

Principals and Teacher-Librarians Working Within an Information Literate School Community-Research from Korea *

학교정보화를 위한 교장과 사서교사의 협력에 관한 연구

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ABSTRACTS

The purpose of this study is to reveal how principals work with teacher-librarians to implement school library programs for information literate school community. According to the studies, the effective school library programs are implemented in schools where the principal takes a leadership role in creating the collaborative environment necessary for cooperative integrated school library programs. However this research on the role of the principal in supporting the information literate school community shows that teacher-librarians generally view principal support as critical to the success of the school information literate programs.

초 록

이 연구는 학교장과 사서교사의 협력관계가 학교사회의 정보화에 미치는 영향을 알기 위하여 진행된 것이다. 연구의 목적을 달성하기 위하여 학교장의 학교도서관에 대한 이해, 사서교사에 대한 지원, 정보화에 대한 이해 등을 설문서를 통하여 조사하였으며, 같은 질문을 사서교사에게도 함으로서 학교장 자신이 생각하는 것과 사서교사들이 받아들이는 관점의 차이를 조사하였다. 선행연구들에 나타난 것과 같이 학교장의 이해와 협력은 학교사회의 정보화를 위하여 필수적인 것이나 조사 결과 우리나라 학교장의 정보화에 대한 이해 정도나 지원은 부족하였으며 또한 교장 자신들이 스스로 생각하는 것에도 미치지 못하고 있다는 것이 밝혀졌다.

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1. Introduction

1. 1 Background of the research

James Henri and Lyn Hay conducted a detailed qualitative research project examining the ways principals working within an information literate school community were able to provide support to the teacher librarian. This project was conducted in a metropolitan school region within the New South Wales Department of Education (Henri and Hay, 1995). However this qualitative research project did not seek evidence to prove or disprove hypotheses that were held prior to entering the study—a top-down research model. The researchers intent was to employ a bottom-up methodology, where theory could be developed as abstractions are built from the particulars that have been gathered or grouped together. In December 1995 IFLA Division III (Libraries Serving the General Public) agreed to provide funding to underpin the extension of this research to facilitate the development and piloting of a quantitative instrument that could be employed on an international scale. In July 1996 IASL (International Association of School

Librarianship) awarded the authors, with the assistance of Dianne Oberg, additional funding to further support the establishment of an International Reference Group consisting of six countries—Canada, France, Japan, Finland, South Korea and Scotland—to implement the replication of this Australian quantitative research project (Henri, J. and Hay, L. 1995). The members of this International Reference Group attended IFLA General Conference 1997 and had a workshop for the project. James Henri and Lyn Hay provided the background that lead to the implementation of this project and the problems associated with the pilot of the instruments and the choice of a convenience sample are discussed. The survey was conducted with the same instruments in 7 countries and each country's report was presented under the same format at the School Libraries and Resource Centers Workshop of the 64th IFLA General Conference 1998. This article was rewritten from a South Korea's report of the workshop.

1. 2 Research problems

The researcher devised a set of key

areas for discussion for both the principals and teacher librarians. These included:

(1) Areas for discussion : Principals

What would you regard as key features of an information literate school community?

What do you understand to be the role of the teacher librarian in this?

What do you do to enable the development of an information literate school community?

To what extent do you support the introduction and use of information technology?

How important is the school library to a program that fosters information literacy?

Did you have something to do with the appointment of your teacher librarian?

How important is the teacher librarian in the school?

How do you support the teacher librarian?

What are the major barriers to the development of an information literate school community?

How do you address these?

What critical experiences have shaped your understanding and beliefs about effective school library

programs?

(2) Areas for discussion : Teacher librarian

What do you understand by an information literate school community?

What is the attitude of the principal with respect to:

information and especially, information technology

the library

a teacher librarian

What does he do to turn these attitudes into a powerful influence?

What are the major barriers to success? How is the principal addressing these?

What strategies do you use when seeking support from your principal?

How do you disseminate information that might enable the principal to facilitate support for the library program and you as teacher librarian?

What critical event has provided you with a clear understanding of the role of the teacher librarian in the school?

To identify above the research problems, survey instrument was developed in a number of distinct parts and included open ended questions to be analysed qualitatively

(appendix 5-1, 5-2, 5-3 / 6-1, 6-2, 6-3). Questions of the instruments were based on the findings of the qualitative study (Henri and Hay, 1995 / La Rocque and Oberg, 1991 / Oberg, 1995). A four point Likert scale was employed with zero weighting for an additional category 'cannot comment'. A five point scale was rejected on the advice that in this scale respondents may use the mid point 3 score as a short cut to serious thinking. Scoring was established in the reverse order of 4 to 1 as a match against the value of the choice (that is 4 equals a lot and 1 equals none).

