Report of Phase Two of Delaware School Library Survey: "Student Learning Through Delaware School Libraries"

Part 2 Summary of Findings & Recommendations

On behalf of the Governor's Task Force on School Libraries Delaware USA

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Study Goals

The "Student Learning Through Delaware School Libraries" sought to:

- (a) provide evidence of how quality school libraries in Delaware help students with their learning in and away from school, and identify the outcomes enabled through this help; and
- (b) provide insight into professional practices of high quality school libraries which can serve as service models for developing continuous improvement plans for Delaware's school libraries, with particular emphasis on developing the instructional role of school libraries in Delaware integrated with content standards (a gap identified in Phase One).

Summary of Findings and Recommendations

The student and faculty data and qualitative responses support the view that school libraries in the study are robust school libraries, with widespread contribution to learning and student development taking place in their schools through the range of helps identified and valued by students and faculty. The school libraries clearly provide an information and information technology infrastructure, a range of instructional interventions and learning support mechanisms, and a caring supportive environment that helps students and fosters learning outcomes. The school libraries studied are engaging places, where students connect with, interact with and utilize information and engage in a journey of discovery, learning, and personal development. The school libraries are not merely informational places, but play a role as transformational and enabling of learning, a role that has opportunity to be extended and developed further.

The students' use of the school library and perceptions of its help are a complex interaction of many aspects: from access to and appropriateness of library resources, availability of information technology and its functionality, the nature of instructional interventions to guide students on information seeking and using experiences, to spatial dynamics and the persona of school librarians.

- The quantitative data set consisted of 5733 valid student responses, and 468 faculty responses from 13 selected schools in Delaware that met a range of quality school library criteria.
- 1210 students and 156 teachers from elementary schools, 2239 students and 149 teachers from elementary schools, and 2277 students and 163 teachers from high schools participated in the study.
- Among the students, 2659 were boys (46.4% of sample) and 2742 girls (47.8% of sample) participated in the study. Of the faculty, 111 were males (23.7% of the sample) and 297 females (63.5% of the sample).

- Among the students, most were White (60.5 % of the sample) with African Americans forming the next largest group (19.1 %). Most faculty were White (86.1 % of the sample) with African Americans forming the next largest group (7.1 %).
- The students were aged from 8 to 18, with an average of 13.6 years. The majority of students were from 13 to 16 years of age.
- The majority of the responding students and faculty represented grades 7-11.
- 98.17% of the sample (5628 students) indicated that the school library, and especially the school librarians, have helped them in some way in their learning process. 105 students indicated that they got no help from the school library. The school library has helped a vast majority of the students, regardless of the extent of help.
- There is considerable diversity of help and the level of help provided by the school libraries, and this is highly commendable. School libraries help students and faculty in a myriad of ways, both individual and collective, and students and faculty draw on this help, whether it be a little or a lot, depending on their needs, and indeed, their awareness of the nature and extent of services provided by the school library. While there is some variation in the extent to which students perceive this help across boys and girls, grade groups, and ethnic groups, and the personal circumstances and pressures confronting them, the school library reaches almost every student in the schools in the study in some, if not multiple ways, and they value this help. This is a noteworthy achievement.
- The extent of levels of **help to students** is shown in the following table:

Student Survey Statement by Bloo	Percentag	e of Respo	onses		
Block 1. How helpful the school library is with getting information you need.	Most helpful	Quite helpful	Some help	A little help	No help
1. The school library has helped me know the different steps in finding and using information	28.4	33.9	20.9	11.0	5.8
2. The school library has helped me work out the questions for the topics I am working on	29.0	36.1	19.1	9.6	6.2
3. The school library has helped me find different sources of information for my topics (such as books, magazines, CDs, websites, videos)	37.0	27.8	18.1	10.2	7.0
4. The school library has helped me know when I find good information	26.5	29.4	21.9	13.7	8.6
5. The school library has helped me find different opinions about my topics	23.9	29.7	22.6	14.1	9.7
6. The school library has helped me feel better about finding information	28.4	27.4	20.9	13.7	9.7
7. The school library has helped me feel good about asking for assistance when I need information	33.3	23.5	18.1	14.4	10.7

2. How helpful the school library is with using the information to complete your school work.	Most helpful	Quite helpful	Some help	A help	little	No help
1. The school library has helped me know how to	33.1	27.8	18.1	11.5		9.5
use the different kinds of information sources,						
(such as books, magazine, CDs, websites, videos)						
2. The school library has helped me work out the	25.3	33.0	20.9	12.5		8.2
most important things in the information I find						
3. The school library has helped me get better at taking notes	19.7	21.5	20.5	19.5		18.9
4. The school library has helped me put all the		26.9	21.8	16.2		13.4
ideas together for my topics	21.7					
5. The school library has helped me put ideas in		23.5	21.8	18.4		16.2
my own words	23.5					
6. The school library has helped me think about	28.5	28.0	19.9	14.4		9.2
how I will find information next time						
7. The school library has helped me know that	35.6	26.4	17.0	12.1		8.9
research takes a lot of work						
8. The stuff I have found in the school library has	29.2	24.7	20.4	15.1		10.7
helped me become more interested in my topics						
3. How helpful the school library is with your	Most	Quite	Some	A	little	No
school work in general.	helpful	helpful	help	help		help
1. The school library has helped me remember	22.5	27.7	20.9	15.8		13.1
what I learn in school	22.3	27.7	20.5	13.0		13.1
2. Name two of the classes where you have	1.		2.			
remembered more school work	1.		2.			
3. The school library has helped me get the first	28.0	31.8	19.8	12.1		8.3
facts about my topics	20.0	31.0	13.0	12.1		0.0
4. The school library has helped me learn more	36.0	30.9	17.4	9.5		6.3
facts about my topics	20.0	20.5	17.1	7.5		0.5
5. The school library has helped me when I do	26.6	27.5	21.0	14.3		10.7
not understand some things I learn about	20.0	27.5	21.0	1 1.5		10.7
6. The school library has helped me figure out if	22.6	26.3	21.5	15.3		14.4
my own ideas about a topic are good or bad						
and a management of the same grounds and						
7. The school library has helped me change my	25.6	26.6	20.9	14.2		12.7
mind about some things I thought I knew						
	22.6	25.5	20.7	16.4		14.8
, i	24.3	27.0	21.5	15.2		12.0
1			1 - 1 - 1			
	20.1	19.7	19.0	19.2		22.1
1						
	Most	Ouite	Some	A	little	No
		~				
·		F				r -
1. Computers in the school library help me do my	47.8	21.9	9.6	9.6		8.2
1. Computers in the school notary help me do my						
 8. The school library has helped me figure out my own opinions on things 9. The school library has helped me connect different ideas I already have 10. The school library has helped me talk more in class discussions 4. How helpful the school library is with using computers in the library, at school, and at home. 1. Computers in the school library help me do my 	24.3 20.1 Most helpful	27.0 19.7 Quite helpful	20.7 21.5 19.0 Some help	16.4 15.2 19.2 A help	little	14.8 12.0 22.1 No help 8.2

