacy of information literacy gave the following reasons: 'there is Internet access', 'IT makes our jobs more easy', 'it is related to the courses', 'competency-based curriculum requires information literacy', 'so that teachers and students actively search for information', 'so that students enjoy and are creative in reading', 'it is required in globalization era', 'it is the key to successful education', 'to be able to follow the advancement of science and technology', 'to acquire ICT skills', 'information is important', etc. The interview with the principal of a junior secondary school also confirmed some of these findings. He said that if the teachers had less information than the students, their teachings would not attract their students' attention.

The above comments suggest the respondents' various degree of information literacy understanding.

When the teacher respondents were asked whether or not schools should teach information literacy skills, almost all said YES (97%). See the following Table.

Table 19: Should Schools Teach Information Literacy?

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-------|-----------|---------|---------------|--------------------|
| Valid | Yes | 183 | 92.0 | 96.8 | 96.8 |
| | No | 6 | 3.0 | 3.2 | 100.0 |
| | Total | 189 | 95.0 | 100.0 | |
| Missing | | 10 | 5.0 | | |
| Total | | 199 | 100.0 | | |

Persons in Charge of Libraries

The proportion of participating librarians who knew information literacy (73%) was not as big as that of school principals (76%), but more than teachers (70%). They all formed a majority in their groups.

Table 20: Librarians' Knowledge of Information Literacy Concept

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-------|-----------|---------|---------------|--------------------|
| Valid | Yes | 40 | 66.7 | 72.7 | 72.7 |
| | No | 15 | 25.0 | 27.3 | 100.0 |
| | Total | 55 | 91.7 | 100.0 | |
| Missing | | 5 | 8.3 | | |
| Total | | 60 | 100.0 | | |

At the school levels, we observed that the proportions of librarians who knew the information literacy concept were not the same. Table 21 shows that the higher the school level, the bigger the proportion of librarians who knew the concept.

Table 21: Librarians' Knowledge of Information Literacy Concept by School Levels

| | | Librarians' Knowledge of Information Literacy | | Total |
|------------------|------------------|---|-------|--------|
| School Levels | | Yes | No | |
| primary | Count | 10 | 5 | 15 |
| | % within schools | 66.7% | 33.3% | 100.0% |
| junior secondary | Count | 12 | 5 | 17 |
| | % within schools | 70.6% | 29.4% | 100.0% |
| Senior secondary | Count | 18 | 5 | 23 |
| | % within schools | 78.3% | 21.7% | 100.0% |

| | | | | |
|-------|------------------|-------|-------|--------|
| Total | Count | 40 | 15 | 55 |
| | % within schools | 72.7% | 27.3% | 100.0% |

When the participating librarians had to elaborate the elements of information literacy, their answers were as follows: 50%-77% librarians did not agree with almost all the listed elements; 45% considered that 'the ability to organize and integrate information into existing knowledge' was part of information literacy skills.

Table 22: Information Literacy Elements According to Librarians

| | Yes | | No | | Total | |
|---|-------|------|-------|------|-------|-------|
| | Count | % | Count | % | Count | % |
| The ability to recognize when information is needed | 29 | 50.0 | 29 | 50.0 | 58 | 100.0 |
| The ability to identify needed information | 27 | 46.6 | 31 | 53.4 | 58 | 100.0 |
| The ability to identify the sources | 24 | 41.4 | 34 | 58.6 | 58 | 100.0 |
| The ability to locate information efficiently and effectively | 22 | 37.9 | 36 | 62.1 | 58 | 100.0 |
| The ability to access information efficiently and effectively | 24 | 41.4 | 34 | 58.6 | 58 | 100.0 |
| The ability to evaluate information critically | 13 | 22.4 | 45 | 77.6 | 58 | 100.0 |
| The ability to organize and integrate information into existing knowledge | 32 | 55.2 | 26 | 44.8 | 58 | 100.0 |
| The ability to use information ethically and legally | 17 | 29.3 | 41 | 70.7 | 58 | 100.0 |
| The ability to communicate information | 23 | 39.7 | 35 | 60.3 | 58 | 100.0 |
| To carry out all of the above activities effectively | 27 | 46.6 | 31 | 53.4 | 58 | 100.0 |

Concluding Remarks for this Sub-Chapter

Compared with Table 14 & 17, Table 22 gives the impression that librarians' knowledge of information literacy was generally the least compared with that of school principals and teachers. This was probably because those in charge of school libraries were usually administrative staff or students.

The proportion of school principals who refused to include 'To carry out all of the above activities effectively' in the information literacy concept (52%) was the least compared with that of teachers (60%) and librarians (53,4%). From this point of view, librarians' performance was slightly better than teachers.

In the three groups of respondents, those who excluded ‘the ability to evaluate information critically’ from the information literacy concept formed the biggest proportion. This finding need to be further examined if information literacy concept will be accepted and implemented wholly in one package of information literacy curriculum.

3.2 Information Literacy Practices

This section discusses information literacy practices in terms of several inter-related components, i.e., the existence of vision/mission/goal/policy statements, administrative and institutional supports for information literacy and libraries, supports from outside, library facilities, staffing for information literacy programs, information literacy activities, and program assessments.

3.2.1 Vision/Mission/policy/goal statements

According to 26 (45.6%) principals who answered the question, the national education policy did include an information literacy component. This answer was the correct one (see Chapter 1). Unfortunately, many of the school principals (28 persons) neither had knowledge of this nor answered this question.

Table 23: The Existence of an Information Literacy component in the National Education Policy

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|------------|-----------|---------|---------------|--------------------|
| Valid | Yes | 26 | 39.4 | 45.6 | 45.6 |
| | No | 12 | 18.2 | 21.1 | 66.7 |
| | Don't know | 19 | 28.8 | 33.3 | 100.0 |
| | Total | 57 | 86.4 | 100.0 | |
| Missing | | 9 | 13.6 | | |
| Total | | 66 | 100.0 | | |

According to the school principals, most of the schools have written/published vision or mission statements (86%). There were 8 schools that did not have any written vision/mission statements (see Table 24). The schools were 1 senior secondary school, 3 junior secondary and 4 primary schools.

Table 24: The Existence of Schools' Written/Published Vision/Mission Statements

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-------|-----------|---------|---------------|--------------------|
| Valid | Yes | 57 | 86.4 | 87.7 | 87.7 |
| | No | 8 | 12.1 | 12.3 | 100.0 |
| | Total | 65 | 98.5 | 100.0 | |
| Missing | | 1 | 1.5 | | |
| Total | | 66 | 100.0 | | |

Surprisingly, among the schools that had written visions/missions, about 60% had statements about information literacy or 'information search and use' in their visions/missions (see Table 25). Most of them were senior secondary schools (18), followed by junior secondary (11), and primary schools (7). However, none of them provided the photocopies of it.

Table 25: The Existence of a Statement about Information Literacy in the Schools' Vision/Mission

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-------|-----------|---------|---------------|--------------------|
| Valid | Yes | 36 | 63.2 | 67.9 | 67.9 |
| | No | 17 | 29.8 | 32.1 | 100.0 |
| | Total | 53 | 93.0 | 100.0 | |
| Missing | | 4 | 7.0 | | |
| Total | | 57 | 100.0 | | |

There were 17 schools that did not have any information literacy statement in their vision/mission. These were more than the number of schools that did not have any written vision/mission statements (8 schools). The good thing was that, there were 21 schools who had published policies on information literacy outside the schools' vision/mission (see Table 26). Eleven of them were senior secondary schools; the other ten schools were equally distributed between junior secondary and primary schools.

Table 26: The Existence of a published policy on information Literacy outside the Schools' Vision/Mission

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-------|-----------|---------|---------------|--------------------|
| Valid | Yes | 21 | 31.8 | 38.2 | 38.2 |
| | No | 34 | 51.5 | 61.8 | 100.0 |
| | Total | 55 | 83.3 | 100.0 | |
| Missing | | 11 | 16.7 | | |
| Total | | 66 | 100.0 | | |

Again here, none of them submitted the photocopies of the existing policies.

In summary, there was a national policy on information literacy. However, not all school principals knew about it (less than 50%). More than 50% of the schools had written statements on information literacy, either in their schools' visions/missions or policies.

2.1 Administrative and institutional supports for information literacy and libraries

Support for Information Literacy programmes inside and outside libraries

There were several types of schools' supports for information literacy, namely, information literacy training, financial support, staff involvement in the policy making, etc.

According to the school principals, their schools provided several kinds of information literacy training for teachers and librarians, namely, in-service training (28 schools), seminar (25 schools), library user education programme (17 schools), and others (computers, internet, media, etc.) (9 schools) (see Table 27).

Table 27: Information Literacy Training Provided by the Schools

| | Yes | | No | | Total | |
|----------------------------------|-------|------|-------|------|-------|-------|
| | Count | % | Count | % | Count | % |
| In-service training | 28 | 44.4 | 35 | 55.6 | 63 | 100.0 |
| Library user education programme | 17 | 27.0 | 46 | 73.0 | 63 | 100.0 |
| Seminar | 25 | 39.7 | 38 | 60.3 | 63 | 100.0 |
| Others | 9 | 14.3 | 54 | 85.7 | 63 | 100.0 |

These activities certainly need budget. Table 28 shows the percentage of the school/local budget that was spent on the information literacy programme.

Table 28: Percentages of the School/Local Budgets Spent on the Information Literacy Programme

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|--------------|-----------|---------|---------------|--------------------|
| Valid | None | 17 | 25.8 | 28.3 | 28.3 |
| | 1% | 11 | 16.7 | 18.3 | 46.7 |
| | 2-3% | 9 | 13.6 | 15.0 | 61.7 |
| | 4-5% | 5 | 7.6 | 8.3 | 70.0 |
| | More than 5% | 18 | 27.3 | 30.0 | 100.0 |
| Total | | 60 | 90.9 | 100.0 | |
| Missing | | 6 | 9.1 | | |
| Total | | 66 | 100.0 | | |

There were only 17 schools that did not have budgets for information literacy programmes. Most of them had it. About 30% (18 schools) even spent more than 5% of the budgets on the information literacy programme. How they spent this budget should be examined further in order to have a better picture of their information literacy efforts. These were according to the school principals.