2. Research methodology

2.1 Research sample

Korea is a small country geographically but its population is large. The educational system is 6-3-3-4 and there are 5,732 elementary schools, 2,705 middle schools and 1,856 high schools in Korea. The Ministry of Education is a central coordinating body for school education, it sets the goals of schooling for the nation, and establishes curriculum guidelines and

requirements. Elementary and secondary schools are under the supervision of the provincial area's superintendent of education. In Korea, public secondary schools are not fully funded by the national or provincial government and students have to pay their tuition. Teachers can belong to the teachers' associations (eg., Secondary School Teacher's Association) of their own choice, while the teachers' union was not permitted until 1998 because teachers were not accepted as laborers in Korean society. This organizational structure for public education results in a non-autonomy educational system.

According to the statistics of the 1996 Korean Education Yearbook (Korean Education Newspaper Co., 1997), 62.4% of elementary schools, 84.9% of middle schools, and 98.3% of high schools have libraries. The employment of a teacher-librarian is recommended by the Law of Education, but not obligatory. Elementary school libraries do not have teacher-librarians with a few exceptions. Only 1.3% of middle school libraries, 6.2% of high school libraries and 1.5% of all schools in Korea have teacher-librarians and these are mainly in Seoul (Korean Library Association, 1997).

Compared with this low employment rate of teacher-librarian or the nation's geographical size, the programs for education in librarianship are not small. Programs for librarianship education began in Korean universities in 1957(Choi, 1992) and now 32 universities offer the undergraduate courses for library and information science. Among of these universities, 20 have master's and also 7 offer doctoral courses.

While the education programs are rich, the number of professors in faculties of education, with the expertise and credentials necessary for supervising graduate work in teacher-librarianship, is also very small. All this means that there is not a large amount of research in teacher-librarianship carried out in Korea, and that much of the research that is carried out is conducted by students in their Master's or Doctoral programs, and that much of it is not disseminated to the profession.

A study is currently being conducted across the high school districts of Seoul. There is 1 superintendent and 11 school districts. Selection of the research participants could not be done by random sampling because all high schools in Seoul do not have teacher-

librarians. A population approach (selection of all the schools in one district, for example) could not be used either because no district in Seoul is large enough to get 100-150 schools with teacher-librarians. 252 teacher-librarians are in Korea and 175 teacher-librarians are in high school. Only 141 high schools have teacher-librarians in Seoul and so all of them were selected as the research participants. The sample-the schools with a teacher-librarian-was identified using the 1996 Korean Education Yearbook and the 1997 Statistics on Libraries in Korea.

2. 2 Survey Administration

In Korea, using an online survey format which developed by the Internet Special Projects Group could not be expected because almost all participants, particularly principals, were inexperienced Internet users even though most schools had computers. Because of the participants' lack of familiarity with web-based forms, paper copies of the surveys were requested.

Three instruments of the principal and teacher-librarian were translated into Korean (appendix 5-1, 5-2, 5-3 / 6-1, 6-

2, 6-3) by September 1997. Also information about this research project and how to participate were written in the covering letter under my name. I also asked the Seoul Secondary School Library Association's cooperation to increase response rate in October, and decided to attach an official letter of the Association to ask the principals and teacher-librarians' cooperation. Prepared instruments were mailed to the 141 schools and only 17 principal/teacher-librarian pairs were collected by early January 1998. At this time, the Association's workshop of the teacher-librarian was held and 18 instruments of the teacher-librarian were completed by them here. 124 paper copies of the surveys were mailed a second time while 18 instruments of the principal were also delivered by the teacher-librarians to their principals. Early February the third paper copies of the surveys were mailed once more and I phoned some of them to ask cooperation. Finally, by late February 43 principal/ teacher-librarian pairs were collected and the response rate was 30.5%. The data was loaded by the researcher and an assistant on the South Korea Web-site (http://farrer.riv.csu.edu.au/principal/survey/PR1_sk.html ;

[/PR2_sk.html](#) ; [/PR3_sk.html](#) ; http://farrer.riv.csu.edu.au/principal/survey/TL1_sk.html ; [/TL2_sk.html](#) ; [/TL3_sk.html](#)) during a period of three weeks from late February.

Even though there was no such thing as the Freedom of Information and Protection of Privacy Act of the Province of Alberta (Oberg, 1997) in Korea, there were a number of factors that influenced low response rates. First of all, the survey instrument was too lengthy and too complicated to complete, especially for the open-ended questions (instrument 3). Second, some of the questions in the instruments were not relevant to the present educational situation of Korea.

3. Survey Results

3. 1 Characteristics of survey sample

(1) School profile

All of the responding principals' schools are located in urban areas and more than half (54.8%) of them are public schools, and have large enrollment. Most of the schools (97.6%) have 1,000+ students and 71.4% have between 60-100+ teaching staff.