		1		,		
2. The school library has gotten me more interested in computers	32.0	21.6	15.7	14.9		15.8
3.Computers help me find information inside and	51.2	21.9	12.6	8.4		6.0
outside of the school library						
4. The school library has helped me search the	37.0	22.9	15.3	13.5		11.3
Internet better						
5. The school library has helped me be more careful about information I find on the Internet	32.6	24.5	16.3	14.2		12.4
6. Computer programs (like Powerpoint, Word) in the school library help me do my school work	43.6	22.1	13.4	10.5		10.5
7. The school library has helped me feel better about using computers to do my school work	36.0	23.2	14.9	13.4		12.6
5. How helpful the school library is to you with	Most	Quite	Some	A	little	No
your general reading interests.	helpful	helpful	help	help	nttic	help
your general reading interests.	пстртиг	Петргия	ПСТР	пстр		пстр
1. The school library has helped me find stories I like	39.8	21.5	15.1	11.7		11.9
2. The school library has helped me read more	30.4	20.7	16.1	16.1		16.7
3. The school library has helped me become a	29.4	19.5	16.2	16.2		18.8
better reader						
4. The school library has helped me enjoy reading more	30.2	17.4	14.7	18.2		19.5
5. The school library has helped me be a better writer	22.3	20.8	17.9	17.7		21.3
6. How helpful the school library is to you	Most	Quite	Some	A	little	No
when you are not at school.		_				
when you are not at senoor.	neipiui	helpful	help	help		help
when you are not at school.	helpful	helpful	help	help		help
1. The school library has helped me learn ways to	30.0	helpful 23.7	help 15.6	help 12.8		help 17.8
The school library has helped me learn ways to discover interesting topics other than my school	_	-		_		
The school library has helped me learn ways to discover interesting topics other than my school work	_	-		_		
The school library has helped me learn ways to discover interesting topics other than my school work Some of these topics are	30.0	23.7	15.6	12.8		17.8
The school library has helped me learn ways to discover interesting topics other than my school work Some of these topics are The things I've learned in the school library	_	-		_		
The school library has helped me learn ways to discover interesting topics other than my school work Some of these topics are The things I've learned in the school library help me study at home and other places outside	30.0	23.7	15.6	12.8		17.8
1. The school library has helped me learn ways to discover interesting topics other than my school work 2. Some of these topics are 3. The things I've learned in the school library help me study at home and other places outside of school.	30.0	23.7	15.6	12.8		17.8
1. The school library has helped me learn ways to discover interesting topics other than my school work 2. Some of these topics are 3. The things I've learned in the school library help me study at home and other places outside of school. 4. The school library has helped me be more	30.0	23.7	15.6	12.8		17.8
1. The school library has helped me learn ways to discover interesting topics other than my school work 2. Some of these topics are 3. The things I've learned in the school library help me study at home and other places outside of school. 4. The school library has helped me be more organized with my homework	30.0	23.7	15.6	12.8		17.8
1. The school library has helped me learn ways to discover interesting topics other than my school work 2. Some of these topics are 3. The things I've learned in the school library help me study at home and other places outside of school. 4. The school library has helped me be more	30.0 24.9 19.4	23.7 26.0 22.2	15.6	12.8 16.6		17.8
 The school library has helped me learn ways to discover interesting topics other than my school work Some of these topics are The things I've learned in the school library help me study at home and other places outside of school. The school library has helped me be more organized with my homework The school library has helped me find 	30.0 24.9 19.4	23.7 26.0 22.2	15.6	12.8 16.6		17.8
1. The school library has helped me learn ways to discover interesting topics other than my school work 2. Some of these topics are 3. The things I've learned in the school library help me study at home and other places outside of school. 4. The school library has helped me be more organized with my homework 5. The school library has helped me find information at the public library.	30.0 24.9 19.4 22.8	23.7 26.0 22.2 21.2	15.6 18.0 18.8 16.8	12.8 16.6 17.5 15.3 18.4		17.8 14.6 22.1 23.9
 The school library has helped me learn ways to discover interesting topics other than my school work Some of these topics are The things I've learned in the school library help me study at home and other places outside of school. The school library has helped me be more organized with my homework The school library has helped me find information at the public library. The school library lessons have helped me solve problems better Information in the school library has helped 	30.0 24.9 19.4 22.8	23.7 26.0 22.2 21.2	15.6 18.0 18.8 16.8	12.8 16.6 17.5 15.3		17.8 14.6 22.1 23.9
 The school library has helped me learn ways to discover interesting topics other than my school work Some of these topics are The things I've learned in the school library help me study at home and other places outside of school. The school library has helped me be more organized with my homework The school library has helped me find information at the public library. The school library lessons have helped me solve problems better Information in the school library has helped me decide what I need to do next with my school 	30.0 24.9 19.4 22.8 20.8	23.7 26.0 22.2 21.2 19.9	18.0 18.8 16.8 19.1	12.8 16.6 17.5 15.3 18.4		17.8 14.6 22.1 23.9 21.8
1. The school library has helped me learn ways to discover interesting topics other than my school work 2. Some of these topics are 3. The things I've learned in the school library help me study at home and other places outside of school. 4. The school library has helped me be more organized with my homework 5. The school library has helped me find information at the public library. 6. The school library lessons have helped me solve problems better 7. Information in the school library has helped me decide what I need to do next with my school work.	30.0 24.9 19.4 22.8 20.8 24.2	23.7 26.0 22.2 21.2 19.9 20.5	18.0 18.8 16.8 19.1 15.8	12.8 16.6 17.5 15.3 18.4 15.1		17.8 14.6 22.1 23.9 21.8 24.5
 The school library has helped me learn ways to discover interesting topics other than my school work Some of these topics are The things I've learned in the school library help me study at home and other places outside of school. The school library has helped me be more organized with my homework The school library has helped me find information at the public library. The school library lessons have helped me solve problems better Information in the school library has helped me decide what I need to do next with my school work. The school library website helps me when I am 	30.0 24.9 19.4 22.8 20.8	23.7 26.0 22.2 21.2 19.9	18.0 18.8 16.8 19.1	12.8 16.6 17.5 15.3 18.4		17.8 14.6 22.1 23.9 21.8
 The school library has helped me learn ways to discover interesting topics other than my school work Some of these topics are The things I've learned in the school library help me study at home and other places outside of school. The school library has helped me be more organized with my homework The school library has helped me find information at the public library. The school library lessons have helped me solve problems better Information in the school library has helped me decide what I need to do next with my school work. The school library website helps me when I am not at the school library (in classrooms, at home, 	30.0 24.9 19.4 22.8 20.8 24.2	23.7 26.0 22.2 21.2 19.9 20.5	18.0 18.8 16.8 19.1 15.8	12.8 16.6 17.5 15.3 18.4 15.1		17.8 14.6 22.1 23.9 21.8 24.5
 The school library has helped me learn ways to discover interesting topics other than my school work Some of these topics are The things I've learned in the school library help me study at home and other places outside of school. The school library has helped me be more organized with my homework The school library has helped me find information at the public library. The school library lessons have helped me solve problems better Information in the school library has helped me decide what I need to do next with my school work. The school library website helps me when I am not at the school library (in classrooms, at home, or other places I study). 	30.0 24.9 19.4 22.8 20.8 24.2	23.7 26.0 22.2 21.2 19.9 20.5	15.6 18.0 18.8 16.8 19.1 15.8	12.8 16.6 17.5 15.3 18.4 15.1	littla	17.8 14.6 22.1 23.9 21.8 24.5
 The school library has helped me learn ways to discover interesting topics other than my school work Some of these topics are The things I've learned in the school library help me study at home and other places outside of school. The school library has helped me be more organized with my homework The school library has helped me find information at the public library. The school library lessons have helped me solve problems better Information in the school library has helped me decide what I need to do next with my school work. The school library website helps me when I am not at the school library (in classrooms, at home, 	30.0 24.9 19.4 22.8 20.8 24.2	23.7 26.0 22.2 21.2 19.9 20.5	18.0 18.8 16.8 19.1 15.8	12.8 16.6 17.5 15.3 18.4 15.1	little	17.8 14.6 22.1 23.9 21.8 24.5