However, the respondent librarians were more pessimistic about this. According to them, there were 23 libraries (38%) that did not receive any fund from the schools for the information literacy programme. Most of the librarians (25 librarians, 41%) did not provide information on this matter. (See Table 29)

Table 29: Percentages of the School/Local Budget Spent on the Information Literacy Programme for the Library (Librarians)

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-------|-----------|---------|---------------|--------------------|
| Valid | None | 23 | 38.3 | 65.7 | 65.7 |
| | 1% | 2 | 3.3 | 5.7 | 71.4 |
| | 2-3% | 5 | 8.3 | 14.3 | 85.7 |
| | 4-5% | 2 | 3.3 | 5.7 | 91.4 |
| | >5% | 3 | 5.0 | 8.6 | 100.0 |
| | Total | 35 | 58.3 | 100.0 | |
| Missing | | 25 | 41.7 | | |
| Total | | 60 | 100.0 | | |

According to the school principals, some schools (38 schools, 57.6%) had designated persons who were responsible for the planning and implementation of the information literacy programme. For these persons, schools might provide supports. Most of the support given was incentive in terms of promotion (60.5%). Other support was monthly payment, honorarium (6 schools), transportation fees, etc.

Table 30: Schools' Support Given to the Designated Persons for Information Literacy Programme

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|---------------------------------|-----------|---------|---------------|--------------------|
| Valid | None | 2 | 5.3 | 5.4 | 5.4 |
| | Incentive in terms of promotion | 23 | 60.5 | 62.2 | 67.6 |
| | Others | 12 | 31.6 | 32.4 | 100.0 |
| | Total | 37 | 97.4 | 100.0 | |
| Missing | | 1 | 2.6 | | |
| Total | | 38 | 100.0 | | |

When the school principals were asked whether these designated persons had an input into school policies, most of their answers were YES. There were 11 schools that did not involve these designated persons in the policy making. See Table 31.

Table 31: Involvement of Information Literacy Staff in the Policy Making

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-------|-----------|---------|---------------|--------------------|
| Valid | Yes | 26 | 68.4 | 70.3 | 70.3 |
| | No | 11 | 28.9 | 29.7 | 100.0 |
| | Total | 37 | 97.4 | 100.0 | |
| Missing | | 1 | 2.6 | | |
| Total | | 38 | 100.0 | | |

Support for Libraries

According to the school principals, there were 59 schools (89%) that had libraries; whilst according to the staff-in-charge of the library, there were 54 schools that had libraries.

Most of them (53 schools), according to the school principals, had a budget specifically for development and maintenance of the library. The rest (5 schools) did not have one, and one school principal did not provide information on this matter. See Table 32a.

Table 32a: Budget for Development and Maintenance of the Library (School Principals)

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------------|-----------|---------|---------------|--------------------|
| Valid yes | 53 | 89.8 | 91.4 | 91.4 |
| No | 5 | 8.5 | 8.6 | 100.0 |
| Total | 58 | 98.3 | 100.0 | |
| Missing | 1 | 1.7 | | |
| Total | 59 | 100.0 | | |

However, according to the librarians, there were 14 schools that did not financially support the development and maintenance of the library. This number was almost three times the number mentioned by the school principals. Compare Tables 32a and 32b.

Table 32b: Budget for Development and Maintenance of the Library (Librarians)

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------------|-----------|---------|---------------|--------------------|
| Valid Yes | 35 | 64.8 | 71.4 | 71.4 |
| No | 14 | 25.9 | 28.6 | 100.0 |
| Total | 49 | 90.7 | 100.0 | |
| Missing | 5 | 9.3 | | |
| Total | 54 | 100.0 | | |

The budget for development and maintenance of the library came from different sources, namely, from the government, raised by the school, or both. According to the school principals, most of the schools that had libraries (60%) funded the library by themselves. Only 4 schools received library funding from the government.

Table 33a: Sources of Library Budgets (School Principals)

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-----------------------|-----------|---------|---------------|--------------------|
| allocated by the gov. | 4 | 7.5 | 7.5 | 7.5 |
| Raised by the school | 32 | 60.4 | 60.4 | 67.9 |

| | | | | |
|-------|----|-------|-------|-------|
| Both | 17 | 32.1 | 32.1 | 100.0 |
| Total | 53 | 100.0 | 100.0 | |

A similar picture was given by the librarians concerning the sources of library budgets. Most schools used their own resources for library funding. Compare Tables 33a and 33b.

Table 33b: Sources of Library Budget (Librarians)

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-----------------------|-----------|---------|---------------|--------------------|
| allocated by the gov. | 1 | 2.9 | 2.9 | 2.9 |
| raised by the school | 26 | 74.3 | 74.3 | 77.1 |
| Both | 8 | 22.9 | 22.9 | 100.0 |
| Total | 35 | 100.0 | 100.0 | |

Although there were 53 schools that had budgets for libraries, 55 school principals could provide answer to the following question: “what percentage of the school/local budget is spent on library resources and services?” Some of the school principals who did not provide answer on the existence of libraries in their schools might have answered this question. They were one primary school and two junior secondary school principals.

| Schools | Budget Allocation | Existence of Libraries |
|------------------------------|--------------------------|-------------------------------|
| SDN Tebet Barat 03 | no answer | no answer |
| SDN Pademangan Timur 06 Pagi | 2-3% | no answer |
| SMPN 44 | 2-3% | no answer |
| SMPN 45 | 4-5% | no answer |

The following table shows the budget allocation for libraries. There were 14 schools that spent more than 5% of their budgets on library resources and services. This answer was surprising since this percentage was above the minimum requirement for university libraries (as recommended by Departemen Pendidikan dan Kebudayaan RI-Direktorat Jenderal Pendidikan Tinggi or Ministry of Education-Directorate General of Higher Education, 1994).

Table 34a: Percentages of the School/Local Budget Spent on Libraries (School Principals)

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------------|-----------|---------|---------------|--------------------|
| Valid None | 6 | 9.1 | 9.8 | 9.8 |
| 1% | 4 | 6.1 | 6.6 | 16.4 |
| 2-3% | 26 | 39.4 | 42.6 | 59.0 |
| 4-5% | 11 | 16.7 | 18.0 | 77.0 |
| More than 5% | 14 | 21.2 | 23.0 | 100.0 |
| Total | 61 | 92.4 | 100.0 | |
| Missing | 5 | 7.6 | | |

| | | | | |
|-------|----|-------|--|--|
| Total | 66 | 100.0 | | |
|-------|----|-------|--|--|

Comparison of Tables 28 and 29, on the one hand, and Tables 32 and 34, on the other hand, suggested that schools spent more for libraries than for information literacy.

Table 34b: Percentages of the School/Local Budget Spent on Library Resources and Services? (Librarians)

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-------|-----------|---------|---------------|--------------------|
| Valid | None | 10 | 18.5 | 24.4 | 24.4 |
| | 1% | 15 | 27.8 | 36.6 | 61.0 |
| | 2-3% | 8 | 14.8 | 19.5 | 80.5 |
| | 4-5% | 5 | 9.3 | 12.2 | 92.7 |
| | >5% | 3 | 5.6 | 7.3 | 100.0 |
| | Total | 41 | 75.9 | 100.0 | |
| Missing | | 13 | 24.1 | | |
| Total | | 54 | 100.0 | | |

Although there were 60 staffs-in-charge of libraries participating in this survey, only 54 persons mentioned the existence of libraries in their schools. The rest of the schools might only have cupboards for keeping books.

Among these libraries, there were 10 libraries (18%) that did not receive any funds from the school/local budget, and only 3 libraries supported by more than 5% school/local budgets. Again this shows how librarians were more pessimistic than the school principals about the schools' spending on library resources and services. Comparison of Tables 34 and 35 reveals the difference between the school principals' and librarians' perceptions on school budget allocation for library resources and services. That is why almost a half of the librarians that came from the schools with libraries (25 of 54), did not think that the current support was adequate. See the following table.

Table 36: The Adequacy of The Current Support for Libraries

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-------|-----------|---------|---------------|--------------------|
| Valid | Yes | 24 | 44.4 | 49.0 | 49.0 |
| | No | 25 | 46.3 | 51.0 | 100.0 |
| | Total | 49 | 90.7 | 100.0 | |
| Missing | | 5 | 9.3 | | |
| Total | | 54 | 100.0 | | |

When there was support for libraries, it was mostly less than US\$1,000. Most of the school libraries did not have budget for computers and online resources. The following tables show an annual library/reading room budget for library materials (Table 36), computers (Table 37), and online resources (Table 38). The

information was obtained from 31 schools that had library budgets according to the librarians.

Table 36: Annual Library Budget for Library Materials

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------------------|-----------|---------|---------------|--------------------|
| None | 1 | 3.2 | 3.6 | 3.6 |
| Less than US\$1,000 | 24 | 77.4 | 85.7 | 89.3 |
| US\$1,000-4,000 | 3 | 9.7 | 10.7 | 100.0 |
| Total | 28 | 90.3 | 100.0 | |
| Missing | 3 | 9.7 | | |
| Total | 31 | 100.0 | | |

Table 37: Annual Library Budget for Library Computers

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------------------|-----------|---------|---------------|--------------------|
| None | 16 | 51.6 | 57.1 | 57.1 |
| Less than US\$1,000 | 11 | 35.5 | 39.3 | 96.4 |
| US\$1,000-4,000 | 1 | 3.2 | 3.6 | 100.0 |
| Total | 28 | 90.3 | 100.0 | |
| Missing | 3 | 9.7 | | |
| Total | 31 | 100.0 | | |

Table 38: Annual Library Budget for Library Online Resources

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------------------|-----------|---------|---------------|--------------------|
| None | 13 | 41.9 | 50.0 | 50.0 |
| Less than US\$1,000 | 12 | 38.7 | 46.2 | 96.2 |
| US\$1,000-4,000 | 1 | 3.2 | 3.8 | 100.0 |
| Total | 26 | 83.9 | 100.0 | |
| Missing | 5 | 16.1 | | |
| Total | 31 | 100.0 | | |

In summary, most of the schools had provided budgets for information literacy programmes and libraries. Most of the schools also had designated persons for the programmes, and they were involved in the policy making. However, the staffs-in-charge of the library revealed more pessimistic view of schools' supports for libraries than the school principals. Many of them said that the support was inadequate.

2.3 Support from outside

There were two types of support from outside the schools, namely, support for information literacy programme and support for libraries. This information was

overlapping especially when the information literacy activities were carried out also by the school libraries. The data were obtained from the school principals.