〈Table 1〉 Demographic of TL and Principal

		Teacher-librarian(%)	Principal(%)
Sex	Male	22.7	85.7
	Female	77.3	14.3
Age	20-29	6.8	0
	30-39	43.2	0
	40-49	43.2	0
	50-59	0	28.6
	60+	6.8	71.4
Qualifications	University	76.7	54.8
	Graduate school	23.3	45.2
Number of years in executive position	0- 4 years	0	0
	5- 9	0	5
	10-14	0	15
	15-19	0	70
	20-24	0	5
	25+	0	5
Number of years in current position	0- 4 years	31	33.3
	5- 9	26.2	26.2
	10-14	26.2	33.3
	15-19	14.3	4.8
	20+	2.4	2.4
Number of years teaching prior to appointment	0 years	45.2	0
	1- 4	16.7	9.5
	5- 9	7.1	2.4
	10-14	19.0	57.1
	15-19	0	23.8
	20+	2.4	7.1
Number of TL journals subscribed to/ Professional Associations (Principal)	0	5.9	8.3
	1	70.6	83.3
	2	20.6	4.2
	3	2.9	4.2

However all of the participant schools have one full time teacher-librarian which is not connected with the school size. 60% of the principals responded that internet connection is possible in their schools and the number of internet connections vary from 1 to 100. However the principal's internet knowledge is not accurate

because 48.3% of schools have no internet points in their school while 40% of the principals responded that their school has no internet connections. This means that 8.3% of the schools can access internet without internet points.

(2)Principal and teacher-librarian profile

According to the Table 1, all prin-

principals graduated from university and 45.2% also attended graduate school. 85.7% of the principals are male and 77.3% of the teacher-librarians are female. Teacher-librarians and principals differed significantly on the number of years they have spent teaching prior to appointment to their current position, number of years in executive positions, and age. 88% of the principals have spent between 10-20+ years teaching prior to appointment and 45.2% of the teacher-librarians have not had teaching experience. Whilst all teacher-librarians had spent no time in executive positions, principals were likely to have spent between 15-19 years in such positions. 100% of teacher-librarians have never been in an executive position. In Korea, due to the teacher-librarians have no way to promote in an executive position by Education Law. 100% of the principals are from 50 years of age upward and 71.4% of them are over 60 years of age. The teaching profession's retirement age is 65 in Korea. According to the principals' responses, only 2.4% the principals have been in their current position for 20+ years. This means that a teacher can only be a principal after 50 years of age with few exceptions. 76.8% of the principals who

responded have worked with 1-2 teacher-librarians and 2.4% of the principals have worked with 5-6. The later case is possible in the public school because the public school teachers have to be transferred every 4 years.

The demographics of a teacher-librarian are different from the principal's. The largest distribution are between the ages of 30-49. The number of years in current position is very diverse from between 0-4 years to over 20 years. All of the teacher-librarians graduated from university and 23.3% of them attended graduate school. 94.1% of the teacher-librarians subscribe to 1-3 journals and 89.3% of the teacher-librarians are members of 1-3 Professional Associations. But only 38.6% of the teacher-librarians subscribe to a listserve for librarians. This means that professional activity through computer has not been popular yet in Korea. 86.4% of teacher-librarians are appointed to unadvertised positions because employment of teacher-librarian is not required in Korea, so most employment is carried out by a personal recommendation. 92.7% of schools have no internet point in the school library. Through this we can guess the information literacy position or situation of the school library in Korea.

3. 2 Analysis of data

Means for the perception factors were computed for present-future of teacher librarian-principal groups (Appendix 1, 1-1). In order to determine if a difference existed between the means in each group, t-tests were computed for the means of each perception factor (Appendix 3). For the belief factors, means were computed for teacher librarian-principal groups (Appendix 2, 2-1). T-tests were also computed to know that significant differences exist between two groups (Appendix 4). The software program QSR Nudist was used to handle the data from the open-ended questions, instrument 3.

3. 2. 1 Statistical analysis for the perception factors

According to teacher-librarians their principals give the most attention to encouraging the professional development of teaching staff or enhancing the use of information technology at present and in the future(Q 3, 11). The next concern of principals is allocating flexible time for the teacher-librarian to administer the school library(Q 8). However the significant difference between time currently spent and time perceived to be required in

the future are presented at $p = /<.001$ only in question 11 at the result of t-test for these cases(Appendix 3). The teacher-librarians believe that the least attention among principals is seeking outside school funding possibilities that can be used to supplement the school library budget at present and in the future. There is significant difference between present and future at $p = /<.000$ for this case at t-test's result (Appendix 3).

According to the principals <Table 2> they pay very sufficient attention to allocating adequate time for the teacher-librarian to administer the school library at present (Q 8), and facilitating the development of an information literate school community in the future (Q 1). The significant differences between present and future are presented at $p = /,001$, $p = /,000$ for them at the result of t-test (Appendix 3-1). The principals perceive that advocating that the teacher-librarian be a member of key school committees to tap into his expertise and schoolwide perspective requires the least attention among themselves (Q 27) at present and in the future <Table 2>. The significant difference between present and future are also presented at $p = /<.000$ for this case (Appendix 3-1).