1. The library has helped me do my school work	30.9	24.1	17.5	13.9	13.5
better					
2. The school library has helped me get better	25.7	24.0	19.2	15.8	15.2
grades on my school work					
3. The school library has helped me get better	21.8	20.9	19.3	17.3	20.6
grades on tests and quizzes					
4. The school library has helped me think harder	24.0	21.4	17.7	18.1	18.9
about my school work					
5. The school library has made me more	27.0	19.4	17.1	16.7	19.8
confident about doing my school work					

• The extent of levels of **help to faculty** is shown in the following table:

Faculty Survey Statements	Percentage of Responses				
Block 1. How helpful is the school library with				No	
helping students get the information they need	helpful	helpful	help	little	help
				help	
1. The school library has helped students know the	60.9	27.1	6.8	0.4	4.5
different steps in finding and using information.					
2. The school library has helped students work out	56.6	30.8	6.0	1.5	4.7
the questions for the topics they are working on.					
3. The school library has helped students find	62.0	25.9	7.1	0.9	3.6
different sources of information for their topics					
(such as books, magazines, CDs, websites, videos).					
4. The school library has helped students know	47.9	32.9	12.6	1.1	5.1
when they find good information.					
5. The school library has helped students find	41.0	33.8	12.8	2.6	9.2
different opinions about their topics.					
6. The school library has helped students feel better	55.3	26.7	9.2	3.0	5.3
about doing research.					
7. The school library has helped students feel good	62.0	22.2	6.6	4.1	4.7
about asking for assistance with their research.					
Block 2. How helpful is the school library with	Most	Quite	Some	A	No
helping students use information to complete	helpful	helpful	help	little	help
their school work				help	
1. The school library has helped students know how	53.6	29.5	10.7	1.5	4.5
to use the different sources of information (such as					
books, magazine, CDs, websites, videos).					
2. The school library has helped students work out	34.4	38.0	15.8	1.7	9.2
the main ideas in the information they find.					
3. The school library has helped students get better	26.1	28.6	20.9	8.8	15.2
at taking notes.					
4. The school library has helped students put all the	31.6	35.3	17.1	4.9	10.7
ideas together for their topics.					
5. The school library has helped students put ideas	24.8	33.3	21.8	7.3	12.2
in their own words.					
6. The school library has helped students think	50.9	30.3	9.8	3.4	4.9
about how they should go about finding					