Support for Information Literacy

Table 37: Support from Local Authorities and Community for Information Literacy Programme

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-----------|-----------|---------|---------------|--------------------|
| Valid Yes | 33 | 50.0 | 55.9 | 55.9 |
| No | 26 | 39.4 | 44.1 | 100.0 |
| Total | 59 | 89.4 | 100.0 | |
| Missing | 7 | 10.6 | | |
| Total | 66 | 100.0 | | |

Half of the schools (33) received support from local authorities and community for information literacy programme. Most of them (23) received the support from the Parents and Teachers Association (PTAs) (23). The National Library and public libraries play less significant roles than Ministry of Education and local authorities, in the schools' information literacy activities. See Tables 37 and 38.

Table 38: Agencies that Provide Support

| | Yes | | No | | Total | |
|---|-------|------|-------|------|-------|-------|
| | Count | % | Count | % | Count | % |
| Ministry of Education | 14 | 42.4 | 19 | 57.6 | 33 | 100.0 |
| Local Authorities | 13 | 39.4 | 20 | 60.6 | 33 | 100.0 |
| Parents and Teachers Association (PTAs) | 23 | 69.7 | 10 | 30.3 | 33 | 100.0 |
| National Library | 6 | 18.2 | 27 | 81.8 | 33 | 100.0 |
| Public Library | 2 | 6.1 | 31 | 93.9 | 33 | 100.0 |
| Others* | 5 | 15.2 | 28 | 84.8 | 33 | 100.0 |

Notes: * Others:

- the Regional Government – District Office of Directorate General of Higher Education (2 schools)
- NGOs
- PT Astra Honda Motor graduates

The above-mentioned agencies provided several types of support to the schools for their information literacy programmes. See the following table.

Table 39: Types of Supports Provided to the Schools

| | Yes | | No | | Total | |
|-----------------------------|-------|------|-------|------|-------|-------|
| | Count | % | Count | % | Count | % |
| Teaching/learning materials | 19 | 59.4 | 13 | 40.6 | 32 | 100.0 |
| Training | 15 | 46.9 | 17 | 53.1 | 32 | 100.0 |
| Teaching assistance | 2 | 6.3 | 30 | 93.8 | 32 | 100.0 |
| Others | 6 | 18.8 | 26 | 81.2 | 32 | 100.0 |

Notes: * block grant, funds; computers, internet access, telephone

As expected, the largest support was in the form of teaching/learning materials (59%), followed by training (47%), etc. Teaching assistance was received only by 2 schools. A similar picture was also found in the types of supports provided for the libraries (see Table 40).

Support for Libraries

As previously mentioned, according to the school principals, there were 59 schools (89%) that had libraries. However, only 45 school principals provided information on the support from local authorities and communities for the libraries. Among them, there were 9 libraries that did not received any support from local authorities and community. Most libraries (25) received only one type of support. Most of the supports were teaching/learning materials. Only one library received teaching assistance.

Table 40: Type of Support Provided for the Libraries

| | Ya | | Tidak | | Total | |
|-----------------------------|-------|------|-------|------|-------|-------|
| | Count | % | Count | % | Count | % |
| Teaching/learning materials | 30 | 66.7 | 15 | 33.3 | 45 | 100.0 |
| Training | 17 | 37.8 | 28 | 62.2 | 45 | 100.0 |
| Teaching assistance | 1 | 2.2 | 44 | 97.8 | 45 | 100.0 |
| Missing= 14 | | | | | | |

According to the school principals, the support they had from local authorities and community was far from enough. Only 4 school principals who said that the current support was adequate for the libraries. More than 80% school principals were not satisfied with the support they received. In addition to training, the libraries needed funds, books, qualified human resources, radios, computers, adequate building, etc.

Table 41: The Adequacy of the Support for the Libraries

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-------|-----------|---------|---------------|--------------------|
| Valid | Yes | 4 | 8.9 | 9.5 | 9.5 |
| | No | 38 | 84.4 | 90.5 | 100.0 |
| | Total | 42 | 93.3 | 100.0 | |
| Missing | | 3 | 6.7 | | |
| Total | | 45 | 100.0 | | |

In summary, there were still many schools and libraries (almost half of them) that did not have support from the local authorities and community. Those who had the support found it not adequate.

2.4 Library Facilities

This section is about library facilities according to the school principals and staff-in-charge of libraries. As previously mentioned, there was a difference between the total number of school libraries according to the staffs-in-charge of libraries (54 libraries) (Table 42a) and the school principals (59 libraries) (Table 42b).

Table 42a: Schools that Had Libraries according to the School Librarians

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-------|-----------|---------|---------------|--------------------|
| Valid | Yes | 54 | 90.0 | 93.1 | 93.1 |
| | No | 4 | 6.7 | 6.9 | 100.0 |
| | Total | 58 | 96.7 | 100.0 | |
| Missing | | 2 | 3.3 | | |
| Total | | 60 | 100.0 | | |

Table 42b: Schools that Had Libraries according to the School Principals

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-------|-----------|---------|---------------|--------------------|
| Valid | Yes | 59 | 89.4 | 95.2 | 95.2 |
| | No | 3 | 4.5 | 4.8 | 100.0 |
| | Total | 62 | 93.9 | 100.0 | |
| Missing | | 4 | 6.1 | | |
| Total | | 66 | 100.0 | | |

The following table shows that the schools that did not have libraries were all primary schools. All junior and senior secondary schools under study had libraries.

Table 43: Types of Schools that Had Libraries

| | | School Library | | Total |
|------------------|------------------------|----------------|-------|--------|
| | | Yes | No | |
| Primary | Count | 13 | 3 | 16 |
| | % within school levels | 81.3% | 18.8% | 100.0% |
| Junior Secondary | Count | 19 | 0 | 19 |
| | % within school levels | 100.0% | .0% | 100.0% |
| Senior Secondary | Count | 27 | 0 | 27 |
| | % within school levels | 100.0% | .0% | 100.0% |
| Total | Count | 59 | 3 | 62 |
| | % within school levels | 95.2% | 4.8% | 100.0% |

According to both the school principals and librarians, to support teaching and learning, most of the libraries (about 70%) had sufficient books and other materials (see Tables 44a&b).

Table 44a: Sufficiency of Books and Other materials to Support Teaching/Learning according to the School Principals

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-------|-----------|---------|---------------|--------------------|
| Valid | Yes | 46 | 78.0 | 79.3 | 79.3 |
| | No | 12 | 20.3 | 20.7 | 100.0 |
| | Total | 58 | 98.3 | 100.0 | |
| Missing | | 1 | 1.7 | | |
| Total | | 59 | 100.0 | | |

Table 44b: Sufficiency of Books and Other materials to Support Teaching/Learning according to the School Librarians

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | Yes | 38 | 70.4 | 70.4 | 70.4 |
| | No | 16 | 29.6 | 29.6 | 100.0 |
| | Total | 54 | 100.0 | 100.0 | |

The above picture was different from that of computer facilities. There were more school libraries that lacked of computers to support teaching/learning (34 or 58% libraries) and to facilitate library operation and use (45 or 83% libraries), than those that had sufficient computers. Compare Tables 44 and 45a&b.

Table 45a: Sufficiency of Computers to Support Teaching/Learning

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | Yes | 25 | 42.4 | 42.4 | 42.4 |
| | No | 34 | 57.6 | 57.6 | 100.0 |
| | Total | 59 | 100.0 | 100.0 | |

Table 45a: Sufficiency of Computers to Facilitate Library Operation and Use

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | Yes | 9 | 16.7 | 16.7 | 16.7 |
| | No | 45 | 83.3 | 83.3 | 100.0 |
| | Total | 54 | 100.0 | 100.0 | |

Among 25 school libraries that had sufficient computers to support teaching-learning, only 9 libraries that had computers for student use with online connections. The rest did not have ones. See Table 46a.

Table 46a: Online Connections for Students according to the School Principals

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|--|--|-----------|---------|---------------|--------------------|
|--|--|-----------|---------|---------------|--------------------|

| | | | | | |
|-------|-------|----|-------|-------|-------|
| Valid | Yes | 9 | 36.0 | 36.0 | 36.0 |
| | No | 16 | 64.0 | 64.0 | 100.0 |
| | Total | 25 | 100.0 | 100.0 | |

Among 9 school libraries that had sufficient computers to facilitate library operation and use, only 2 libraries that had computers for student use with online connections. See Table 46b.

Table 46b: Online Connections for Students according to the School Librarians

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | Yes | 2 | 22.2 | 22.2 | 22.2 |
| | No | 7 | 77.8 | 77.8 | 100.0 |
| | Total | 9 | 100.0 | 100.0 | |

Regarding the reference documents on the teaching of information literacy, most of the school librarians (28 or 52%) mentioned the unavailability of these documents. Those who were sure about the availability of these documents, listed documents such as 'Encyclopaedia of Indonesia', 'Atlas of Indonesia', 'Atlas of Jakarta', computer books, dictionary, dewey classification, library guides, composition, school libraries, '30 Years of Indonesian Independence', maps, etc.

Table 47: The existence of Reference Documents on Information Literacy Teaching

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-------|-----------|---------|---------------|--------------------|
| Valid | Yes | 23 | 42.6 | 45.1 | 45.1 |
| | No | 28 | 51.9 | 54.9 | 100.0 |
| | Total | 51 | 94.4 | 100.0 | |
| Missing | | 3 | 5.6 | | |
| Total | | 54 | 100.0 | | |

According to the staffs-in-charge of libraries, only 8 libraries that did not receive contribution from the Ministry of Education for their collection development. There were 14 libraries (27%) that did not purchase from book stores, and 12 that did not receive donation for their collection.

Table 48: Methods of Library Acquisition

| | Yes | | No | | Total | |
|---------------------------|-------|------|-------|------|-------|-------|
| | Count | % | Count | % | Count | % |
| Donation | 40 | 76.9 | 12 | 23.1 | 52 | 100.0 |
| Purchase from book stores | 38 | 73.1 | 14 | 26.9 | 52 | 100.0 |
| Contribution from MOE | 44 | 84.6 | 8 | 15.4 | 52 | 100.0 |
| Missing= 2 | | | | | | |

In summary, according to the school principals and librarians, the libraries generally had adequate materials to support teaching and learning, but still lacked of computers especially that had online connections.

2.5 Staffing for Information Literacy Program

This section elaborates the staffing for information literacy program at the school and library level. It is about the quality and quantity of human resource development in this field. It discusses also the whole library staffing, and who should teach information literacy skills..