<Table 2> Ranking of importance/Non importance from statistics frequency analysis for perception factors

Perception Factors	Teacher-librarian				Principal			
	Present		Future		Present		Future	
	Question Number	Mean	Question Number	Mean	Question Number	Mean	Question Number	Mean
Important	3	3.07	11	3.25	8	3.47	1	3.74
	11	3.0	3	3.23	7	3.3	3	3.70
	8	2.95	8	3.16	1	3.16	8	3.70
	2	2.61	1	3.05	2	3.12	7	3.56
	13	2.61	24	3.02	3	3.09	2	3.51
	24	2.61	2	3.0	6	3.0	4	3.40
						9	3.40	
Not important	16	1.64	27	2.05	27	1.83	27	2.37
	27	1.84	16	2.09	22	2.09	16	2.70
	12	1.86	12	2.16	17	2.16	20	2.74
	30	1.95	30	2.16	20	2.16	22	2.74
	25	2.0	25	2.27	16	2.21	12	2.79
						26	2.79	

<Table 3> Ranking of TL/PR's belief factors

Teacher-librarian	Agree	Question No.	33	34	35	48	42
		Mean	3.50	3.48	3.43	3.39	3.18
Disagree	Question No.	52	40	43	50	36	49
	Mean	1.82	2.45	2.48	2.48	2.55	2.55
Principal	Agree	Question No.	34	33	37	44	35
		Mean	3.42	3.26	3.16	3.14	3.12
	Disagree	Question No.	39	40	48	41	32
		Mean	2.4	2.49	2.49	2.51	2.6

Appendix 4 shows us that there are significant differences between teacher-librarians and principals at $p = < .005$ for many perception factors. It indicates that principals and teacher-librarians differ on how much time they think the principal spends on various tasks (eg., facilitating the development of an information literate school community(Q 1)).

Overall principals view themselves as spending more time on tasks than the

teacher-librarians perceive them to be spending. Principals also perceive themselves as generally being able to spend more time on tasks in the future than the teacher-librarian thinks they should have to.

3. 2. 2 Statistical analysis for the belief factors

The teacher-librarians believe that their qualification in education, librarianship and promotion is very impor-

tant (Q 33, 34, 35, 48) and the next is library service (Q 42) (Table 3). The majority of them agree that they should be key players in the school's information literacy program or that internet access should be available through the school library, even though their belief is not so strong (Mean 3.16/ 3.07). But they do not believe that the position of teacher-librarian is good enough preparation for the position of principal (Q 52) even though they are concerned about achievement of Advanced Skill Teacher status (Q 48). They especially express negative feeling about the principal's supervision or their judgement about the teacher-librarian's competence (Q 43, 50). It is not an expected result that the teacher-librarians do not agree with providing a flexible timetable that best meets the needs of individual students, groups and whole classes (Q 38, 40).

The principals are also interested in the teacher-librarian's ability and qualification, but they do not have concern about their promotion. It is noticed that the principal's and teacher-librarian's interests clash about the status of Advanced Skills Teacher. Meanwhile there is no significant differences between teacher-

librarian and principals at $p = / < .005$ for the belief factors. On the one hand the principals pay attention to the staff development plans and provide appropriate inservicing to teaching staff, while the principal's reaction is very negative (Q 32, 39, 41) about school library or teacher-librarian's key role in the information literacy programs.

3. 2. 3 Findings from Instrument 3

The responses to the open-ended questions on Instrument 3 were analyzed and interpreted as follows:

(1) The strengths of the school library were accepted as promoting reading and providing books or information for teaching-learning by both principals and teacher-librarians. However the principals put the strongest emphasis on the reading while the teacher-librarians put the strongest emphasis on providing information or helping teachers teach and students learn.

(2) The challenges that face the school library are budget and information literacy. Also mentioned by teacher-librarians, but with less frequency, were the library's simple role as a study room.

(3) The teacher-librarian's critical functions are providing information

and reading guidance. The function of providing information was seen as circulation of books.

(4) If the library were closed or a teacher-librarian were absent for more than two weeks, teaching-learning would be affected in using information materials. Thus student aids have to be trained well in order to ensure access to the school library when the librarian is absent.

(5) Both teacher-librarians and principals see information literacy mostly as ability to get information through computer network. Mentioned by teacher-librarians, but with less frequency, was the providing of teaching-learning materials.

(6) Software and budget are the major barriers to the integration of information skills across the curriculum.

(7) Principals respond that their role is to provide a supporting budget or to emphasize the role of the school library for the development of an information literate school community.

4. Conclusions

Following results are preliminary :

(1) Principals and teacher-librarians

in South Korea differ significantly in gender, and age. Whilst teacher-librarians are primarily female, principals are male. Teacher librarians are likely to be between 30-49 years of age, all principals are over 50 years of age.

(2) A traditional school library in South Korea is like a warehouse of old books and no information technology in most schools. Teacher librarian's main task is to order books and the main focus of the school library is in supporting reading and students' independent learning.

(3) The principals see the school library as a whole : for them, it must be a performant tool serving everybody, managed by an efficient and friendly teacher-librarian, who opens it as long as possible. Despite the principal's interest for the school library, his support and cooperation with the teacher librarian is minimal.