information next time.					
7. The school library has helped students know that	58.8	27.1	6.4	1.9	5.6
research takes a lot of work.	20.0	27.1		1.7	3.0
8. The information students have found in the	52.8	28.4	10.0	2.8	4.9
school library has helped them become more	32.0	20.1	10.0	2.0	1.7
interested in their topics.					
Block 3. How helpful is the school library with	Most	Quite	Some	A	No
students' school work in general.	helpful	helpful	help	little	help
statents sensor work in general.	пстртит	петргаг	ПСТР	help	петр
1. The school library has helped students	27.6	40.2	20.7	3.4	7.9
remember what they learned in school.	27.10	1012			
2. The school library has helped students get the	48.1	33.5	11.1	1.9	4.7
first facts about their topics.	10.1	33.3	11.1	1.7	1.,
3. The school library has helped students learn	62.0	27.6	5.3	0.6	3.8
more facts about their topics.	02.0	27.0	3.3	0.0	3.0
4. The school library has helped students when	39.7	32.5	17.3	3.8	6.0
they do not understand some things they learn	37.1	32.3	17.5	3.0	0.0
about.					
5. The school library has helped students figure out	32.5	35.0	18.2	6.0	7.7
if their own ideas are accurate or inaccurate.	32.3	33.0	10.2	0.0	/./
6. The school library has helped students change	34.6	36.8	15.4	3.8	9.0
their minds about some things they thought they	31.0	30.0	13.1	3.0	7.0
knew.					
7. The school library has helped students figure out	29.3	35.0	21.8	3.4	10.3
their own opinions on things	27.0		21.0		10.0
8. The school library has helped students connect	37.6	36.5	15.0	3.2	7.3
different ideas they already have					
9. The school library has helped students talk more	31.8	29.1	18.6	7.5	11.3
in class discussions	01.0		10.0	,	11.0
Block 4. How helpful is the school library with	Most	Quite	Some	A	No
students using computers in the library, at	helpful	helpful	help	little	help
school, and at home.	_	1		help	_
1. Computers in the school library have helped	66.0	20.3	6.8	2.6	3.8
students do their school work better.					
2. The school library has got students more	56.8	23.9	9.0	5.1	4.5
interested in computers.					
3. Computers have helped students find information	66.9	19.0	7.1	2.1	4.7
inside and outside of the school library.					
4. The school library has helped students search	67.7	17.5	6.4	3.2	4.9
the Internet better.					
5. The school library has helped students be more	52.1	24.4	13.0	3.6	6.4
careful about information they find on the Internet.					
6. Computer programs (like PowerPoint, Word,	57.3	22.4	8.3	4.1	7.5
and Excel) in the school library help students do					
their school work.					
7. The school library has helped students feel	59.8	19.4	10.7	3.2	6.0
better about using computers to do their school					
work.					
	•	•	-		

Block 5. How helpful is the school library to students with their general reading interests.	Most helpful	Quite helpful	Some help	A little help	No help
1. The school library has helped students find stories they like.	59.8	21.4	10.5	0.9	6.8
2. The school library has helped students read more.	59.2	20.5	12.0	1.9	6.0
3. The school library has helped students get better at reading.	51.1	25.4	13.2	3.0	6.8
4. The school library has helped students enjoy reading more.	57.9	19.9	10.9	4.1	6.6
5. The school library has helped students be better writers.	31.2	29.9	20.5	5.6	10.7
Block 6. How helpful is the school library to students when they are not at school.	Most helpful	Quite helpful	Some help	A little help	No help
1. The school library has helped students discover interesting topics beyond their school work.	49.8	32.1	9.4	2.1	5.8
2. The skills students have learned in the school library help them study at home.	29.3	33.5	20.5	6.4	9.8
3. The school library has helped students get more organized with their homework.	18.2	28.4	22.9	10.0	20.1
4. The school library has helped students find information even when they are not at school.	30.6	30.8	15.6	6.8	15.6
5. The school library lessons have helped students solve problems better.	26.3	32.9	17.9	9.4	12.8
6. The school library has helped students when they have a personal issue or concern.	18.6	20.1	20.3	13.5	26.3
7. Information in the school library has helped students decide what they need to do next with their school work	22.4	31.4	22.2	9.2	13.7
8. The school library helps students use the public library	38.0	28.8	15.8	6.2	10.5
9. The school library website helps students when they are in the classroom or at home.	32.7	21.6	11.5	7.1	26.3
Block 7. General statements about the school library's contribution to students' academic achievement.	Most helpful	Quite helpful	Some help	A little help	No help
1. The school library has helped students do their school work better.	40.8	33.5	14.7	4.1	6.4
2. The school library has helped students get better grades on their projects and assignments.	47.6	29.1	12.8	3.4	6.2
3. The school library has helped students get better grades on tests and quizzes.	24.1	26.9	21.4	10.7	15.8
4. The school library has helped students think harder about their school work.	31.0	31.8	18.2	7.9	10.3
5. The school library has made students feel more confident about doing their school work.	40.2	28.2	15.8	6.4	8.3

• The comparison between the students and the faculty in terms of ranking and mean scores for each block is shown below. Overall, the average responses from the faculty are higher than those from the students in all of the blocks. The triangulation of faculty and student data shows a high level of consistency in mean responses. What the students ranked highest and lowest was also what the faculty ranked highest and lowest. The perceptions of how school libraries provide from high to low levels of help is consistent across the school community.

BLOCK	RANK OF MEAN FROM	Faculty	Student
	HIGHEST TO LOWEST	Mean	Mean
4	COMPUTERS	4.29	3.69
1	GETTING INFORMATION	4.27	3.6
2	USING INFORMATION	3.94	3.41
3	KNOWLEDGE	3.92	3.38
5	READING	4.09	3.29
7	ACHIEVEMENT	3.79	3.22
6	INDEPENDENT LEARNING	3.49	3.13