School Level

This study asked about information literacy training the school principals and teachers personally ever had, and the existence of persons responsible for information literacy programmes.

Table 49a: Information Literacy Training Attended by the School Principals

| | Yes | | No | | Total | |
|------------------------|-------|------|-------|------|-------|-------|
| | Count | % | Count | % | Count | % |
| Self-taught | 35 | 53.0 | 31 | 47.0 | 66 | 100.0 |
| In-service training | 18 | 27.3 | 48 | 72.7 | 66 | 100.0 |
| Library user programme | 7 | 10.6 | 59 | 89.4 | 66 | 100.0 |
| Seminar | 26 | 39.4 | 40 | 60.6 | 66 | 100.0 |
| Others | 4 | 6.1 | 62 | 93.9 | 66 | 100.0 |

There were many ways of acquiring information literacy skills. Table 49 a&b reveal that self-taught was practiced by most of the school principals and teachers, followed by seminars, in-service trainings, library user programmes, and others. Other types of training included workshops, training of trainers, short courses, etc.

Table 49b: Information Literacy Training Attended by the Teachers

| | Yes | | No | | Total | |
|------------------------|-------|------|-------|------|-------|-------|
| | Count | % | Count | % | Count | % |
| Self-taught | 117 | 59.1 | 81 | 40.9 | 198 | 100.0 |
| In-service training | 60 | 30.3 | 138 | 69.7 | 198 | 100.0 |
| Library user programme | 20 | 10.1 | 178 | 89.9 | 198 | 100.0 |
| Seminar | 61 | 30.8 | 137 | 69.2 | 198 | 100.0 |
| Others | 19 | 9.6 | 179 | 90.4 | 198 | 100.0 |

Note: missing= 1

Concerning the training materials, both the school principals and teachers mentioned several topics that are irrelevant to information literacy, such as, the use of IT for school administration, leadership and management, school management, schools' integrated information system, biotechnology & metabolism, environment, SPSS, EDP, LAN administrator, competency-based curriculum, how to develop teaching materials, and career counseling.

Training materials on information literacy covered the following topics: internet, computers, library as learning resources, information technology and its uses, information searching, MS Word, etc. These were mentioned by the school principals. The teacher respondents mentioned more various topics such as how to use library, computers, information searching, communication media; reading, writing, and arithmetic; how to make the most use of learning resources, how to give information to students using multimedia, how to use reference books, how to use internet, how to use LCD, information from the mass media, etc.

There were 17 schools whose teachers had no training on information literacy. The rest had teachers trained on this topic. Almost 20% schools even had more than 50% teachers trained on information literacy. The data were obtained from the school principals. See the following table.

Table 50: Percentage of Teachers Trained on Information Literacy

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|---------------|-----------|---------|---------------|--------------------|
| Valid | None | 17 | 25.8 | 27.0 | 27.0 |
| | Less than 10% | 15 | 22.7 | 23.8 | 50.8 |
| | 11-25% | 10 | 15.2 | 15.9 | 66.7 |
| | 26-50% | 8 | 12.1 | 12.7 | 79.4 |
| | More than 50% | 13 | 19.7 | 20.6 | 100.0 |
| Total | | 63 | 95.5 | 100.0 | |
| Missing | | 3 | 4.5 | | |
| Total | | 66 | 100.0 | | |

In order to find out the commitment of the school principals to information literacy, this study asked them whether or not 'there is a designated person who is responsible for the planning and implementation of the information literacy programme in the school'. The results were as follows:

Table 51: The Existence of a Designated Person Responsible for Literacy Programme

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-------|-----------|---------|---------------|--------------------|
| Valid | Yes | 38 | 57.6 | 58.5 | 58.5 |
| | No | 27 | 40.9 | 41.5 | 100.0 |
| | Total | 65 | 98.5 | 100.0 | |
| Missing | | 1 | 1.5 | | |
| Total | | 66 | 100.0 | | |

Surprisingly, most (58%) of the schools had a designated person who is responsible for the planning and implementation of the information literacy programme in the school. They were mostly from senior secondary schools (25 schools). The rest were from junior secondary (8 schools) and primary schools (5 schools).

Most of these schools (21 schools) employed the designated information literacy persons as full-time staff. Most probably they were computer teachers. See Table 52.

Table 52: Full-time Information Literacy Staff

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-------|-----------|---------|---------------|--------------------|
| Valid | Yes | 21 | 55.3 | 56.8 | 56.8 |
| | No | 16 | 42.1 | 43.2 | 100.0 |
| | Total | 37 | 97.4 | 100.0 | |
| Missing | | 1 | 2.6 | | |
| Total | | 38 | 100.0 | | |

The designated persons spent 50% or less of their time on the information literacy programme in most of the schools (32 schools). This means, information literacy programme was not their full-time job. See Table 53.

Table 53: Time Spent on the Information Literacy Programme

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|----------------|-----------|---------|---------------|--------------------|
| Valid | Less than 10% | 9 | 23.7 | 24.3 | 24.3 |
| | 11-25% | 11 | 28.9 | 29.7 | 54.1 |
| | 25-50% | 12 | 31.6 | 32.4 | 86.5 |
| | More than 50% | 5 | 13.2 | 13.5 | 100.0 |
| | Total | 37 | 97.4 | 100.0 | |
| Missing | Tidak ada info | 1 | 2.6 | | |
| Total | | 38 | 100.0 | | |

Librarians' Information Literacy Skills

Compared to the school principals and teachers, the librarians had the least training on information literacy. Less than 50% respondent librarians had training on this topic, either through self-taught, in-service training, library user programme, seminar, and/or other types of training (e.g., workshop, study visits).

Table 54: Information Literacy Training Attended by the Librarians

| | Yes | | No | | Total | |
|-------------|-------|------|-------|------|-------|-------|
| | Count | % | Count | % | Count | % |
| Self-taught | 29 | 48.3 | 31 | 51.7 | 60 | 100.0 |

| | | | | | | |
|------------------------|----|------|----|------|----|-------|
| In-service training | 11 | 18.3 | 49 | 81.7 | 60 | 100.0 |
| Library user programme | 24 | 40.0 | 36 | 60.0 | 60 | 100.0 |
| Seminar | 22 | 36.7 | 38 | 63.3 | 60 | 100.0 |
| Others | 7 | 11.7 | 53 | 88.3 | 60 | 100.0 |

Topics of their training were library administration, library management, classification and cataloguing, acquisition, library functions, document processing and use, computers, macro media, information searching, etc. As the other groups of respondents, the librarians confused information literacy with other topics.

Table 55: Percentage of Library Staff Trained on Information Literacy

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|---------|-----------|---------|---------------|--------------------|
| Valid | None | 20 | 33.3 | 39.2 | 39.2 |
| | Only me | 9 | 15.0 | 17.6 | 56.9 |
| | < 10% | 12 | 20.0 | 23.5 | 80.4 |
| | 11-25 % | 2 | 3.3 | 3.9 | 84.3 |
| | 26-50 % | 5 | 8.3 | 9.8 | 94.1 |
| | > 50% | 3 | 5.0 | 5.9 | 100.0 |
| | Total | 51 | 85.0 | 100.0 | |
| Missing | | 9 | 15.0 | | |
| Total | | 60 | 100.0 | | |

There were about 30% schools whose library staff never had any training on information literacy. About 35% participating schools had sent only less than 10% of its library staff to information literacy trainings. Table 52 therefore confirms that the librarians had the least training on information literacy as compared to the school principals and teachers.

Library Staffing

As ideally information literacy programme should be the school library's main programme, and this certainly requires proper staffing; the following paragraphs elaborate the library staffing of the participating schools.

Among 59 libraries mentioned by the school principals, there were 18 schools (30%) that did not have staff assigned to manage the school library. Most of the libraries (70%) had full-time or part-time staff assigned to manage the school library. The librarians gave even more optimistic picture of this. According to them, 90% of 54 school libraries had full-time or part-time staff assigned to manage the school library. Compare Table 56 a & b. The rest of the libraries might be managed by students

Table 56a: The Existence of Staff Assigned to Manage the School Library according to the School Principals

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | Yes | 41 | 69.5 | 69.5 | 69.5 |
| | No | 18 | 30.5 | 30.5 | 100.0 |
| | Total | 59 | 100.0 | 100.0 | |

Table 56b: The Existence of Staff Assigned to Manage the School Library according to the Librarians

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | Yes | 49 | 90.7 | 90.7 | 90.7 |
| | No | 5 | 9.3 | 9.3 | 100.0 |
| | Total | 54 | 100.0 | 100.0 | |

According to the librarians, among these 49 school libraries, only 11 school libraries that did not have full-time staff, and 23 did not have part-time staff.

Table 57a: Number of Full-time Staff to Manage the School Library

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-------|-----------|---------|---------------|--------------------|
| Valid | 0 | 11 | 22.4 | 25.6 | 25.6 |
| | 1 | 11 | 22.4 | 25.6 | 51.2 |
| | 2 | 12 | 24.5 | 27.9 | 79.1 |
| | 3 | 7 | 14.3 | 16.3 | 95.4 |
| | 4 | 1 | 2.0 | 2.3 | 97.7 |
| | 5 | 1 | 2.0 | 2.3 | 100.0 |
| | Total | 43 | 87.8 | 100.0 | |
| Missing | | 6 | 12.2 | | |
| Total | | 49 | 100.0 | | |

Table 57b: Number of Part-time Staff to Manage the School Library

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-------|-----------|---------|---------------|--------------------|
| Valid | 0 | 23 | 46.9 | 53.5 | 53.5 |
| | 1 | 10 | 20.4 | 23.2 | 76.7 |
| | 2 | 6 | 12.2 | 14.0 | 90.7 |
| | 3 | 4 | 8.2 | 9.3 | 100.0 |
| | Total | 43 | 87.8 | 100.0 | |
| Missing | | 6 | 12.2 | | |
| Total | | 49 | 100.0 | | |

Table 57c shows that there was only 1 school library that had 5 staff to manage the school library. About 42% or 21 school libraries had only 2 staff.