(4) The Korean principals have no concern for the role of the teacher-librarian in the instructional program, and they do not have interest in seeking collaboration of the teacher-librarian with respect to issues of whole school information management.

(5) Teacher-librarians appear to have a clear understanding of what principal support entails and of the

need to gain this critical support. However they appear to have less knowledge of the strategies that they might employ to gain principal support and less assertiveness in using the strategies of which they are aware.

Although the level of responses to this study in South Korea was disappointing, there are a number of significant issues which have been raised and the results can be seen as mainly positive, despite some differences in beliefs being found. The key

recommendations which this author would make are :

(1) Strategies for improving cooperation between teacher-librarians and principals in relation to the development of information skills in schools should be developed and disseminated to both principals and teacher-librarians.

(2) The results of the survey need to be disseminated in both the educational and librarianship press and journals.

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〈Appendix 1〉

Descriptive statistics from frequency analysis for Teacher-librarians perception of time spent on tasks/ or in support of tasks by the Principal

Question	Present		Future	
	Mean	SD	Mean	SD
1	2.57	.87	3.05	.78
2	2.61	.89	3.00	.81
3	3.07	.70	3.23	.68
4	2.52	.93	2.84	.83
5	2.34	.94	2.57	.95
6	2.55	.82	2.82	.84
7	2.41	.79	2.64	.89
8	2.95	.71	3.16	.71
9	2.45	.85	2.75	1.01
10	2.14	.85	2.57	1.00
11	3.0	.84	3.25	.72
12	1.86	.80	2.16	.96
13	2.61	.78	3.00	.84
14	2.32	.91	2.55	1.07
15	2.48	1.07	2.68	1.03
16	1.64	.78	2.09	.94
17	2.09	1.03	2.48	.95
18	2.52	.98	2.84	.89
19	2.43	.83	2.73	.85
20	2.20	1.07	2.50	.98
21	2.45	1.00	2.75	.97
22	2.41	.97	2.66	1.06
23	2.55	.98	2.80	.95
24	2.61	.92	3.02	.93
25	2.0	.96	2.27	1.04
26	2.41	1.00	2.75	.92
27	1.84	.99	2.05	1.06
28	2.34	.96	2.45	1.04
29	2.23	1.03	2.55	1.04
30	1.95	.94	2.16	1.12
31	2.02	1.05	2.36	1.01

〈Appendix 1-1〉

Descriptive Statistics from frequency analysis for Principals perception of time spent on tasks/ or in support of tasks by themselves

Question	Present		Future	
	Mean	SD	Mean	SD
1	3.16	.65	3.74	.49
2	3.12	.76	3.51	.67
3	3.09	.43	3.70	.51
4	2.95	.87	3.40	.73
5	2.93	.70	3.23	.75
6	3.0	.72	3.19	.76
7	3.3	.71	3.56	.55
8	3.47	.67	3.70	.51
9	2.84	.53	3.40	.62
10	2.36	.89	2.93	.99
11	2.84	.57	3.37	.79
12	2.33	.92	2.79	.94
13	2.74	.88	3.21	.99
14	2.51	.83	3.02	.91
15	2.60	.76	3.21	.89
16	2.21	.77	2.70	.89
17	2.16	.92	2.88	.93
18	2.58	.96	3.08	.84
19	2.65	.75	3.16	.87
20	2.16	.84	2.74	.85
21	2.70	.83	3.05	.84
22	2.09	.72	2.74	.95
23	2.86	.77	3.23	.81
24	2.84	.84	3.30	.74
25	2.42	.63	3.00	.72
26	2.33	.71	2.79	.74
27	1.83	.91	2.37	1.09
28	2.51	.83	3.12	1.03
29	2.56	.96	3.02	.99
30	2.40	.93	2.93	.94
31	2.37	.90	2.91	.87

〈Appendix 2〉 Descriptive Statistics from frequency analysis for Teacher-librarians Beliefs

Question	Mean	SD
32	3.16	.94
33	3.50	.76
34	3.48	.51
35	3.43	.76
36	2.55	.87
37	2.91	1.18
38	2.93	.82
39	2.82	.95
40	2.45	1.04
41	3.07	.95
42	3.18	.62
43	2.48	.63
44	3.09	.68
45	3.07	.82
46	3.14	.67
47	3.02	.46
48	3.39	.54
49	2.55	.79
50	2.48	.70
51	3.16	.48
52	1.82	.99
53	3.11	.54

〈Appendix 2-1〉 Descriptive Statistics from frequency analysis for Prin-cipals Beliefs

Question	Mean	SD
32	2.6	.90
33	3.26	.76
34	3.42	.50
35	3.12	.66
36	3.05	.82
37	3.16	.65
38	2.67	.81
39	2.4	.85
40	2.49	.86
41	2.51	.98
42	3.0	.72
43	2.81	.70
44	3.14	.64
45	3.00	.95
46	2.79	.94
47	2.84	.57
48	2.49	.88
49	2.91	.68
50	2.88	.50