- The five statements that most students marked as being "most helpful" were the following: 43. Computers help me find information inside and outside of the school library, 41. Computers in the school library help me do my school work better, 46. Computer programs (like PowerPoint, Word) in the school library help me do my school work, 51. The school library has helped me find stories I like, and 13. The school library has helped me find different sources of information for my topics (such as books, magazines, CDs, websites, videos).
- The five top helps of the school library (regardless of level of perceived help) and which recorded the least number of "no helps" were the following: 11, The school library has helped me know the different steps in finding and using information, 43, Computers help me find information inside and outside of the school library, 12, The school library has helped me work out the questions for the topics I am working on, 34, The school library has helped me learn more facts about my topics and 13 The school library has helped me find different sources of information for my topics (such as books, magazines, CDs, websites, videos). For large numbers of students in these schools, school libraries play a vital role in launching students in their research endeavors getting the search steps right, finding information, knowing what to look for, building a picture of the topic, and fining information in different sources. Defining information needs, establishing direction and setting up a basis for building knowledge are at the heart of this.
- Students articulated the knowledge outcomes of this help in a rich variety of ways. They acknowledged that through the library help, the perceived amount of knowledge about their topics had increased: they learned "a lot" or "much"; others made direct connections between help and achievement by stating that they "got a good grade", "got better grades" or they got "A". Others stated that it impacted on the depth of their knowledge, for example: "I got a better understanding", "able to thoroughly explain". A range of affective outcomes were also identified:

feelings of success and accomplishment, satisfaction with being able to execute an information search, greater interest in the topic, willingness to try harder.

- Overall, the classes where the school library help seemed to impact most in terms of remembering content were English, Social Studies, Science, and Language Arts, as the majority of students were from middle and high schools. There were differences according to elementary, middle and high schools. Elementary school students identified impact of remembering content in Reading, Social Studies, Science and Writing classes; middle school students identified Language Arts, Social Studies, Science and Reading, and high school students identified English, History, Health and Global Studies.
- Overall, the role of information technology in school libraries is highly valued, and Block 4, the information technology dimensions of the school library was ranked the highest by both students and faculty. The three statements that the highest percentage of students considered most helpful were also connected to information technology: 43. Computers help me find information inside and outside of the school library (51 %), 41. Computers in the school library help me do my school work better (48%), and 46. Computer programs (like PowerPoint, Word) in the school library help me do my school work (43%).
- Information technology in school libraries goes beyond a technical role in information retrieval and access. 37 % of the students also felt that they had learned to search the Internet better through the instructional input of the school library. This is also related to a higher awareness of differing quality of Internet sources (32 % of the students felt that this was the most helpful aspect of the school library). They value the skills of accessing and using high quality sources. Having access to information technology at the school library also helps students who do not have computer access at home to complete their research tasks. As evidenced by the student voices in the study, the role of information technology in and through the school library is multifaceted. It is:
 - (a) functional, in terms of providing access to and delivery of essential information resources;
 - (b) *technical*, enabling the students to develop a range of technical competencies in relation to using sophisticated information technology to learn complex search skills for learning and living in an increasingly technological work and social environment;
 - (c) *evaluative*, providing schools with a framework for enabling students to develop the critical competencies needed to identify high quality accurate and authoritative information amid a real-world information environment that is complex, diverse, conflicting, and of variable quality;
 - (d) *constructive*, providing technical tools for the students to construct and present representations of their new knowledge and understanding of their researched topics in ways that allow the integration of mixed media, and to share their new understandings with others.
- Phase 1 of the Delaware study revealed that the average number of computers in the school libraries available for internet access is 15 (10 in elementary schools, 20 in middle schools, and 29 in high schools), and 56 school libraries of the 154 schools (= 36%) have web sites. When information technology functions well, it is highly appreciated by the students, when technical issues and access issues arise, as some students identified in the critical incident statements, this

is a cause of concern that seems to foster negative attitudes towards the school library and a perception that it is unable to provide any help to them.

- Overall, the second highest ranked category of school library help was acquisition of information, followed by the third in relation to information use. The most appreciated aspect in the first category was the notion of the broad range of information sources available through the library, Question 13. The school library has helped me find different sources of information for my topics (such as books, magazines, CDs, websites, videos). The notion of the library as a provider of a broad range of information sources was also reflected in the most helpful aspects of information use: 27. The school library has helped me know that research takes a lot of work and 21. The school library has helped me know how to use the different kinds of information sources, (such as books, magazine, CDs, websites, videos). Similarly, the faculty rankings and evidence statements give emphasis to the substantial help provided in relation to access to resources.
- The five statements that most students marked as being of "no help" were the following: 67. Information in the school library has helped me decide what I need to do next with my school work, 65. The school library has helped me find information at the public library, 3A. The school library has helped me talk more in class discussions, 64. The school library has helped me be more organized with my homework, and 66. The school library lessons have helped me solve problems better. These dimensions primarily relate to accessing and using information beyond the school library, and flag opportunities for Delaware to rethink the nature of the information landscape of the state, and how all providers and stakeholders can construct a holistic and integrated information landscape.
- 99.82% of the faculty members perceived that the school library has helped their students, in some way, regardless of the extent of help across the 50 dimensions, or level of help.
- The five statements that faculty marked as being "most helpful" were the following: 44. The school library has helped students search the Internet better, 43. Computers have helped students find information inside and outside of the school library, 41. Computers in the school library have helped students do their school work better, 13. The school library has helped students find different sources of information for their topics (such as books, magazines, CDs, websites, videos), 33. The school library has helped students learn more facts about their topics. Faculty identify the role of information technology in terms of information access, information quality, and information diversity.
- The five statements that faculty marked as being of "no help" were the following: 66. The school library has helped students when they have a personal issue or concern, 69. The school library website helps students when they are in the classroom or at home, 63. The school library has helped students get more organized with their homework, 73. The school library has helped students get better grades on tests and quizzes, and 64. The school library has helped students find information even when they are not at school. These perceptions of no help center around the broader life context of students away from school solving life concerns, and being in information contexts other than school and resolving information needs that arise in them. This poses a key question: how does the school library more effectively connect students with life in the round?

- The student comments show that the professional role of the school librarian, as an information learning specialist, an information technologist, and an information resource manager is recognized and prized by many students, and students particularly see the school librarian as key to making the vital connections between the diverse, complex and confronting world of information, use of information technology, and access, empowerment and achievement. This key is likewise highly valued by the school's faculty who not only see the learning connections, but also see the evidence in terms of a diverse range of learning and life outcomes. Students and faculty alike both acknowledge and value this personal connection. The importance of a credentialed, learning-centered school librarian cannot be under estimated, and the findings of this study celebrate this central role.
- The student comments show that help through the school library is also provided at multiple levels in whole class instruction, small groups and individually. One aspect that often goes unnoticed in school libraries is the individual (and time absorbing) attention that school librarians provide dealing with individual and specific student needs, and the student comments indicate that this individual level of guidance and help is both widespread and very important to them.
- Some students make connections between the informational and instructional programs of the school libraries and achievement and success with their research assignments and projects, and their development as capable learners able to negotiate and use the information landscape to learning success and personal gain. However, this connection is not always clear nor capitalized on, and provides an opportunity for school librarians to market both the range of instructional and informational services more clearly and precisely, and to establish more clearly the links to student achievement and other learning outcomes.
- The students value the school library's role in helping them understand that doing good quality research is a time-consuming process. Students see the reward through effort. It is very clear that school libraries play a critical role in the development of school students as researchers: school librarians work to engage students in an active and meaningful search process contextualized by specific learning tasks, helping them to explore, formulate and focus their searches, and provide a supportive environment (personal, physical and instructional) for students to success in their research. Faculty clearly see this role of the development of students as good researchers, and acknowledge it as a key outcome of the school library.
- The students' replies revealed four basic categories of "no help": 1) students who do not go to the library and do not make use of the library, 2) students who prefer to find information elsewhere, 3) students who were aware, but did not use since they did not experience the need of it ("I can do it myself"), and 4) students who identified personnel or other barriers to receiving help from the school library. Not all expressions of "no help" were negative (some students appear to have developed some independence with information seeking). The faculty categories of no help revolved around 1) faculty who do not use the school library because they do not see the need, 2) faculty who appreciate library services in theory but do not use it for their work, and 3) faculty who do not use the school library because of disappointment in library services.

- There were differences in levels of help perceived across the ethnic groups. Hispanics and African American students shared similarities in their ranking of statements that differed from the ranking by Whites. The conception of research as hard work, and learning how to search the Internet better ranked considerable higher among the Whites as compared to the Hispanic and African American students, while school library help in finding different sources of information ranked higher among the Hispanic and African American students than among White students. There were also some differences according to ethnic group among the faculty responses, but the faculty categories consisted of too few people to generalize.
- There were differences in students' responses according to grade level. The students of grades 3-5 mainly saw the school library helping with their reading interests, and there is a clear shift from reading to information seeking for curriculum topics in grades 6-8, with perceptions of helps in relation to supporting reading declining through grade levels. Few of the younger students mention the school library's role in the provision and use of information technology and software, however, this aspect becomes more evident in the middle and high schools. This grade difference was supported by a similar pattern among faculty when faculty responses were examined by school level (elementary, middle and high).
- The critical incident question revealed a broad range of descriptions and conceptions of the school library. Many of the students' statements reflected aspects that were acknowledged in the categorical statements listed in the survey, but their statements also revealed additional dimensions of school library help. The additional categories focused on three main aspects: school librarians, school library as a milieu and students' personal development. Students valued the school librarian as instructor, and as a friendly and caring initiator of help, and as one who helps them meet just-in-time learning demands (rescue agent) where resources and expertise are provided in time of need, especially with issues to do with information technology, and in terms of the multiple research demands placed on students.
- Students derive help from instructional interventions undertaken by school librarians and classroom teachers. Students identified different types instruction linked to:
 - independent information seeking
 - use of information technology for finding sources of information for school work
 - Internet searching and internet site evaluation
 - judging information quality
 - selecting relevant information
 - reading and writing
 - clarifying and explaining unclear issues in relation to the topics that the students are working on, and to a lesser extent
 - interpreting, analyzing and/or discussing information found

According to the students, these instructional interventions are seen to contribute to success, primarily getting strong grades in research tasks.

• Students' statements show that they value the school library as a quiet comfortable place where they can work independently and without distraction. Some students acknowledged the school library as a safe place where they can investigate problematic and contentious issues in privacy and safety

- The faculty responses to the critical incident question revealed similar themes to the ones identified by the students. The faculty value the role of the school librarian as an instructor, especially in terms of research, information access and information seeking, and enhancing students' reading skills. The school librarian's role in terms of knowledge construction through information was less strongly supported. There is a very tangible view that the role of the school librarian as an instructional partner contributes to student learning outcomes, and there is considerable scope for extending the nature of instructional interventions to focus on enabling students to use found information to build their deep knowledge and deep understanding of their topics.
- The faculty value the school library as a welcoming space and place, where individual needs are responded to, and which they perceives as important in helping students learn, and for their own preparedness in providing instruction. A key to this, as identified in some faculty comments, is flexibility in library schedules and opening hours, which contribute to meeting information needs in a timely and appropriate way.
- Some faculty make a tangible link between the help of a range of school library services and students' preparation for and achievement in state standardized testing.
- The comparison of mean value of each statement according to faculty at elementary, middle and high school levels shows that elementary school teachers saw school libraries helping predominantly in reading dimensions; middle school faculty saw school libraries helping predominantly in students' information seeking, access and research skills; and high school faculty saw school libraries helping predominantly in relation to information technology.
- The comparison of mean value of each statement by faculty in elementary, middle and schools shows a drop in some levels (14 of the 50 statements) of help perceived by middle school faculty. This is particularly noticeable in terms of the school library's contribution to students' academic achievement. This flags an important area for discussion and professional action.
- Instructional partnerships were perceived by faculty primarily in terms of providing resources and assistance in support of their teaching needs (co-operation) with a smaller number of faculty identifying the school librarian as a valuable collaborator in the actual teaching process. Overall, there was a strong view that the school library and school librarians were viewed as an integral part of the learning fabric of the school.

RECOMMENDATIONS

The recommendations are built around several themes, as elaborated below.

Dissemination of Findings

One key challenge that emerges from this study is ensuring that all school communities, stakeholder groups, school boards and community groups know of the vital role that effective school libraries play in terms of student learning and student development in the state of Delaware.

Recommendation 1

It is recommended that the Governors Task force establish mechanisms for the production and distribution of the findings of this study in multiple forms and formats to ensure that the findings are known, and provide the basis for the development of continuous improvement initiatives in schools. Underpinning this is the identification of key audiences for the findings, and establishing the most appropriate and effective means of presenting the findings and follow-up actions. These should include:

- (a) Press releases
- (b) Concise fact sheets for distribution to school administrators, faculty, school board
- (c) Summaries posted on school library web sites
- (d) Examine ways that incorporate the voice of the students. For example: Student Guide to Good Research might be presented in both concise paper guide and on school websites as well, which outlines the processes, steps, work habits, from the perspective of students that tell other students how to maximize the school library to become good researchers
- (e) Develop evidence-based advocacy materials to celebrate school libraries in Delaware
- (e) Utilizing teachers as advocates of school libraries and to document teachers' perspectives of how school libraries help them help students learn
- (f) Conference presentations
- (g) Journal papers

Provision of professional expertise: certified school librarians

While all school libraries were valued for the depth and extent of help provided, the strong overall pattern in relation to the levels of help derived from the school library was the role that elementary school libraries play. The findings of the study particularly show the importance of certified school librarians committed to developing foundational programs in information literacy and reading enrichment in elementary schools. This was identified as a significant gap in Phase 1 of the study. This study shows that elementary school libraries are particularly strong in relation to fostering sustained encouragement and passion for reading and providing foundational skills in learning to become effective researchers. School libraries in elementary schools are vital to the transition from *learning to read* to *reading to learn*. The first phase of the study of Delaware school libraries shows considerable gaps in the provision of qualified and full time school librarians in elementary schools, and the absence of this leadership in a school would suggest that students in elementary schools are missing out on significant foundational learning experiences that shape their learning through information and information technology.

Recommendation 2

It is recommended that the Governors Task Force advocate for high quality school libraries in all schools, both elementary, middle and high, led by certified school librarians, using the findings of this study to continue a concerted effort, together with key library stakeholders in the state, to provide equity of learning for all schools. Each school should have a certified school librarian who is full-time at that school. It is recommended that the initial effort be focused on elementary schools since the data reveals a significant gap in the provision of school librarians at this level.

Information Technology

The role of information technology is highly valued by students and teachers. As indicated in the findings, the most helpful dimensions of school libraries, as perceived by both students and faculty, centre on the central place of information technology in accessing information and using the technology to enable students to complete their school work.

It is important to maintain and extend these strengths. Despite these strengths, they are offset somewhat by students' and faculty comments that information technology is old, slow, with infrequent updating. This is both a source of frustration to students and teachers, who see the technology in some ways holding them back from providing efficient and timely instruction: both in terms of knowledge outcomes, and in terms of helping students use information technology in meaningful ways. School libraries, as the hub of and gateway to high quality information, must continue to provide state-of-the-art information technology to maximize learning, and to provide the learning-for-life opportunities that the information society is generating.

Recommendation 3

It is recommended that the Governors Task Force advocate for the establishment of guidelines for school library information technology updates and renewal plans in the state.

The Delaware Information Landscape

The study raises some concerns about the lower levels of help of the school library when students are away from it, how they might access a range of resource and instructional helps, access to knowledge-development tools, and access to solutions to just-in-time learning needs. Students' perceptions of helps in relation to finding information at the public library, and help from the school library website when they are not at school are low, particularly in the upper school levels, and for faculty. There is a disconnect between the different contexts of the students' information landscape: the school library, the learning environment out of school (eg doing homework) and other information places eg. Public libraries. Yet this is in the context of an overall finding of the helpfulness and importance of information technology. It is about students being supported in a multifaceted, diverse and often conflicting and competing information environments.

In Phase one it was recommended that all school libraries establish a web presence, both within the school and as part of a broader learning-centered advocacy program to provide access to electronic resources, databases both onsite and remotely, and provide access to research guides and learning techniques. This remains part of the equation, but the findings suggest the need to focus as well on the whole equation of the information environment for learning in Delaware, and how all stakeholders and

information providers can provide the best information infrastructure to support learning and the longerterm development of an informed citizenry.

Delaware, as a small state, has a unique opportunity to plan for and construct an integrated, seamless and holistic information landscape that can maximize information services and learning opportunities for all schools. It is not conceived that this environment be just for school students. It is for school faculty as well. This has the potential to involve many dimensions:

- access to the wealth of databases and resources across Delaware
- learning support and self-help portals
- learning tools, research tools and guidelines
- virtual reference services
- information literacy tutorials
- support for reading development and motivation
- teacher and librarian pathfinders to curriculum standards
- help for parents
- homework support
- access to information networks, organizations and resources on life concerns.
- enable classroom teachers to identify and understand more richly the information literacy components to meeting Delaware's curriculum standards, and identify those standards that the school libraries can actively support through resources and instructional interventions.

This is an enormous task, a staged program which will involve considerable expertise, planning with multiple stakeholders, conceptualization and implementation.

Recommendation 4

It is recommended that the Governors' Task Force lead in exploring the feasibility of the creation of a seamless, contiguous and integrated information landscape that can serve all schools and information providers across the state which will support students and faculty in multiple ways.

Information Literacy Development

It is very clear that the students place great importance on the library in helping them find information they need, and value the information literacy skills that enable them to do this in an efficient and timely way. The strongest findings relate to the school library helping students to access and find information, and to a certain extent, to evaluate this information for quality and appropriateness. Students perceive the help of the school library to be less in terms of enabling them to interrogate this information and to use it to construct their new knowledge of their topics. Overall, the findings suggest a mismatch between where students see the highest levels of help and where school librarians as a professional group want the students to be. ALA/AASL's Nine Information Literacy Standards for Student Learning place focus not just on the finding of information, but on the creative and accurate utilization of this information, and excellence of knowledge generation, representation and presentation.

The focus of information literacy instructional interventions, as identified in Phase 1 report, and supported by the findings from this second phase, indicate that information literacy competencies tend to focus on location, finding and access dimensions. This is an important achievement, and the findings

indicate that the nature of information literacy intervention can be extended to focus more on knowledge dimensions rather than information dimensions. There is an important need that these interventions be modeled.

Recommendation 5

It is recommended that the Governors Task Force, in conjunction with appropriate professional development associations in the state, support development of a sustained and in-depth information literacy training program for school librarians and classroom teachers that focuses on:

- Constructivist learning through the school library;
- Collaboration between school librarians and classroom teachers;
- Nature of disciplinary inquiry and inquiry learning: eg how does a social scientist
 inquire into ideas and develop new knowledge, and how do students learn the research
 habits, processes and modes of inquiry that reflect how disciplines build knowledge, and
 how can this be developed through the school library;
- Instructional interventions that focus on transformations of text and knowledge construction rather than information gathering and reporting;
- Use of information technology for constructing and representing new knowledge
- Assessing knowledge outcomes and demonstrating how the school library contributes to these outcomes.

Reading Enrichment

The help provided by the school library in terms of reading support and development is lower, compared to the role of the school library in relation to the other helps. Notwithstanding, some student comments highlight that school libraries play a very important role in keeping them connected to a creative and satisfying world of ideas through literature. Their comments also provide some indication why their perception of help in relation to reading enrichment declines through schooling, including the large amounts of curriculum-based research that they are required to do, which leaves little lime for leisure reading, perceptions that school libraries are for "informational" as opposed to "leisure" reading, and the lack of currency or match with personal interests.

The analysis of Phase 1 study data on reading enrichment showed that reading enrichment interventions typically focused on passive activities and strategies, rather than those that actively engaged people in rich and personal reading experiences. This is coupled with lower levels of resourcing for books in Delaware, as compared to national standards. The findings here reinforce this. The critical question is, on the basis that we value the importance of sustaining a love of and motivation for reading, how do we maintain the focus on reading enrichment in a context of competing information demands as students go through schooling? In Phase 1, it was recommended that all school library media specialists in Delaware plan and implement one major reading / writing initiative that engages students actively in thinking, discussing, sharing ideas, reflecting and participating, rather than activities where students primarily remain as the passive recipients. It is important that school library media specialists continue to undertake this, and share the outcomes. The data from Phase 2 suggests that the role of reading enrichment and maintaining the reading experience beyond the demands of reading for curriculum is a much wider issue, and one not merely left to school library media specialists to solve.

Recommendation 6

It is recommended that the Governor's Task Force lead in the development of an action plan that seeks to bring together key expertise and current research on reading development, reading motivation, sustaining reading literacy, reading interventions, to identify the critical issues including levels of resourcing and funding, and to plans steps / stages in the continuing professional development of classroom teachers and school library media specialists as team players, together with community librarians, in boosting reading, particularly reading for pleasure and self-interest, in Delaware.

Middle Schooling

The drop in perceptions of help and shift in the perceptions of help as students move from elementary schools to middle schools is noteworthy. The middle school years encompass developmental stages of adolescence with emphasis on identity, independence of activity and thinking, as well as social, emotional and physical development. The central question revolves around how school libraries can engage more effectively with young people at this stage of their development, so that they are not just aware of, but engaged in the range of helps that a school library can provide them, and develop identity, relationships, acceptance and success that are important to them at their stage of development. This is not solely a school library agenda; rather it is participating in wider state initiatives that focus on middle schooling, exploring implications for school libraries in middle schools, and thinking and rethinking appropriate school library services and school library interventions as part of whole-school initiatives.

We know, for example, that adolescents at this age invest time and effort in establishing and experimenting with forms of social and personal communication, developing relationships, social networks and group memberships. It is an opportunistic time to re-examine how the school library can contribute, through its information, information technology, and its safe and caring information environment, to help students develop on their life journey. Given that overall, the perception that school libraries are not seen as particularly helpful in relation to personal problems and issues, the challenge of making school libraries stronger in terms of life and living for middle schoolers is even more challenging.

Recommendation 7

It is recommended that The Governors Task Force collaborate with other groups, key library stakeholders, and the Department of Education to examine the research, practice and issues of middle schools with a focus on the school library's role in middle schools, with a long-term view of establishing initiatives, practices and resources to support school library media specialists in these important years of schooling, and to make explicit the vital role of the school library in such issues.

Evidence-Based Benchmarking and Advocacy

One of the goals of undertaking a study of this nature was to provide insight into professional practices of high quality school libraries which can serve as service models for developing continuous improvement plans for Delaware's school libraries. Phase 1 of the study recommended that school library media specialists undertake a professional development program on evidence-based practice to

develop their skills at identifying, documenting and disseminating student learning outcomes enabled by the school library program, emphasizing curriculum outcomes, rather than library-based outcomes. As indicated earlier in this report, while some students and faculty make connections between the informational and instructional programs of the school libraries and achievement and success, the perceived helpfulness of the school library in terms of student achievement ranked low amongst the blocks of help. This connection is not always clear nor capitalized on, and provides an opportunity for school libraries to market both the range of instructional and informational services more clearly and precisely, and to establish more clearly the links to student achievement and other learning outcomes.

Recommendation 8

It is recommended that the Governors Task Force, in conjunction with the Delaware School Library Media Association and the Department of Education, provide guidance and support in enabling school libraries in the state to gather base line data on student and faculty perceptions of their school library program, (using all or parts of this study instrument is one approach) and use such data as a basis for benchmarking the development of continuous improvement of individual school libraries, and the inclusion of individual school libraries plans in their schools' strategic long-term plans and school improvement plans.

Recommendation 9

It is recommended that all school librarians receive training and develop experience with articulating school library services and programs more explicitly in terms of Delaware's learning goals and curriculum standards (student-centered, outcomes-centered, rather than information-centered and library-centered).