Table 57c: Number of Part-time and Full-time Staff to Manage the School Library

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-------|-----------|---------|---------------|--------------------|
| Valid | 1.00 | 2 | 4.1 | 5.1 | 5.1 |
| | 2.00 | 21 | 42.9 | 53.8 | 59.0 |
| | 3.00 | 10 | 20.4 | 25.6 | 84.6 |
| | 4.00 | 5 | 10.2 | 12.8 | 97.4 |
| | 5.00 | 1 | 2.0 | 2.6 | 100.0 |
| | Total | 39 | 79.6 | 100.0 | |
| Missing | | 10 | 20.4 | | |
| Total | | 49 | 100.0 | | |

Who worked in the school libraries: professional librarian, teacher, paraprofessional, clerk, volunteers, or others? According to the school principals, only 11 schools employed professional librarians (Table 58a). However, according to the librarians, only 2 schools that had professional librarians (see Table 60). Concerning these differences, Mr. Bambang Dwi Prasetyo (the Chairman of Forum for School Libraries in Indonesia) confirmed via SMS that there were indeed 2 professional librarians that worked as librarians; the rest worked as non-permanent library staff, or full-time/part-time/non-permanent teachers or clerical staff. Those who worked outside the library were apparently included by the school principals.

Table 58a: The Existence of Professional Librarians

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-------|-----------|---------|---------------|--------------------|
| Valid | Yes | 11 | 16.7 | 16.9 | 16.9 |
| | No | 54 | 81.8 | 83.1 | 100.0 |
| | Total | 65 | 98.5 | 100.0 | |
| Missing | | 1 | 1.5 | | |
| Total | | 66 | 100.0 | | |

In a senior secondary school, the professional librarian was assigned as staff-in-charge of the library (see Table 58c). The rest of the libraries were taken care by non-professional librarians. Table 58 b&c reveal who the non-professional librarians were.

Most of the schools assigned teachers (81%) and/or clerks (42%) to be in charge of the library. Only 9 schools employed paraprofessionals, and 6 schools assigned students for this task. The information from the school principals were rather contradictory with those from the respondent librarians. According to the librarians, most of the school libraries were managed by paraprofessional (67%) and clerical staff (50%). Only 8 schools assigned teacher to be in charge of the library (Table 58c).

Table 58b: Non-professionals in Charge of the Library according to the Principals

| | Yes | | No | | Total | |
|------------------|-------|------|-------|------|-------|-------|
| | Count | % | Count | % | Count | % |
| Teacher | 50 | 80.6 | 12 | 19.4 | 62 | 100.0 |
| Paraprofessional | 9 | 14.5 | 53 | 85.5 | 62 | 100.0 |
| Clerk | 26 | 41.9 | 36 | 58.1 | 62 | 100.0 |
| Student | 6 | 9.7 | 56 | 90.3 | 62 | 100.0 |
| Volunteers | 2 | 3.2 | 60 | 96.8 | 62 | 100.0 |

Table 58c: Staff-in charge of Libraries according to the Librarians

| | Yes | | No | | Total | |
|------------------------|-------|------|-------|-------|-------|-------|
| | Count | % | Count | % | Count | % |
| Professional Librarian | 1 | 2.2 | 45 | 97.8 | 46 | 100.0 |
| Paraprofessional | 31 | 67.4 | 15 | 32.6 | 46 | 100.0 |
| Clerical Staff | 23 | 50.0 | 23 | 50.0 | 46 | 100.0 |
| Student | 3 | 6.5 | 43 | 93.5 | 46 | 100.0 |
| Volunteer | | | 46 | 100.0 | 46 | 100.0 |
| Teacher | 8 | 19.6 | 38 | 80.4 | 46 | 100.0 |

This study asked the school principals also about the multimedia room. According to the school principals, there were 41 schools that had multimedia rooms. None of them were managed by professionals. They were managed by teachers (88%), clerks (29%), paraprofessionals (7%), students (7%), volunteers (1 school), and vice principal (1 school). See Table 59.

Table 59: Non-professionals in Charge of the Multimedia Room

| | Ya | | Tidak | | Total | |
|------------------|-------|------|-------|------|-------|-------|
| | Count | % | Count | % | Count | % |
| Teacher | 36 | 87.8 | 5 | 12.2 | 41 | 100.0 |
| Paraprofessional | 3 | 7.3 | 38 | 92.7 | 41 | 100.0 |
| Clerk | 12 | 29.3 | 29 | 70.7 | 41 | 100.0 |
| Student | 3 | 7.3 | 38 | 92.7 | 41 | 100.0 |
| Volunteer | 1 | 2.4 | 40 | 97.6 | 41 | 100.0 |
| Vice Principal | 1 | 2.4 | 40 | 97.6 | 41 | 100.0 |

The library staff of most of the schools (33 out of 54 schools that had libraries) had on-the-job training. According to the librarians, only 2 schools that employed library staff that had university education in library science. These data were obtained from the librarians. See the following table.

Table 60: Training the Library Staff Had

| | Yes | | No | | Total | |
|---|-------|------|-------|------|-------|-------|
| | Count | % | Count | % | Count | % |
| University education in library science | 2 | 4.7 | 41 | 95.3 | 43 | 100.0 |
| On-the-job training | 33 | 76.7 | 10 | 23.3 | 43 | 100.0 |
| University degree in other subjects | 19 | 44.2 | 24 | 55.8 | 43 | 100.0 |
| Others (training, seminars) | 17 | 39.5 | 26 | 60.5 | 43 | 100.0 |

Suggestions from Teachers about Staffing

Teachers were asked about who should teach information literacy skills. Surprisingly, less than 40% teachers considered that as librarians' responsibility. Most of them chose teachers (77%). Fortunately, as previously mentioned, there were many teachers worked at the library. Parents were chosen by 52 teachers (28%). Information literacy training is indeed everybody's jobs including the government and society.

Table 61: Who Should Teach Information Literacy?

| | Yes | | No | | Total | |
|-----------|-------|------|-------|------|-------|-------|
| | Count | % | Count | % | Count | % |
| Teacher | 144 | 77.4 | 42 | 22.6 | 186 | 100.0 |
| Librarian | 67 | 36.0 | 119 | 64.0 | 186 | 100.0 |
| Parent | 52 | 28.0 | 134 | 72.0 | 186 | 100.0 |
| Others* | 44 | 23.7 | 142 | 76.3 | 186 | 100.0 |

Notes: *mostly mentioned the experts; the rest chose computer experts, society, or gov. officials from MoE

In summary, this section reveals that from the point of view of information literacy skills, the schools and libraries were still under-staffed. Therefore, the teachers had less confidence in librarians concerning information literacy skills.

2.6 Information Literacy Activities

In this section, information literacy activities will be explained in terms of its existence, topic coverage, ways of delivery, problems encountered, and student coverage.

The Existence of Information Literacy Activities

This study asked school principals, teachers, and librarians about whether or not information literacy was taught in their schools, and for how long it had been taught.

According to the school principals, most of the schools (71%) taught information literacy. Similar situation was also found at each school level, and in addition,

the higher the school level the higher the percentage of schools that taught information literacy (see Table 62 a&b).

Table 62a: Information Literacy Being Taught in the Schools (School Principals)

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-------|-----------|---------|---------------|--------------------|
| Valid | Yes | 47 | 71.2 | 72.3 | 72.3 |
| | No | 18 | 27.3 | 27.7 | 100.0 |
| | Total | 65 | 98.5 | 100.0 | |
| Missing | | 1 | 1.5 | | |
| Total | | 66 | 100.0 | | |

Table 62b: Information Literacy Being Taught According to the School Levels

| School Level | | Schools Taught Information Literacy | | Total |
|------------------|-----------------------|-------------------------------------|-------|--------|
| | | Yes | No | |
| Primary | Count | 10 | 7 | 17 |
| | % within school level | 58.8% | 41.2% | 100.0% |
| Junior Secondary | Count | 15 | 6 | 21 |
| | % within school level | 71.4% | 28.6% | 100.0% |
| Senior Secondary | Count | 22 | 5 | 27 |
| | % within school level | 81.5% | 18.5% | 100.0% |
| Total | Count | 47 | 18 | 65 |
| | % within school level | 72.3% | 27.7% | 100.0% |

The school principals' information on the information literacy activities in the schools was confirmed by the teachers. Indeed, most of the respondent teachers (60%) taught information searching and use in their schools, and about 55% taught their students about citation (see Table 63 a&b). Table 63c shows a similar picture at each school level.

Table 63a: Teachers Taught Information Literacy

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | Yes | 120 | 60.3 | 60.3 | 60.3 |
| | No | 79 | 39.7 | 39.7 | 100.0 |
| | Total | 199 | 100.0 | 100.0 | |

The teachers taught their students about reading, how to make clippings on certain topics, how to search information from various sources (e.g. Internet, newspapers, radio, TV, dictionaries, local government offices, libraries, books, e-journals, field works, study visits), and how to make presentations (written and oral) based on these sources.

Table 63b: Teachers Taught about Citation

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-------|-----------|---------|---------------|--------------------|
| Valid | Yes | 109 | 54.8 | 55.1 | 55.1 |
| | No | 89 | 44.7 | 44.9 | 100.0 |
| | Total | 198 | 99.5 | 100.0 | |
| Missing | | 1 | .5 | | |
| Total | | 199 | 100.0 | | |

Concerning citation, the teachers taught about how to make bibliographies, quotations, footnotes, citing information from various sources (e.g. the Internet, interviews, questionnaires, and mass media such as newspapers, radio, TV).

Table 63c: Teachers Taught Information Literacy According to the School Levels

| | | Teachers Taught Information Literacy Skills | | Total |
|------------------|-----------------------|---|-------|--------|
| School Level | | Yes | No | |
| Primary | Count | 26 | 25 | 51 |
| | % within school level | 51.0% | 49.0% | 100.0% |
| Junior Secondary | Count | 39 | 27 | 66 |
| | % within school level | 59.1% | 40.9% | 100.0% |
| Senior Second. | Count | 55 | 27 | 82 |
| | % within school level | 67.1% | 32.9% | 100.0% |
| Total | Count | 120 | 79 | 199 |
| | % within school level | 60.3% | 39.7% | 100.0% |

The above table reveals that the higher the school level, the higher also the percentage of teachers who taught information literacy in the schools. This is the same as the situation reported by the school principals. How about information literacy teaching by the library staff?

Table 64: Library Staff Taught Information Literacy in the Library

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | Yes | 28 | 46.7 | 46.7 | 46.7 |
| | No | 32 | 53.3 | 53.3 | 100.0 |
| | Total | 60 | 100.0 | 100.0 | |

Although library staff were expected to be more active in teaching information literacy than the teachers, this study found out that most of them (53%) did not teach information literacy in the library. They thus played less roles than the teachers in this activity.