〈Appendix 3〉 T-Tests- Present vs Future Analysis : Teacher-librarians

Question	Present		Future		P value
	Mean	SD	Mean	SD	
10	2.14	.85	2.57	.998	.000
11	3.00	.84	3.25	.72	.001
12	1.86	.80	2.16	.96	.001
13	2.61	.78	3.0	.84	.000
16	1.64	.78	2.09	.94	.000
17	2.09	1.03	2.48	.95	.000
18	2.52	.98	2.84	.88	.001
1	2.57	.87	3.05	.78	.000
21	2.45	.999	2.75	.98	.000
23	2.54	.975	2.79	.95	.000
24	2.61	.92	3.02	.93	.000
26	2.41	.99	2.75	.92	.000
29	2.23	1.03	2.54	1.04	.001
2	2.61	.895	3.0	.81	.001
4	2.52	.93	2.84	.83	.000
6	2.55	.82	2.82	.84	.000

〈Appendix 3-1〉 T-Tests - Present vs Future Analysis : Principals

Question	Present		Future		P value
	Mean	SD	Mean	SD	
10	2.3	.89	2.93	.99	.000
11	2.84	.57	3.37	.78	.000
12	2.33	.92	2.79	.94	.000
13	2.74	.88	3.21	.99	.000
14	2.51	.83	3.02	.91	.000
15	2.60	.76	3.21	.89	.000
16	2.21	.77	2.70	.89	.000
17	2.16	.92	2.88	.93	.000
18	2.58	.96	3.05	.84	.000
19	2.65	.75	3.16	.87	.000
1	3.16	.65	3.74	.49	.000
20	2.16	.84	2.74	.85	.000
22	2.09	.72	2.74	.95	.000
24	2.84	.84	3.30	.74	.000
25	2.42	.63	3.00	.72	.000
26	2.33	.72	2.79	.74	.000
27	1.83	.91	2.38	1.10	.000
28	2.51	.82	3.12	1.03	.001
29	2.56	.96	3.02	.99	.000
2	3.12	.76	3.51	.67	.000
30	2.39	.93	2.93	.94	.000
31	2.37	.90	2.91	.87	.000
3	3.09	.42	3.70	.51	.000
4	2.95	.87	3.40	.73	.000
5	2.93	.70	3.23	.75	.000
8	3.46	.67	3.70	.51	.001
9	2.84	.53	3.40	.62	.000

〈Appendix 4〉 Teacher-librarian vs Principal
Present and Future Questions and Beliefs

Question	Levenes F-value	Levenes p-value	T-value	df	p-value
12f	.000	.997	-3.09	85	.003
16f	.013	.910	-3.10	85	.003
16p	.061	.805	-3.44	85	.001
1f	1.727	.192	-5.00	85	.000
1p	4.143	.045	-3.60	79.55	.001
25f	9.373	.003	-3.79	76.76	.000
28f	.001	.969	-2.98	85	.004
2f	.202	.654	-3.22	85	.002
30f	1.605	.209	-3.48	85	.001
3f	3.365	.070	-3.64	85	.000
4f	.021	.886	-3.30	85	.001
5f	2.921	.091	-3.61	85	.001
5p	8.909	.004	-3.32	79.69	.001
7f	2.658	.107	-5.79	85	.000
7p	.218	.641	-5.56	85	.000
8f	1.493	.225	-4.03	85	.000
8p	2.778	.099	-3.44	85	.001
9f	3.414	.068	-3.57	85	.001

Question	TL Mean	TL SD	Principal Mean	Principal SD
12f	2.16	.96	2.79	.94
16f	2.09	.94	2.70	.887
16p	1.64	.78	2.21	.773
1f	3.05	.78	3.74	.49
1p	2.57	.87	3.16	.65
25f	2.27	1.04	3.00	.724
28f	2.45	1.04	3.12	1.03
2f	3.00	.81	3.52	.67
30f	2.16	1.12	2.93	.94
3f	3.23	.68	3.70	.51
4f	2.84	.83	3.40	.73
5f	2.57	.95	3.23	.751
5p	2.34	.94	2.93	.704
7f	2.64	.89	3.56	.548
7p	2.041	.787	3.30	.708
8f	3.16	.71	3.70	.51
8p	2.95	.714	3.47	.667
9f	2.75	1.014	3.40	.62

<Appendix 5-1> Principal Instrument 1 : Demographics

Please provide the following data which will provide a basis for understanding your answers to the questionnaire. Tick or provide data as required.