The Existence of Information Literacy Activities outside Curriculum

All groups of respondents were asked about the existence of any extracurricular activities to promote information literacy in the school in their schools. The results were as follows:

Table 65a: Extracurricular Literacy Activities (School Principals)

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-------|-----------|---------|---------------|--------------------|
| Valid | Yes | 38 | 57.6 | 62.3 | 62.3 |
| | No | 23 | 34.8 | 37.7 | 100.0 |
| | Total | 61 | 92.4 | 100.0 | |
| Missing | | 5 | 7.6 | | |
| Total | | 66 | 100.0 | | |

According to the school principals, more than 55% schools carried out extracurricular information literacy activities. At the secondary schools, the percentages were even higher (it reached 60%).

Table 65b: Extracurricular Literacy Activities at the School Levels (School Principals)

| School Levels | | Extracurricular Activities to Promote Information Literacy | | Total |
|------------------|-----------------------|--|-------|--------|
| | | Yes | No | |
| Primary school | Count | 10 | 7 | 17 |
| | % within school level | 58.8% | 41.2% | 100.0% |
| Junior secondary | Count | 13 | 7 | 20 |
| | % within school level | 65.0% | 35.0% | 100.0% |
| Senior secondary | Count | 15 | 9 | 24 |
| | % within school level | 62.5% | 37.5% | 100.0% |
| Total | Count | 38 | 23 | 61 |
| | % within school level | 62.3% | 37.7% | 100.0% |

Unfortunately, the above promising picture given by the principals was not supported by the teachers. The number of teachers that mentioned the existence of extracurricular information literacy activities (95 teachers) was almost the same as those who revealed the non-existence of extracurricular information literacy activities (92 persons).

Table 66a: Extracurricular Information Literacy Activities (Teachers)

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-------|-----------|---------|---------------|--------------------|
| Valid | Yes | 95 | 47.7 | 50.8 | 50.8 |
| | No | 92 | 46.2 | 49.2 | 100.0 |
| | Total | 187 | 94.0 | 100.0 | |
| Missing | | 12 | 6.0 | | |
| Total | | 199 | 100.0 | | |

At the school level, the pictures were varied. At the primary school, the situation was the same as at the whole school sample. This was not found at the other school levels. At the junior secondary schools, the number of teachers that mentioned the non-existence of extracurricular information literacy activities (39 teachers) was almost double the number of teachers that said the other way around (23 persons). At the senior secondary schools, more than 60% teachers mentioned the existence of extracurricular activities.

Table 66b: Extracurricular Literacy Activities at the School Levels (Teachers)

| School Level | | Extracurricular Activities to Promote Information Literacy | | Total |
|------------------|-----------------------|--|-------|--------|
| | | Yes | No | |
| Primary | Count | 23 | 24 | 47 |
| | % within school level | 48.9% | 51.1% | 100.0% |
| Junior Secondary | Count | 23 | 39 | 62 |
| | % within school level | 37.1% | 62.9% | 100.0% |
| Senior Secondary | Count | 49 | 29 | 78 |
| | % within school level | 62.8% | 37.2% | 100.0% |
| Total | Count | 95 | 92 | 187 |
| | % within school level | 50.8% | 49.2% | 100.0% |

The extracurricular activities mentioned by the teachers were, for example, the language month, English clubs, computer training, Internet training, reading campaign in the library, poetry reading, short story writing competition, language skill competition, book review writing competition, story telling competition, speech competition, news writing, wall magazine, and interviewing. Most of these activities were mentioned also by the librarians. They also added the following activities: English story reading, reporting what you read, and training librarianship to students.

However, the following table shows that again and again the librarians gave more pessimistic pictures of information literacy activities at the school, as compared to the principals and teachers respectively. This time was regarding the existence of extracurricular information literacy activities. According to them, 50% schools did not have extracurricular information literacy activities.

Table 67: Extracurricular Information Literacy Activities (Librarians)

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-------|-----------|---------|---------------|--------------------|
| Valid | Yes | 23 | 38.3 | 43.4 | 43.4 |
| | No | 30 | 50.0 | 56.6 | 100.0 |
| | Total | 53 | 88.3 | 100.0 | |
| Missing | | 7 | 11.7 | | |

| | | | |
|-------|----|-------|--|
| Total | 60 | 100.0 | |
|-------|----|-------|--|

To conclude, the school principals provided more optimistic pictures of the existence of extracurricular information literacy activities. This was probably because they had a better view of the whole school than their counterparts.

For How Long Had Information Literacy Been Taught?

According to the principals, there were 10 schools that had just recently started teaching information literacy, and there were 10 schools who had taught it for 5 or more years already (see Table 68a).

Table 68a: For How Long Had Information Literacy Been Taught? (School Principals)

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------|-----------|---------|---------------|--------------------|
| Valid | | | | |
| Less than 1 year | 10 | 21.3 | 23.3 | 23.3 |
| 1-2 years | 18 | 38.3 | 41.9 | 65.1 |
| 3-4 years | 5 | 10.6 | 11.6 | 76.7 |
| 5 years or longer | 10 | 21.3 | 23.3 | 100.0 |
| Total | 43 | 91.5 | 100.0 | |
| Missing | 4 | 8.5 | | |
| Total | 47 | 100.0 | | |

Among all the teachers that thought information literacy, about 35% had done it for 5 years or even more. The others had taught information literacy for 1-2 years (20%), less than 1 year (18%), and for 3-4 years.

Table 68b: For How Long Had Information Literacy Been Taught? (Teachers)

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------|-----------|---------|---------------|--------------------|
| Valid | | | | |
| Less than 1 year | 21 | 17.5 | 20.4 | 20.4 |
| 1-2 years | 24 | 20.0 | 23.3 | 43.7 |
| 3-4 years | 15 | 12.5 | 14.6 | 58.3 |
| 5 years or longer | 43 | 35.8 | 41.7 | 100.0 |
| Total | 103 | 85.8 | 100.0 | |
| Missing | 17 | 14.2 | | |
| Total | 120 | 100.0 | | |

According to the library staff, 11 libraries (39%) had taught information literacy for less than 1 year, and 7 libraries (25 %) for 5 years or more. The rest had done it for 1-4 years.

Table 68c: For How Long Had Information Literacy Been Taught? (Librarians)

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------|-----------|---------|---------------|--------------------|
| Less than 1 year | 11 | 39.3 | 42.3 | 42.3 |
| 1-2 years | 3 | 10.7 | 11.5 | 53.8 |
| 3-4 years | 5 | 17.9 | 19.2 | 73.0 |
| 5 years or longer | 7 | 25.0 | 26.9 | 100.0 |
| Total | 26 | 92.9 | 100.0 | |
| Missing | 2 | 7.1 | | |
| Total | 28 | 100.0 | | |

Methods of Delivery

This study distinguishes two types of information literacy programme delivery, namely, as curricular and extracurricular activities. As curricular activities, information literacy programmes can be offered as a course, embedded into existing courses, taught as and when necessary, as a library user education/orientation programme.

According to the school principals, in most of the schools (70%), information literacy teaching was embedded into existing courses, and only 30% schools offered it as a course. Unfortunately, only 8 schools taught information literacy in the form of library user orientation programmes. See the following table for the details.

Table 69: Ways of Teaching Information Literacy (School Principals)

| | Yes | | No | | Total | |
|---------------------------------|-------|------|-------|------|-------|-------|
| | Count | % | Count | % | Count | % |
| As a course | 15 | 31.9 | 32 | 68.1 | 47 | 100.0 |
| Embedded into existing course | 33 | 70.2 | 14 | 29.8 | 47 | 100.0 |
| Taught as and when necessary | 2 | 4.3 | 44 | 95.7 | 46 | 100.0 |
| In cooperation with the library | 8 | 17.4 | 38 | 82.6 | 46 | 100.0 |

According to the school principals, information literacy was embedded into the following courses: Indonesian language, English language, computer, math, social sciences, natural sciences, religion, history, biology, arts, physics, and career guidance. These courses were also mentioned by the teachers. They even added the following: sociology, moral education, chemistry, guidance and counseling, citizenship, and physical education.

Most of the teachers (83%) taught information literacy skills together with the courses they taught. There were 44% teachers taught it in cooperation with the

library. Only 18 teachers taught information literacy skills as a course. See the following table.

Table 70: Ways of Teaching Information Literacy (Teachers)

| | Yes | | No | | Total | |
|---------------------------------|-------|------|-------|------|-------|-------|
| | Count | % | Count | % | Count | % |
| As a course | 18 | 16.5 | 91 | 83.5 | 109 | 100.0 |
| Embedded into existing course | 90 | 82.6 | 19 | 17.4 | 109 | 100.0 |
| Taught as and when necessary | 30 | 27.5 | 79 | 72.5 | 109 | 100.0 |
| In cooperation with the library | 48 | 44.0 | 61 | 56.0 | 109 | 100.0 |

Information literacy skills that the teachers taught as and when necessary were, for example, how to find various information: news, statistical data, financial reports, traditional houses, financial markets, stock exchange, how to study abroad, the uses of electromagnetic waves, etc.

As a course, information literacy skills were taught at all grades of primary level: grades 5-6 (1 teacher), grades 1-6 (1 teacher); all grades of secondary level: grades 7, 9,10, 12 (2 teachers each), grades 8, 11, 10&11 (1 teacher each), grades 10-12 (3 teachers). Information literacy skills embedded into existing course was also practiced by the teachers at all grades of primary and secondary schools. Similar pictures were obtained also concerning the information literacy taught as and when necessary, and in cooperation with the library. These were practiced at all grades from primary to secondary schools.

How about the librarians? As observed by the school principals and practiced by the teachers, most of the librarians taught information literacy skills embedded into existing courses (75%). They also mentioned similar courses that included information literacy skill teaching in it. There were 10 librarians that taught information literacy skills in the library orientation programme, and 10 librarians that thought these skills as and when necessary. Surprisingly, there were 4 librarians that taught information literacy skills as a course in the library. See the following table.

Table 71: Ways of Teaching Information Literacy (Librarians)

| | Yes | | No | | Total | |
|--------------------------------------|-------|------|-------|------|-------|-------|
| | Count | % | Count | % | Count | % |
| As a course in the library | 4 | 14.3 | 24 | 85.7 | 28 | 100.0 |
| Embedded into existing courses | 21 | 75.0 | 7 | 25.0 | 28 | 100.0 |
| Taught as and when necessary | 10 | 35.7 | 18 | 64.3 | 28 | 100.0 |
| In the library orientation programme | 10 | 35.7 | 18 | 64.3 | 28 | 100.0 |

As a course, information literacy skills were taught by the librarians of primary schools (2 librarians, at grades 5-6) and senior secondary schools (2 librarians, at all grades). Embedded into existing courses, information literacy skills were taught at all school levels and at all grades. This was also the case of information literacy skills taught by the librarian as and when necessary. However, the librarians carried out library orientation programmes only for grades 5-11.

Hindering Factors of Information Literacy Activities

This study asked the teachers and librarians who did not teach information literacy about factors preventing the teaching of information literacy. The same question was aimed at the school principals.

Table 72: Factors Preventing the Teaching of Information Literacy (School Principals)

| | Yes | | No | | Total | |
|---------------------------------|-------|------|-------|------|-------|-------|
| | Count | % | Count | % | Count | % |
| Lack of trained teachers | 11 | 64.7 | 6 | 35.3 | 17 | 100.0 |
| There is no such a course | 9 | 52.9 | 8 | 47.1 | 17 | 100.0 |
| Insufficient library collection | 7 | 41.2 | 10 | 58.8 | 17 | 100.0 |
| Lack of trained librarian | 12 | 70.6 | 5 | 29.4 | 17 | 100.0 |
| Lack of computers | 8 | 47.1 | 9 | 52.9 | 17 | 100.0 |
| No Internet connection | 7 | 41.2 | 10 | 58.8 | 17 | 100.0 |
| Others | 2 | 11.1 | 16 | 88.9 | 18 | 100.0 |

As expected, factors mostly preventing the teaching of information literacy in the school were the lack of trained librarian (71%), lack of trained teachers (65%), and because there was no such a course (53%). The other reasons mentioned by about 40% principals were the lack of computers, no Internet access, and insufficient library collection. Other reasons were the lack of understanding on the part of parents, and the library's books arrangement that was not according to the subjects.

Table 73: Factors Preventing the Teaching of Information Literacy (Teachers)

| | Yes | | No | | Total | |
|---------------------------------|-------|------|-------|------|-------|-------|
| | Count | % | Count | % | Count | % |
| Lack of trained teachers | 40 | 50.6 | 39 | 49.4 | 79 | 100.0 |
| There is no such a course | 13 | 16.5 | 66 | 83.5 | 79 | 100.0 |
| Insufficient library collection | 38 | 48.1 | 41 | 51.9 | 79 | 100.0 |
| Lack of trained librarian | 27 | 34.2 | 52 | 65.8 | 79 | 100.0 |
| Lack of computers | 26 | 32.9 | 53 | 67.1 | 79 | 100.0 |

| | | | | | | |
|---------------------------------------|----|------|----|------|----|-------|
| No Internet connection | 26 | 32.9 | 53 | 67.1 | 79 | 100.0 |
| Others (no time, no motivation, etc.) | 9 | 11.4 | 70 | 88.6 | 79 | 100.0 |

A half of the teachers (51%) perceived the lack of trained teachers as the preventing factors. The other factors were mentioned by 30-48% teachers: insufficient library collection, lack of trained librarian, lack of computers, and no Internet connection. See Table 73 for the details.

Table 74: Factors Preventing the Teaching of Information Literacy (Librarians)

| | Yes | | No | | Total | |
|-------------------------------------|-------|------|-------|------|-------|-------|
| | Count | % | Count | % | Count | % |
| I do not have the capacity to train | 11 | 37.9 | 18 | 62.1 | 29 | 100.0 |
| There is no such a course | 21 | 72.4 | 8 | 27.6 | 29 | 100.0 |
| Insufficient library collection | 6 | 20.7 | 23 | 79.3 | 29 | 100.0 |
| Lack of trained librarian | 17 | 58.6 | 12 | 41.4 | 29 | 100.0 |
| Lack of computers | 16 | 55.2 | 13 | 44.8 | 29 | 100.0 |
| No Internet connection | 12 | 41.4 | 17 | 58.6 | 29 | 100.0 |
| Others | 1 | 3.4 | 28 | 96.6 | 29 | 100.0 |

In addition to the lack of training on the part of librarians, more than 50% of the respondent librarians saw the non-existence of information literacy course and lack of computers as factors that prevented the teaching of information literacy in the library. Only 6 librarians perceived insufficient library collection as the inhibiting factor.

Student Coverage

Despite the problems encountered, the above-mentioned information literacy activities had been able to cover various student proportions in the schools. According to almost 50% of the school principals and librarians, the information literacy activities had reached only less than 10% of their students (see Table 75 & 76). Fortunately, according to the principals there were about 25% schools that had more than 50% of their students trained on information literacy. However, only 5 librarians agreed with this statement.

Table 75: Percentage of Students Trained on Information Literacy (School Principals)

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|---------------|-----------|---------|---------------|--------------------|
| Valid | Less than 10% | 30 | 45.5 | 48.4 | 48.4 |
| | 11-25% | 8 | 12.1 | 12.9 | 61.3 |
| | 26-50% | 7 | 10.6 | 11.3 | 72.6 |
| | More than 50% | 17 | 25.8 | 27.4 | 100.0 |
| | Total | 62 | 93.9 | 100.0 | |

| | | | |
|---------|----|-------|--|
| Missing | 4 | 6.1 | |
| Total | 66 | 100.0 | |

Table 76: Percentage of Students Trained on Information Literacy in the Library (Librarians)

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------|-----------|---------|---------------|--------------------|
| Valid < 10% | 28 | 46.7 | 70.0 | 70.0 |
| 11-25 % | 5 | 8.3 | 12.5 | 82.5 |
| 26-50 % | 2 | 3.3 | 5.0 | 87.5 |
| > 50% | 5 | 8.3 | 12.5 | 100.0 |
| Total | 40 | 66.7 | 100.0 | |
| Missing | 20 | 33.3 | | |
| Total | 60 | 100.0 | | |

In summary, this section reveals several things. Most of the schools had taught information literacy skill as curricular as well as extracurricular activities. Most of the schools taught information literacy for more than one year already. Various ways of teaching information literacy skills were practiced at all school levels.

About 50% of the teachers participated in information literacy skill teaching. However, most of the libraries did not provide information literacy training. As the results, almost 50% of the principals and teachers reported that there were only less than 10% of students that had some training on information literacy.

The reasons for this were many, and the lack of human resources (trained librarians and teachers) was perceived by the principals, teachers, and librarians, as the most preventing factors of information literacy activities in their school.

2.7 Program Assessment

For the teaching of information literacy skills that had been going on for more than one year, this study asked the three groups of respondents about the evaluation of the programme: evaluation methods, the evaluator, and whether or not the programme was successful.

Among the schools that had information literacy programme, most of them (66%) carried out assessment to measure the impact of the programme. This was confirmed also by the teachers (71.8%). Only 50% of the librarians who taught information literacy skills conducted assessment of their programme. See Table 77 a-c.

Table 77a: Assessment of the Outcome of Information Literacy Programme (School Principals)

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|--|-----------|---------|---------------|--------------------|
|--|-----------|---------|---------------|--------------------|

| | | | | | |
|---------|-------|----|-------|-------|-------|
| Valid | Yes | 31 | 66.0 | 72.1 | 72.1 |
| | No | 12 | 25.5 | 27.9 | 100.0 |
| | Total | 43 | 91.5 | 100.0 | |
| Missing | | 4 | 8.5 | | |
| Total | | 47 | 100.0 | | |

Table 77b: Assessment of the Outcome of Information Literacy Programme (Teachers)

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-------|-----------|---------|---------------|--------------------|
| Valid | Yes | 74 | 71.8 | 74.7 | 74.7 |
| | No | 25 | 24.3 | 25.3 | 100.0 |
| | Total | 99 | 96.1 | 100.0 | |
| Missing | | 4 | 3.9 | | |
| Total | | 103 | 100.0 | | |

Table 77c: Assessment of the Outcome of Information Literacy Programme (Librarians)

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-------|-----------|---------|---------------|--------------------|
| Valid | Yes | 13 | 50.0 | 59.1 | 59.1 |
| | No | 9 | 34.6 | 40.9 | 100.0 |
| | Total | 22 | 84.6 | 100.0 | |
| Missing | | 4 | 15.4 | | |
| Total | | 26 | 100.0 | | |

Again and again, the librarian provided the least promising picture of its information literacy activities' component.

Assessment Methods

To measure the impact of the information literacy programme, the schools, teachers, and librarians, employed several methods, namely, survey, pre and post-test results, focus groups, and others. According to the school principals, 13 of 31 schools that conducted assessments used pre and post-test results, and 7 used surveys. Other methods used were library's visitor books, writing tasks, and course tests.

Table 78a: Measurement Methods of the Impact of Information Literacy Programme (School Principals)

| | Yes | | No | | Total | |
|---------------------------|-------|------|-------|------|-------|-------|
| | Count | % | Count | % | Count | % |
| Survey | 7 | 24.1 | 22 | 75.9 | 29 | 100.0 |
| Pre and post-test results | 13 | 44.8 | 16 | 55.2 | 29 | 100.0 |
| Focus groups | 1 | 3.4 | 28 | 96.6 | 29 | 100.0 |
| Others | 3 | 10.3 | 26 | 89.7 | 29 | 100.0 |

Most of the teachers who assessed their information literacy programmes, used pre and post-test results to measure the impact of the programmes (69%). Other assessment methods were discussions, observation, study visits, assignments, and portfolio.

Table 78b: Measurement Methods of the Impact of Information Literacy Programme (Teachers)

| | Yes | | No | | Total | |
|---------------------------|-------|------|-------|------|-------|-------|
| | Count | % | Count | % | Count | % |
| Survey | 6 | 8.8 | 62 | 91.2 | 68 | 100.0 |
| Pre and post-test results | 47 | 69.1 | 21 | 30.9 | 68 | 100.0 |
| Focus groups | 3 | 4.4 | 65 | 95.6 | 68 | 100.0 |
| Others | 15 | 22.1 | 53 | 77.9 | 68 | 100.0 |

Only 4 librarians used survey and pre and post-test results, respectively, to assess the impact of their information literacy programmes. Other methods they employed were library's visitor books, user evaluation of the library, observation, and the products of information literacy activities.