1. Type of school government _____ non-government _____
 1-6 _____ 7-9 _____ 10-12 _____ other _____
2. Size of school Number of teachers _____
 Number of students _____
 Number of teacher librarians _____
3. Number of Internet connections in the school _____
4. Number of Internet access points(terminals) in the school _____
5. Your age: 20-29 years _____
 30-39 years _____
 40-49 years _____
 50-59 years _____
 60 years and over _____
6. Gender: Female _____
 Male _____
7. Your academic qualifications _____
8. Your number of years of teaching prior to appointment as a principal _____
9. Number of years in your current position _____
10. Your number of years in Executive position _____
11. Number of teacher-librarians you have worked with in your career as a principal _____
12. Your membership of professional associations (please name) _____

<Appendix 5-2> Principal Instrument 2

Part A : Perception Factors

Present Situation

How much attention do I give this item?
 A Lot Some Little None Cannot Comment

4 3 2 1 0

Future Situation

How much attention would I like to give this item?
 A Lot Some Little None Cannot Comment

4 3 2 1 0

1. I advocate and facilitate the development of an information literate school community.
2. I ensure that the attainment of information literacy is part of the school plan.
3. I encourage and facilitate the professional development of staff.
4. I understand and advocate the role of the teacher librarian in the school's instructional program.
5. I demonstrate support for collaboration among the teacher-librarian and teaching staff.
6. I ensure that the school library resource centre objectives reflect school goals.
7. I ensure that the teacher-librarian has an appropriate allocation of support staff.
8. I allocate adequate, flexible time for the teacher librarian to administer the library resource centre.
9. I encourage the teaching staff to involve themselves in the development of library resource centre policies and programs.
10. I encourage the teaching staff to invest time in cooperatively planning and teaching with the teacher librarian.
11. I encourage and facilitate the professional development of teaching staff to enhance their understanding and use of information technology.
12. I inform new staff about the importance of collaborating with the teacher librarian.
13. I support the development of a resource collection that is current and relevant to the curriculum needs of the school.
14. I encourage staff debate about information policy.
15. I ensure that significant funding is allocated to the library resource centre budget.
16. I actively seek outside school funding possibilities that can be used to supplement the library resource centre budget.
17. I engage in regular and timely communication with the teacher librarian.
18. I visit the library resource centre to observe the work of the teacher librarian.
19. I encourage the teacher librarian to debate and justify current practice.
20. I ask questions of the teacher librarian about teaching and learning.
21. I rely on the teacher librarian to keep me abreast of developments that affect his role.
22. I seek advice from the teacher librarian with respect to issues of whole school information management.
23. I encourage the teacher librarian to take risks.

24. I encourage teachers to employ a wide range of information resources in their teaching programs.
25. I encourage the teacher librarian to take a leadership role in the development and maintenance of a school wide information skills continuum.
26. I work with the teacher librarian to develop his personal professional development plan.
27. I advocate that the teacher librarian be a member of key school committees to tap into his expertise and schoolwide perspective.
28. I encourage teachers to incorporate the learning and use of a range of information skills into their teaching programs and to assess process skills as well as content.
29. I provide time release and funding to the teacher librarian to undertake ongoing professional development.
30. When the teacher librarian is not represented on a key committee I ensure that the needs of the library resource centre are addressed.
31. I seek feedback from staff about their impressions of the quality of library resource centre services.

Part B : Belief Factors

Please indicate the strength of your belief for each of these items.

Strongly Agree Agree Disagree Strongly Disagree Cannot Comment

4 3 2 1 0

32. I believe that the teacher librarian should be a key player in the school's information literacy programs.
33. I believe that a teacher librarian ought to have a qualification in education and librarianship.
34. I believe teacher librarians ought to be appointed according to a merit selection process.
35. Should an unqualified teacher librarian be appointed to my school, I would expect that he undertake a specialist qualification in teacher librarianship.
36. I expect the teacher librarian to spend all of his day in the library resource centre.
37. I believe that staff development plans should address the development of teachers' information literacy.

38. I believe that the teacher librarian should be timetabled to cover classroom teachers' release from face-to-face time.
39. I identify the teacher librarian as an information technology leader in the school.
40. I believe that the teacher librarian should provide a flexible timetable that best meets the needs of individual students, groups, and whole classes.
41. I believe that Internet access should be available through the library resource centre.
42. I believe that students should have individual access to the library resource centre during class time.
43. I believe that the principal should supervise the teacher librarian.
44. I believe that the teacher librarian should provide appropriate inservicing to the teaching staff.
45. I believe it is important that principals act as role models and mentors to staff who are reticent about the appropriate instructional use of information technology.
46. I believe that cooperative planning and teaching should occur in the classroom as well as in the library resource centre.
47. When the teacher librarian is absent, I believe that it is necessary to fill his position with a suitably qualified replacement.
48. I believe that teacher librarians should be supported to achieve Advanced Skills Teacher status and appropriate executive positions.
49. My acceptance of the teacher librarian's professional judgement relates directly to his credibility.
50. I believe that I am well placed to judge the teacher librarian's professional competence.

〈Appendix 5-3〉 Principal Instrument 3

The following questions allow you to provide the researchers with additional information.

From my perspective the strengths of the library resource centre are :

From my perspective the challenges that face the library resource centre are:

The following things that the teacher librarian does are critical to the quality of teaching

and learning.