Table 78c: Measurement Methods of the Impact of Information Literacy Programme (Librarians)

| | Yes | | No | | Total | |
|---------------------------|-------|------|-------|------|-------|-------|
| | Count | % | Count | % | Count | % |
| Survey | 4 | 30.8 | 9 | 69.2 | 13 | 100.0 |
| Pre and post-test results | 4 | 30.8 | 9 | 69.2 | 13 | 100.0 |
| Focus groups | 1 | 7.7 | 12 | 92.3 | 13 | 100.0 |
| Others | 5 | 38.5 | 8 | 61.5 | 13 | 100.0 |

The respondents were asked also whether or not the information literacy assessment was a part of students' learning assessment. Almost in all schools that carried out assessment (93%), information literacy assessment was a part of students' learning assessment as it was integrated in the related course assessment (see Table 79a). This was confirmed by 90% teachers and 77% librarians who evaluated their information literacy programmes (see Table 79 b&c).

Table 79a: Information Literacy Assessment as a Part of Students' Learning Assessment (School Principals)

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-----------|-----------|---------|---------------|--------------------|
| Valid Yes | 29 | 93.5 | 93.5 | 93.5 |
| No | 2 | 6.5 | 6.5 | 100.0 |
| Total | 31 | 100.0 | 100.0 | |

Table 79b: Information Literacy Assessment as a Part of Students' Learning Assessment (Teachers)

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-----------|-----------|---------|---------------|--------------------|
| Valid Yes | 67 | 90.5 | 90.5 | 90.5 |
| No | 7 | 9.5 | 9.5 | 100.0 |
| Total | 74 | 100.0 | 100.0 | |

Table 79c: Information Literacy Assessment as a Part of Students' Learning Assessment (Librarians)

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-----------|-----------|---------|---------------|--------------------|
| Valid Yes | 10 | 76.9 | 76.9 | 76.9 |
| No | 3 | 23.1 | 23.1 | 100.0 |
| Total | 13 | 100.0 | 100.0 | |

The Assessor

As various methods were employed to assess the impact of information literacy programmes, many parties were involved as assessors, namely, subject teachers, home room teachers, school librarians or the staff in charge, and others (school principals).

According to the school principals, in most of the schools that assessed their information literacy programmes (77%), information literacy assessment was carried out by subject teachers (77%). The teachers confirmed this statement, as most of them (69%) carried out the information literacy assessment by themselves (compare Tables 80 a&b). Most of the librarians who assessed the outcome of their information literacy activities (54%), also mentioned subject teachers as the assessors (see Table 80c).

Table 80a: The Assessor of Information Literacy Program (School Principals)

| | Yes | | No | | Total | |
|--|-------|------|-------|------|-------|-------|
| | Count | % | Count | % | Count | % |
| Subject teachers | 24 | 77.4 | 7 | 22.6 | 31 | 100.0 |
| Home room teachers | 5 | 16.1 | 26 | 83.9 | 31 | 100.0 |
| School librarians or the staff in charge | 7 | 22.6 | 24 | 77.4 | 31 | 100.0 |
| Others | 3 | 9.7 | 28 | 90.3 | 31 | 100.0 |

Only 23% or 7 schools involved school librarian or the staff in charge of the library in the assessment, according to the principals (see Table 80a). Only 3 teachers and 5 librarians mentioned the involvement of librarians in the assessment (see Table 80 b&c).

Table 80b: The Assessor of Information Literacy Program (Teachers)

| | Yes | No | Total |
|--|-----|----|-------|
| | | | |

| | Count | % | Count | % | Count | % |
|--|-------|------|-------|-------|-------|-------|
| Myself | 51 | 68.9 | 23 | 31.1 | 74 | 100.0 |
| Subject teachers | 27 | 36.5 | 47 | 63.5 | 74 | 100.0 |
| Home room teachers | 5 | 6.8 | 69 | 93.2 | 74 | 100.0 |
| School librarians or the staff in charge | 3 | 4.1 | 71 | 95.9 | 74 | 100.0 |
| Others | 0 | .0 | 74 | 100.0 | 74 | 100.0 |

The home room teachers played the least role in the assessment of information literacy programmes according to the librarians.

Table 80c: The Assessor of Information Literacy Program (Librarians)

| | Yes | | No | | Total | |
|--|-------|------|-------|-------|-------|-------|
| | Count | % | Count | % | Count | % |
| Subject teachers | 7 | 53.8 | 6 | 46.2 | 13 | 100.0 |
| Home room teachers | 3 | 23.1 | 10 | 76.9 | 13 | 100.0 |
| School librarians or the staff in charge | 5 | 38.5 | 8 | 61.5 | 13 | 100.0 |
| Others | 0 | 0.0 | 13 | 100.0 | 13 | 100.0 |

The Successful of the Information Literacy Programme

About this, there were no structured questions for the school principals. They were asked an open-ended question about the outcome of the assessment and to provide the copy of the assessment report. As the result, none of the school principals provided the answers and the copy of the assessment report.

The teachers and the librarians were asked whether or not the programme was successful, and the reasons.

Table 81a: The Successful of the Information Literacy Programme (Teachers)

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-------|-----------|---------|---------------|--------------------|
| Valid | Yes | 58 | 78.4 | 81.7 | 81.7 |
| | No | 13 | 17.6 | 18.3 | 100.0 |
| | Total | 71 | 95.9 | 100.0 | |
| Missing | | 3 | 4.1 | | |
| Total | | 74 | 100.0 | | |

Most of the teachers who evaluated their information literacy programmes (78%) perceived their programmes as successful. This was because they noticed the improvement of their students' attitude, knowledge, creativity, innovation, performances in the schools and competitions, and motivation.

Those who thought that their programmes were not successful gave the following reasons: still seeking more appropriate teaching models, lack of time and facilities, lack of students' motivation and reading habit.

Table 81b: The Successful of the Information Literacy Programme (Librarians)

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-----------|-----------|---------|---------------|--------------------|
| Valid Yes | 13 | 50.0 | 59.1 | 59.1 |
| No | 9 | 34.6 | 40.9 | 100.0 |
| Total | 22 | 84.6 | 100.0 | |
| Missing | 4 | 15.4 | | |
| Total | 26 | 100.0 | | |

Unlike the teachers, the librarians were again less optimistic about the success of the programme. Only 50% of them thought that their information literacy programmes were successful. They observed that many students were still not able to search for information, there was also a lack of reading habit and motivation on the part of the students, and a lack of facilities.

To improve the information literacy programmes, both teacher and librarian respondents suggested the following: the improvement of library collection, library funding, library staff' welfare, Internet access, information literacy training and practices (students were required to search for information, and write papers), and the improvement of school principals-teachers-librarians cooperation.

CHAPTER 4 CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

This section covers the following:

- the awareness and practices of information literacy in public schools in Jakarta
- the role, readiness, and requirements of school libraries in promoting information literacy

The Awareness and Practices of information literacy in public schools in Jakarta

Concerning the awareness of information literacy, this study found out that none of the respondents had a full understanding of the information literacy concept as suggested by this study. Among the respondents, the librarians had the least understanding of this concept.

Concerning the practices of information literacy, these were the findings:

- More than 50% of the studied schools had written statements on information literacy, either in their schools' visions/missions or policies. However, there were no data on how clearly these statements were formulated, and how these statements were consistently articulated in the goal statements of the libraries and each courses (curriculum).
- The above condition had direct and indirect impacts on the poor resources development and allocation concerning information literacy programme, as shown in the following:
- There were still primary schools that did not have libraries.
- The schools spent their budget more for library resources and services than for information literacy. However, these supports were still not adequate. The support for the libraries from the local authorities and community was also inadequate.
- The libraries still lacked of budget for information literacy programmes, computing facilities, Internet access, and staff development.
- The libraries were still under-staffed, quantitatively and qualitatively

- The lack of trained librarians and teachers were perceived by the three groups of respondents as the most preventing factors of information literacy activities in the schools.
- Based on the assessment, most of the teachers perceived their information literacy training as successful. However, the librarians had a less optimistic view of the success of their programmes.

The Role, Readiness, and Requirements of School Libraries in Promoting Information Literacy

Ideally, school libraries and librarians have to play a central role in the information literacy skills development of the teachers as well as the students. The reasons are as follows:

- the ICT and knowledge develop so fast
- teachers and students have less time to follow this development, as compared with librarians whose main jobs require the use of ICT to produce metadata of all subjects. This was confirmed by the interviews carried out for this study. One of them said as follows:

“I would say..that all the teacher are fully professional in taking and gaining information ... but transferring those to children perhaps there’s certainly scope to spend more time on thatI think it would be good if they [librarians] were allowed more on prominent role in the teaching information skills, and perhaps in that respect, we need to make a more formal situations where library staff can literary take over and given another viewpoint on how to access information.”
- School librarians have more strategic position to meet teachers and students from different disciplines, as well as parents and other information providers.

To be effective, information literacy programmes should be carried out by the librarians in cooperations with teachers, students, and parents

However, this study revealed that although there was a cooperation between teachers and librarians in the teaching of information literacy, the libraries still played less roles than the teachers in information literacy training. There was a lack of confidence on the part of teachers and librarians themselves about the school libraries’ and librarians’ readiness to promote information literacy. They still needed to be equipped with more collection, computers, Internet access, and trained staff.

4.2 Recommendations

Based on the above findings, the following are the suggestion for appropriate action plans for the involvement of school libraries in the development of an information literate society.

To Principals

- Schools need to have explicit and clear statements on the importance of information literacy skills for the success of education
- These statements should be consistently articulated in the schools' vision, mission, policy; library's missions and goals; and in the curriculum
- Schools need to allocate appropriate resources for the implementation of information literacy programmes
- Schools should have good libraries
- Library staff need to be equipped with appropriate education and training
- Library need to be given a central role in information literacy skills training of the teachers and students.

To Librarians

- Librarians have to be aware of their strategic position in this information rich environment
- Librarians have to have ability to train others
- Librarians have to have ability to work in partnership with teachers to make information literacy skills development and assessment integrated in the curriculum.

UNESCO

Unesco needs to continuously support the efforts to improve and increase the following:

- Policy makers' and other stakeholders' awareness and understanding of information literacy concept and the significance of it.
- Library's and librarians' roles and capabilities in information literacy skills teaching.

Follow up studies

- Further examination is needed to find out why certain items of information literacy (e.g., the ability to evaluate information critically, to carry out all the above activities effectively) were not perceived as part of the information literacy concept. This is necessary if information literacy concept will be wholly implemented in one package of information literacy curriculum.