If the library resource centre were closed for more than two weeks the form and quality of teaching and learning would be affected in the following ways:

If the teacher librarian were absent from school for more than two weeks the form and quality of teaching and learning would be affected in the following ways:

When the teacher librarian is absent the following arrangements ensure access to the library resource centre:

I see information literacy as:

I see the following as the major barriers to the integration of information skills across the curriculum:

I promote the role of the library resource centre through school committees in the following ways:

In conclusion I would like to make the following points about my role in developing and supporting an information literate school community:

<Appendix 6-1> Teacher Librarian Instrument 1 : Demographics

Please provide the following data which will provide a basis for understanding your answers to the questionnaire. Tick or provide data as required.

1. Number of Internet connections in the library resource centre _____
2. Number of Internet access points (terminals) in the library resource centre

3. Your age: 20-29 years
30-39 years
40-49 years
50-59 years
60 years and over
4. Gender: Female
Male
5. Your academic qualifications _____
6. Your number of years of teaching prior to appointment as a teacher librarian

7. Number of years in your current position _____

8. Were you appointed to an advertised position? _____
9. Are you an Advanced Skilled Teacher? _____
10. Your number of years in Executive positions _____
11. Your membership of professional associations (please name) _____
12. Do you subscribe to OZTL NET?
13. Which Teacher Librarian journals do you read? _____

〈Appendix 6-2〉 Teacher Librarian Instrument 2

Part A : Perception Factors

Present Situation

How much attention does the Principal give this item?

Future Situation

How much attention should the Principal give this item?

A Lot Some Little None Cannot Comment

4 3 2 1 0

1. The Principal advocates and facilitates the development of an information literate school community.
2. The Principal ensures that the attainment of information literacy is part of the school plan.
3. The Principal encourages and facilitates the professional development of staff.
4. The Principal understands and advocates the role of the teacher librarian in the school's instructional program.
5. The Principal demonstrates support for collaboration among the teacher-librarian and teaching staff.
6. The Principal ensures that the school library resource centre objectives reflect school goals.
7. The Principal ensures that the teacher-librarian has an appropriate allocation of support staff.
8. The Principal allocates adequate, flexible time for the teacher librarian to administer the library resource centre.
9. The Principal encourages the teaching staff to involve themselves in the

- development of library resource centre policies and programs.
10. The Principal encourages the teaching staff to invest time in cooperatively planning and teaching with the teacher librarian.
 11. The Principal encourages and facilitates the professional development of teaching staff to enhance their understanding and use of information technology.
 12. The Principal informs new staff about the importance of collaborating with the teacher librarian.
 13. The Principal supports the development of a resource collection that is current and relevant to the curriculum needs of the school.
 14. The Principal encourages staff debate about information policy.
 15. The Principal ensures that significant funding is allocated to the library resource centre budget.
 16. The Principal actively seeks outside school funding possibilities that can be used to supplement the library resource centre budget.
 17. The Principal engages in regular and timely communication with the teacher librarian.
 18. The Principal visits the library resource centre to observe the work of the teacher librarian.
 19. The Principal encourages the teacher librarian to debate and justify current practice.
 20. The Principal asks questions of the teacher librarian about teaching and learning.
 21. The Principal relies on the teacher librarian to keep me abreast of developments that affect his role.
 22. The Principal seeks advice from the teacher librarian with respect to issues of whole school information management.
 23. The Principal encourages the teacher librarian to take risks.
 24. The Principal encourages teaching staff to employ a wide range of information resources in their teaching programs.
 25. The Principal encourages the teacher librarian to take a leadership role in the development and maintenance of a school wide information skills continuum.
 26. The Principal works with the teacher librarian to develop his personal professional development plan.

27. The Principal advocates that the teacher librarian be a member of key school committees to tap into his expertise and schoolwide perspective.
28. The Principal encourages teaching staff to incorporate the learning and use of a range of information skills into their teaching programs and to assess process skills as well as content.
29. The Principal provides time release and funding to the teacher librarian to undertake ongoing professional development.
30. When the teacher librarian is not represented on a key committee, the Principal ensures that the needs of the library resource centre are addressed.
31. The Principal seeks feedback from teaching staff about their impressions of the quality of library resource centre services.

Part B: Belief Factors

* These items for the Belief Factors are the same with the Principal's.

〈Appendix 6-3〉 Teacher Librarian Instrument 3

The following questions allow you to provide the researchers with additional information.

From my perspective the strengths of the library resource centre are :

From my perspective the challenges that face the library resource centre are:

The following things that the teacher librarian does are critical to the quality of teaching and learning.

If the library resource centre were closed for more than two weeks the form and quality of teaching and learning would be affected in the following ways:

If the teacher librarian were absent from school for more than two weeks the form and quality of teaching and learning would be affected in the following ways:

When the teacher librarian is absent the following arrangements ensure access to the library resource centre;

I see information literacy as:

I see the following as the major barriers to the integration of information skills across the curriculum;

I promote the role of the library resource centre through school committees in the following ways:

I maintain my credibility as a teacher librarian in the following ways:

The principal could provide the following additional supports to me as teacher librarian:

In conclusion I would like to make the following points about my role in developing and supporting an information literate school community: