Teacher and School Librarian Collaboration: A Preliminary Report of Teachers' Perceptions about Frequency and Importance to Student Learning / La collaboration entre enseignants et bibliothécaires scolaires : rapport préliminaire sur la perception par les enseignants de sa fréquence et de son importance pour l'apprentissage des étudiants

Patricia Montiel-Overall, Patricia Jones

Teacher and School Librarian Collaboration: A Preliminary Report of Teachers' Perceptions about Frequency and Importance to Student Learning

La collaboration entre enseignants et bibliothécaires scolaires : rapport préliminaire sur la perception par les enseignants de sa fréquence et de son importance pour l'apprentissage des étudiants

Patricia Montiel-Overall and Patricia Jones
School of Information Resources and Library Science
College of Social and Behavior Science
University of Arizona
1515 East First Street
Tucson, AZ 85719
overall@email.arizona.edu
pjones@email.arizona.edu

Abstract: Understanding teacher and school librarian collaboration is essential for school librarians to be able to comply with professional school librarian guidelines. While information exists about what school librarians perceive teacher and school librarian collaboration to be, little is understood about teachers' perceptions of collaborative endeavors with school librarians. This study examines teachers' perceptions of teacher and school librarian collaboration. The study surveyed 194 elementary school teachers in two school districts to determine how frequently teachers engaged in collaborative endeavors and how important to student learning teachers' perceived the collaborative endeavors to be. A 16 item self-administered survey was used for data collection.

Keywords: Collaboration, Teacher/Librarian Collaboration, Teachers' Perceptions, Research, Survey

Résumé : Comprendre la collaboration entre l'enseignant et le bibliothécaire est essentiel pour les bibliothécaires scolaires afin d'être en mesure de se conformer aux directives de leur profession. On dispose d'information sur la perception qu'ont les bibliothécaires scolaires de la collaboration qui doit s'établir entre l'enseignant et le bibliothécaire scolaire, mais la perception qu'ont les

enseignants de leurs tentatives de collaboration avec les bibliothécaires scolaires est moins bien comprise. Cette étude se penche sur la perception qu'ont les enseignants de la collaboration entre l'enseignant et le bibliothécaire scolaire. L'enquête a porté sur 194 enseignants d'école primaire dans deux districts scolaires afin de déterminer la fréquence des efforts de collaboration ainsi que l'importance de ces efforts, telle que perçue par les enseignants, pour l'apprentissage des étudiants. Une enquête auto-administrée en 16 points a été utilisée pour la collecte des données.

Mots-clés : collaboration, collaboration enseignant/bibliothécaire, perception des enseignants, recherche, enquête

Introduction

For the past 20 years, school librarians[1] have diligently worked to improve collaboration with teachers as a means to improve students' academic performance. This work has been undertaken in compliance with professional guidelines, which recommend that school librarians "work with teachers to plan, conduct, and evaluate learning activities that incorporate information literacy" and create a culture of collaboration throughout the school (American Association of School Librarians & Association for Educational Communications and Technology 1998, 51). A broad range of school library literature about collaborative practices provides considerable anecdotal evidence of the success of teacher and school librarian collaboration in improving teaching and learning (Buzzeo 2003; Callison 1997; Donham 1999; 2005; Harada 2002; Haycock 2003; Small 2002) and numerous studies during the past decade provide evidence that teacher and school librarian collaboration improves student academic achievement in school environments where it occurs (Lance 1994; 2001; 2002; Lance, Hamilton-Pennell, and Rodney 1999; Lance, Rodney, and Hamilton-Pennell 2000; 2001; 2002; 2005; Lance and Russell 2004; Lance, Wellburn, and Hamilton-Pennell 1993). Yet there is still a paucity of empirical evidence specifically related to teacher and school librarian collaboration.

Practices generally understood by school librarians as collaborative endeavours have included a broad range of responsibilities, including finding resources for teachers (Loertscher 1988), developing information literacy (Breivik and Senn 1998), co-planning, co-teaching, and co-evaluation (Callison 1997) with classroom teachers to develop information literacy and to assess student learning (AASL and AECT 1998). These collaborative practices reflect traditional activities that school

librarians carry out with and for teachers, as well as higher-level collaborative practices recommended in *Information Power: Building Partnerships for Learning* (AASL and AECT 1998). Higher-level collaborative practices suggest a more central role for school librarians in planning, teaching, and evaluating students (Berkowitz and Eisenberg 1989; Callison, 1997; Callison and Preddy 2006; Craver 1986). The process of shifting school librarians into a teaching role has been described as complex and evolutionary (Muronaga and Harada 1999) and requires certain internal and external factors be in place. Of critical importance among internal factors are teachers who recognize the role of school librarian as a teaching partner. However, little is known about teachers' perceptions of teacher and school librarian collaboration.

Although there is considerable interest within the library profession to promote the teaching role of school librarians through greater teacher–school librarian collaboration, the phenomenon of school librarians working with teachers in the capacity described in *Information Power* (AASL & AECT 1998) is novel to many teachers and relatively unknown among classroom teachers as a recommended practice for school librarians (Montiel-Overall, 2008a; 2008b). For example, although research on the importance of teachers working closely with school librarians on curriculum planning and implementation to improve student academic achievement (Lance 1994; 2001; 2002; Lance, Hamilton-Pennell, and Rodney 1999; Lance, Rodney, and Hamilton-Pennell 2000; 2001; 2002; 2005; Lance and Russell 2004; Lance, Wellburn, and Hamilton-Pennell 1993) is widely cited in the library profession, it does not appear in the literature in education. Until recently, little information about teachers' perceptions of teacher–school librarian collaboration has been available (Montiel-Overall 2009). The lack of information about what teachers perceive the role of school librarians to be and whether teacher-perceived notions about that role correspond to those recommended in professional guidelines for school librarians must be more clearly understood for more successful teacher–school librarian collaboration to occur. In addition, information from teachers about types of collaboration they engage in with school librarians, how frequently they occur, and how important they are perceived to be to student learning must also be fully understood, particularly since mutual understanding among collaborators is considered a key attribute of successful teacher–school librarian collaboration (Mattessich and Monsey 1992). To address these questions, a study was carried out to examine teachers' perceptions about

how often they collaborated with school librarians and how important to student learning these collaborations were perceived to be.

Research questions

Four research questions are addressed in this study:

- How frequently do teachers perceive they collaborate with school librarians?

- How important to students' learning do teachers perceive collaborative endeavours with school librarians to be?

- How are perceptions of frequency and importance to student learning related?

- Is there a hierarchy to the collaborative endeavours?

Background

A culture of collaboration

This literature review focuses on research on collaboration among library professionals and among teachers. The literature reviewed for this study provides a backdrop for understanding the culture of collaboration as a practice in education between teachers (e.g., teacher to teacher) and the culture of teacher and school librarian collaboration, which has been a key recommendation for school librarians for decades.

School librarian collaboration

Collaboration between teachers and school librarians is considered an important responsibility of school librarians. Early supporters of teacher–school librarian collaboration suggested that including school librarians in instructional teams facilitated integration of library instruction into curriculum (Berkowitz and Eisenberg 1989) and evaluation (AASL and AECT 1988; 1998; Barron 1987), which paved the way for more successful teaching and learning. The expertise of many school librarians as former teachers and curriculum specialists (Pretlow 1987) was considered a strength, which positioned them well to function in multiple roles in schools (e.g., resource specialist, instructional specialist, information specialist, teacher). While not all the literature indicates great success

with collaborative efforts (Mokhtar and Majid 2006), the literature clearly implies that greater teacher and school librarian collaboration is a means to improve what and how students learn (Immroth and Lukenbill 2007; Schultz-Jones 2009).

Webb and Doll (1999) examined teacher and school librarian collaboration in a large number of Library Power–funded schools. Levels of collaboration were identified in the study based on logs of participants. The levels included Awareness; Parallel; Coordinated; Interactive; and Shared. Findings indicated that the majority (82%) of participating teachers and school librarians were at a level considered traditional (i.e., Coordinated), although improved teacher–school librarian collaboration was associated with mere participation in the Library Power project.

A survey study conducted by Bainbridge, Carbonaro, and Wolodko (2002) in Alberta with elementary teachers also found traditional perceptions about school librarians. Findings indicated that school librarians were considered primarily a source of information about resources and collections to support the curriculum and were not engaged as instructional partners in planning and teaching.

Building on the notion of levels, Montiel-Overall (2005) proposed a teacher–school librarian collaboration model with four facets, which identified types of collaboration involving low-level (Coordination and Cooperation) and high-level endeavours (Integrated Instruction). Schultz-Jones (2009) also identified levels of collaboration between teachers and school librarians. Six types of teacher–school librarian collaboration ranged from no interaction to designing course content and jointly presenting the unit. Findings from a pilot study done by Schultz-Jones (2009) indicate that teacher–librarian collaboration "seldom included designing course content and teaching alongside teachers" (21), which would be considered a higher level of collaboration by twenty-first-century-minded library and information science professionals (Todd 2006).

Despite evidence that teacher–school librarian collaboration may not have reached the high levels recommended in Information Power (AASL and AECT 1998), examples of successful collaboration, which enhance teaching and learning, are noted in literature from practitioners. Small (2002) describes an endeavour in which the school librarian helped set up a science lab in an empty classroom for a Grade 4 teacher. In another example, Long (2007) discusses a research project with high school

students, which helped students learn to read content area texts through a collaborative teaching effort involving the school librarian and several content teachers.

Teacher collaboration

There is also a body of literature on collaboration in the field of education. In particular, the literature on special education promotes the importance of collaboration between special educators and teachers on student achievement (Eisenman, Hill, Bailey, and Dickinson 2003). This literature focuses on improved "classroom teacher and special education teacher" efforts through better collaborative efforts. Less is known about "teacher to teacher" collaboration, although for the past decade, professional guidelines such as the National Board for Professional Teaching Standards (2009), and standards proposed by the Interstate New Teacher Assessment and Support Consortium (1987), and the National Staff Development Council (2001) have encouraged schools to build learning communities through increased teacher-to-teacher collaboration. Interest in collaborative teaching and planning to change the culture of schools is described by Lieberman (1986) as necessary to solve the complex problems faced by educators. Efforts to promote collaboration are also seen as a way to change the culture of individualism and isolation, which have traditionally characterized school cultures (Hord 1997).

Studies conducted by Leonard (2002), and Leonard and Leonard (2001a; 2001b) provide some insights into teachers' perceptions of collaboration with fellow teachers. Their studies suggest that teachers support collaboration in theory; however, few teachers are willing to spend the necessary time required for collaborative planning (Leonard and Leonard 2001a).

In a study by Leonard and Leonard (2003), teachers were asked to identify their beliefs about collaborative practices. The types of practices identified in qualitative data analysis of questionnaires showed that collaboration occurred at department meetings, grade-level meetings, and lesson-planning gatherings. However, teachers generally perceived collaboration efforts by their school or school district to be inadequate in making collaboration a priority (e.g., paid time for after-school planning, arranging schedules so that planning periods coincide). These finding supported earlier findings, which showed that collaborative efforts between teachers were difficult to sustain (Leonard and Leonard 2001a; 2001b).

Methods

This study is presented as follows. First there is a discussion of participants and information about the instrument used. Next are descriptive statistics for the Frequency and the Importance to Student Learning scales, presented in table 1. Then follows a discussion of findings of distribution of responses for Frequency and Importance to Student Learning, presented in table 2. Finally, results of a path analysis are presented to address the question of the hierarchical nature of the items.

Participants

The sample for this study consisted of 194 elementary school teachers who represented eleven public schools in a two school districts in a community in the southwestern United States. The majority (86%) were female, which is representative of the population of the teaching profession. Over half (56%) were over the age of 30, half the sample (50%) had more than ten years' teaching experience, and over half (53%) had been at their current school for five years or less. The ethnicity of participants was almost equally split between non-Hispanic (49%) and Hispanic/Latino (44%). Fifty six per cent reported having a bachelor's degree, 40% a master's degree, and 4% other. One participant had a doctorate.

Survey and instrumentation

A self-administered survey was distributed during regularly scheduled faculty meetings. The researcher informed participants about the research and answered questions about the study. The survey took approximately 20 minutes to complete, and participants received a token compensation for their time. Standard Instruction Review Board procedures were followed. Only teacher responses were examined for this report, since the sample of school librarians was too small for generalization.

The survey elicited responses about the following types of collaboration:

- Coordinating library activities with the school librarian;
- Cooperating with the school librarian on instruction;
- Integrating library instruction and classroom teaching;
- Integrating library instruction throughout the curriculum.

The 16-item survey was developed using standard strategies for instrument development to ensure validity and reliability. The instrument was designed to measure how often collaborative efforts between teachers and school librarians occurred (Frequency) and the perceived importance of these collaborations to student learning (Importance to Student Learning). The 16 items on the survey corresponded to four facets proposed in a model of teacher–school librarian collaboration (Montiel-Overall 2005), which are identified in the bulleted list above. The facets (A: Coordination; B: Cooperation; C: Integrated Instruction; and D: Integrated Curriculum) identify collaborative endeavours in which teachers and school librarians might engage during the school day, such as scheduling time for students to use the library, sharing responsibilities to implement a classroom lesson, integrating subject content and library instruction, and jointly evaluating students. Each item on the survey was rated twice: first, on a 4-point Likert-type scale on how *frequently* the activity occurred (1 = Never, 2 = Rarely, 3 = Frequently, 4 = Always) and second, on its *importance to student learning* (1 = Not at All Important, 2 = Somewhat Important, 3 = Important, 4 = Always Important). A complete discussion of the development of the instrument is provided elsewhere (Montiel-Overall 2009). A sample of the survey is found in Appendix A.

Reliability and validity

The internal consistency of the survey was estimated by calculating alpha reliability coefficients. The reliability of the instrument for Frequency and Importance to Student Learning subscales was relatively high (.92 and .93, respectively). Exploratory factor analysis (EFA) procedures were carried out to identify the underlying structure of items in the survey. Internal consistency for factors, which emerged from an EFA, also had relatively high alpha reliability coefficients ranging from .81 to .93. Thus items that grouped together were perceived as similar types of endeavours defining the same construct (Montiel-Overall 2009).

Data analysis

Data from the survey were analysed in SAS 9.1.3. Descriptive statistics (means, standard deviations, and frequency distributions) were obtained for each of the 16 items on the Frequency and Importance to Student Learning (Importance) subscales. In addition, each pair of the 16 Frequency and Importance items was cross-tabulated to examine the

relationship of the two constructs on an item-by-item basis. The extent of the relationship was measured using a Spearman correlation for ranks. Finally, a path analysis was carried out using multiple regression to examine the hierarchical nature of the facets.

Limitations

Several limitations should be mentioned. First, the Teacher and Librarian Collaboration Survey (TLC Survey) II was developed by expert teacher–school librarian collaborators whose perspective may have differed from the perspective of teachers. Future studies would be well served by convening teachers to participate in the discussion and development of measurements of teacher and school librarian collaboration. Wording for greater clarity would be important in another iteration of the instrument to ensure that teachers fully understood the meaning of items. For example, teachers' responses to an item about scheduling time for school librarians to talk to students about books indicated that this activity rarely occurred, although school librarians were observed frequently giving book talks in classrooms of participants.

A second limitation of the study was that only data for teachers were analysed because of the small number of school librarians. Information regarding school librarians' perceptions using a larger sample of school librarians will be important to obtain to compare perceptions.

A third limitation was the length of the instrument. A longer subtest with several more items for each construct may provide a clearer understanding of the underlying constructs (Coordination, Cooperation, Integrated Instruction, and Integrated Curriculum). This will require careful consideration of time requirements since lengthening the subtests would take more time to complete. Finally, the TLC-II was distributed to elementary school librarians in the southwest. Caution should be used in interpreting results to a broader population in other regions of the United States.

Findings

Frequency

Descriptive statistics for Frequency items presented in table 1 show that mean scores for the first facet (Coordination: F1–F4) ranged from 1.82

Table 1: Mean, standard deviation, and Spearman correlation coefficient of Frequency (F1–F16) and Importance to Student Learning (SL1–SL16) for Teacher and Librarian Collaboration Survey based on teacher surveys

	Frequency		Importance		Spearman Correlations of Frequency and Importance Items
	Mean	(SD)	Mean	(SD)	
Facet A: Coordination					
F1/SL1 T/L Work to arrange times for library use	2.36	(.79)	3.13	(.77)	.41
F2/SL2 T/L Spend time to organize instructional activities in the library	1.97	(.71)	2.97	(.76)	.39
F3/SL3 T/L Work to coordinate schedules	2.30	(.87)	3.17	(.77)	.41
F4/SL4 T Schedules time for L to talk to students about a particular book	1.82	(.79)	2.78	(.83)	.40
Facet A composite mean	2.11	(.79)	3.15	(.78)	
Facet B: Cooperation					
F5/SL5 T/L Discuss library materials for teaching	2.30	(.81)	3.11	(.76)	.48
F6/SL6 T/L Discuss what students will do in library	2.35	(.77)	3.07	(.72)	.38
F7/SL7 T Asks L for resources for instruction	2.67	(.76)	3.34	(.67)	.45
F8/SL8 T/L Divide responsibilities when working together	2.18	(.78)	3.04	(.80)	.46
Facet B composite mean	2.37	(.78)	3.16	(.74)	
Facet C: Integrated Instruction					
F9/SL9 T/L Jointly plan objectives for lessons	1.65	(.68)	2.68	(.89)	.40
F10/SL10 T/L Implement lessons together	1.75	(.73)	2.72	(.84)	.39
F11/SL11 T/L Integrate library curriculum into teaching	2.28	(.86)	3.09	(.74)	.45
F12/SL12 T/L Jointly evaluate students' progress	1.66	(.77)	2.50	(.91)	.48
Facet C composite mean	1.84	(.76)	2.75	(.85)	
Facet D: Integrated Curriculum					
F13/SL13 T/L Jointly develop objectives in school district	2.01	(.81)	2.80	(.85)	.41
F14/SL14 T/L Jointly plan lessons in school district	1.93	(.79)	2.70	(.86)	.46
F15/ SL15 T/L Jointly participate in curriculum planning in school district	2.09	(.87)	2.86	(.81)	.43
F16/SL16 T/L Jointly teach together in school district	2.04	(.84)	2.81	(.85)	.36
Facet D composite mean	2.02	(.83)	2.79	(.84)	

Note: Items are arranged in the order in which they appeared in the scale. The highest value on the scale was 4.0. The greater an item's mean, the greater its frequency (F). Also, scales for F and SL are different; therefore, means for the same item shouldn't be expected to be the same.

to 2.32. Item scores for the second facet (Cooperation: F5–F8) were slightly higher, with mean scores ranging from 2.18 to 2.67. Collaborative endeavours in the third facet (Integrated Instruction: F9–F12) generally had the lowest mean scores, ranging from 1.65 to 1.75, with the exception of item 11, integrating library curriculum into teaching (F11), which had a mean score of 2.28. Mean scores for the last facet (Integrated Curriculum: F13–F16) ranged from 1.93 to 2.09.

An examination of the distribution of responses (table 2) provides a clearer picture of teachers' perceptions. Typically, the primary rating for frequency of occurrence of the items corresponding to the first facet (F1–F4) was Rarely, with percentages ranging from 43% of the time (F3, Working with the school librarian to coordinate schedules so that students can use the library) to 56% of the time (F2, Spending time with the school librarian to organize instructional activities in the school library). Teachers indicated that they never scheduled time for the school librarian to talk to students about a particular book (F4) 37% of the time. Only 16% of the teachers said that they did this Frequently or Always. The behaviour most likely to occur was F1, Working with the school librarian to arrange time periods for students to use the library, which 40% teachers indicated occurred Frequently or Always.

Behaviours in the second facet (F5–F8) were somewhat more likely to occur, with lower percentages of teachers reporting that they never carried out the specified behaviours. Fifty-five percent of teachers said that they Frequently or Always asked the school librarian for library resources to use in instruction. The least likely behaviour in this facet to occur was F8, Dividing responsibilities when jointly working, which teachers said was Frequently or Always likely to occur 28% of the time.

Behaviours associated with the third facet (F9–F12) were far less likely to occur, with one exception: Integrating the library curriculum into teaching (F11). While 50% of the teachers stated that they rarely integrated the library curriculum into their teaching (F11), only 16% of the teachers said that they never integrated library curriculum into their teaching at all. The remaining 34% of teachers said that they did this Frequently or Always. However, for the remaining items, 41%–51% of the teachers said that they never planned objectives for lessons with the school librarian (F9), implemented lessons with the school librarian (F10), or evaluated students' progress with the school librarian (F12). These three are items that clearly involve the school librarian directly in

Table 2: Distribution of responses for Frequency items (F1–F16) and Importance to Student Learning (SL1–SL16)

	Frequency					Importance to Student Learning				
	Never	Rarely	Fre-quently	Always	(N)	NI	SI	I	AI	(N)
Facet A: Coordination										
F1/SL1 Working with librarian to arrange time periods for students to use the library	12	48	33	7	191	1	19	44	36	193
F2/SL2 Spending time with the librarian to organize instructional activities in the library	24	56	18	3	194	2	24	46	27	194
F3/SL3 Working with the librarian to coordinate schedules so that students can use the library	18	43	31	8	193	3	15	44	39	193
F4/SL4 Scheduling time for the librarian to talk to students about a particular book	37	46	13	3	193	5	31	44	20	192
Facet B: Cooperation										
F5/SL5 Spend time with the librarian to discuss library materials (e.g., books, websites, references) needed for teaching	12	53	25	10	194	2	17	45	36	193
F6/SL6 Discussing what students will do when they go to the library	11	49	32	7	194	2	18	49	31	194
F7/SL7 Asking the librarian for library resources to use in instruction	3	41	40	15	193	–	9	43	47	194
F8/SL8 Dividing responsibilities when jointly working (e.g., librarian gathers resources for a lesson that you will teach)	18	55	21	7	194	4	20	43	33	193
Facet C: Integrated Instruction										
F9/SL9 Planning objectives for lessons with the librarian	46	43	10	1	194	10	30	39	20	191
F10/SL10 Implementing lessons with the librarian	41	45	12	2	193	6	34	39	21	190
F11/SL11 Integrating the library curriculum into my teaching (reference, research, etc.)	16	50	25	9	194	2	17	49	32	193
F12/SL12 Evaluating students' progress with the librarian	51	36	10	3	192	14	36	32	18	192

Facet D: Integrated Curriculum										
F13/SL13 In general, teacher and librarians in my school district jointly develop objectives for instruction	28	41	29	3	189	7	23	48	22	191
F14/SL14 In general, teacher and librarians in my school district jointly plan lessons	31	44	23	2	190	8	28	45	19	190
F15/SL15 In general, teacher and librarians in my school district jointly participate in curriculum planning	28	39	29	5	189	5	24	48	24	190
F16/SL16 In general, teacher and librarians in my school district teach together (e.g., plan and implement lessons that integrate . . .)	28	43	26	4	189	5	28	44	23	191

Note: Percentages have been rounded off to the nearest integer. The four-point scale used for Importance to Student Learning was Never Important (NI), Somewhat Important (SI), Important (I), Always Important (AI).

the classroom teaching, while F11 does not carry the same level of involvement on the school librarian's part.

Behaviours in the fourth facet (F13–F16) were also unlikely to occur much, with 66%–75% of teachers indicating that teachers and school librarians in the school district were never or rarely likely to carry out the specified tasks. What is noteworthy is that the remaining teachers saw the behaviours as frequently or always likely to occur. Since the teachers were rating the same school district, there are clearly perceptual differences about what is occurring.

Generally, teachers perceived items in the third facet (F9–F12) as occurring less frequently than the first two facets (F1–F8).

Importance to student learning

Descriptive statistics for Importance to Student Learning items are also presented in Table 1, and they show that mean scores for all facets were somewhat higher than for the Frequency scores. Mean scores for the first facet (SL1–SL4) ranged from 2.78 to 3.17. Scores for the second facet (SL5–SL8) were slightly higher than those for the first facet, with mean scores ranging from 3.04 to 3.34. Scores for the third facet (SL9–

SL12) were somewhat lower than either of the previous two facets, ranging from 2.50 to 3.09. Mean scores for the last facet (SL1–SL16) were in the same range as those of the third facet, although the band was narrower, ranging from 2.70 to 2.86.

Table 2 presents information on the distribution of responses to Importance to Student Learning. In contrast to the Frequency items, teachers rated the Importance to Student Learning items at the high end of the scale, with 60% or more of the teachers rating items SL1–SL16 as Important or Always Important to Student Learning. The exceptions to this were SL9 (59%), Planning objectives for lessons with the school librarian, and SL12 (50%), Evaluating students' progress with the school librarian. In each case, over 40% of the teachers felt that the behaviour was Not Important or Only Somewhat Important to student learning.

One trend noted is that the items in the third facet, SL9–SL12 were perceived as less important in general to student learning than items in other facets. The exception was SL11 (Integrating the library curriculum into my teaching), which was rated as Important or Always Important by 81% of the teachers.

Generally, teachers rated items higher on the Importance scale than on the Frequency scale, with percentages on Important and Always Important to Student Learning ranging from 60% to 90%, with the exception of SL12: Evaluating students' progress with the school librarian, which was 50%. This item was rated by over 14% of teachers as Never Important. Another item rated Never Important by over 10% of teachers was SL9: Planning objectives for lessons with the school librarian. The highest rating was for item SL7: Asking the school librarian for library resources to use in instruction, with 90% of teachers rating the item as Important and Always Important. The fact that Importance was rated higher in general may have several causes. First, the scales are different in terms of the anchors. Second, not all behaviours that are important need be carried out frequently. Third, teachers may see a behaviour as important, but lack the resources or time to carry it out frequently, even when it would be appropriate to do so.

Relationship between frequency and importance to student learning

A question to ask is the extent to which teacher perceptions of the Frequency of a practice correspond to their perceptions of its Importance.

Since the items were rated on an ordinal scale, we considered the ratings to be equivalent rankings and used Spearman correlations to measure the magnitude of the relationship. A listing of Spearman correlations appear in table 1 in the last column.

The values of the correlations are quite similar and moderate in size, ranging from .36 to .48. Twelve of the 16 correlations were greater than .40, and all correlations were significant at $p < .0001$. A comparison with other measures of association (Generalized Phi, Cramer's V, Contingency Coefficient, and Pearson correlation) showed similar patterns of moderate values and a narrow band of values. Generally, this suggests that teachers who perceive an activity to be important to student learning are more likely to carry it out frequently, while teachers who see the activity as less important are more likely to carry it out less often.

Cross-tabulation

A more detailed way of exploring the relationship between Importance to Student Learning and Frequency is to carry out a cross-tabulation of responses for each of the 16 behaviours. (We would expect frequency of occurrence to be dependent on the perception of how important teachers consider the activity to be.)

Generally speaking, we found items in Facet A (Coordination) display a simplex pattern, that is, a behaviour that is not considered important is less likely to happen than a behaviour that is considered important. Items that were considered important or always important appear to occur frequently. Collaborative practices that occur frequently are usually rated as important.

The patterns found for the items in Facet A also hold for the other facets. Teachers who rate a behaviour as occurring frequently or always happening are more likely to see it as important. Behaviours that are rated as important or always important are more likely to be engaged in frequently or always than behaviours that are not considered important. However, behaviours that are listed as never occurring in all facets are often rated as important or always important, contrary to expectations. This pattern is particularly evident in Facet C (Integrated Instruction) where teachers indicate that they less frequently work with school librarians in teaching capacity such as planning objectives, implementing lessons, and evaluating students, but regard working with a librarian on these tasks as important to student learning.

Path analysis

The last analysis examined the hierarchical nature of items. As proposed in the TLC model, collaborators who engage in Integrated Instruction (Facet C) and Integrated Curriculum (Facet D) are unlikely to do so unless they also are involved in Coordination or Cooperation (Facets A and B), while the converse is not necessarily the case. The TLC model also proposes that those who engage in Integrated Instruction and Integrated Curriculum are more likely to also engage in Coordination and Cooperation. The association between the theoretical constructs (Facets A and D) is not a causal link but shows relationships. Because we found that items in Facet D tended to behave in a different manner than items in the other facets, we decided to drop this facet from further analysis in this section.

An exploratory factor analysis described in a previous paper (Montiel-Overall 2009) showed that the items generally conformed to the hypothesized structure for the scales, with items corresponding to a given facet having similar loadings. Accordingly, we constructed factor-based scores for each scale (Hatcher 1994). In this approach, averages are constructed for each facet by weighting each item corresponding to the facet equally. Since traditional factor scores use varying weighting for all items on each facet, we decided to use factor-based scores to give a purer measure of each of facet of interest.

Table 3 shows a matrix with correlations of the factor-based scores for the four facets of the Frequency and the Importance to Student Learning scales. A simplex structure (Guttman 1955) is evident in the Frequency scale but it is not strong. A simplex structure typically shows that correlations decrease as distance from the diagonal increases. A simplex pattern is less clear in the Importance to Student Learning scale. For example, the decrease along the diagonal on the Frequency matrix of table 3 is .663, 658, and .499, while on the Importance to Student Learning matrix the correlations are .688, .606, and .694.

The scores for the first three facets for Frequency and Importance to Student Learning were used in separate path analyses. Table 4 shows the score for Facet B (Coordination) was regressed on the score for Facet A (Cooperation). Facet C (Integrated Instruction) was then regressed on Facet A and Facet B individually and simultaneously. Table 4 shows results with Facet B as the dependent variable and then with Facet C as

Table 3: Correlations of composite scores for facets for Frequency and Importance to Student Learning

Pearson correlation coefficients
Prob > |r| under H0: Rho = 0
Number of observations

	F Facet A	F Facet B	F Facet C	F Facet D		SL Facet A	SL Facet B	SL Facet C	SL Facet D
F Facet A	—				SL Facet A	—			
F Facet B	.663	—			SL Facet B	.688	—		
F Facet C	.649	.658	—		SL Facet C	.628	.606	—	
F Facet D	.378	.399	.499	—	SL Facet D	.465	.456	.694	—

Note: F = Frequency, SL = Importance to Student Learning

Table 4: Regressions of Frequency scores

Dependent	Independent	Unique R^2	Total R^2	Beta	Effects		
					Direct	Indirect	Total
Facet B	Facet A	.44	.44	.66	.66	—	.66
Facet C	Facet A	.42	.42	.65	.65	—	.65
Facet C	Facet B	.43	.43	.66	.66	—	.66
Facet C	Facet A	.08	.51	.38	.38	.27	.65
	Facet B	.09		.41	.41	.25	.66

the dependent variable and the direct and indirect effects of each of the facets.

As can be seen in the analysis above, neither Facet A nor Facet B has substantial unique effect on Facet C when the other is included, although each is highly related to Facet C itself. In each case, each variable has a substantial (and nearly equivalent) indirect effect on the dependent variable through its relationship with the other predictor (Facet A: .27; Facet B: .25). In addition, each of the first two facets has a fairly large direct effect on Facet C (Facet A: .38; Facet B: .41).

Table 5: Regressions of Importance to Student Learning scores

Dependent	Independent	Unique R^2	Total R^2	Beta	Effects		
					Direct	Indirect	Total
Facet B	Facet A	.47	.47	.69	.69	—	.69
Facet C	Facet A	.39	.39	.63	.63	—	.63
Facet C	Facet B	.36	.36	.61	.61	—	.61
Facet C	Facet A	.09	.45		.40	.23	.63
	Facet B	.06			.33	.28	.61

Table 6: Assumptions of hierarchical order of possible patterns

Assumption	Possible Patterns
Coordination is a precursor of Cooperation	LL or HL or HH
Coordination is a precursor of Cooperation, which is a precursor of Integrated Instruction	LLL or HLL or HHL or HHH
Coordination is a precursor of Cooperation, which is a precursor of Integrated Instruction, *but* Cooperation is not a precursor to Integrated Instruction	HLH

Note: L = low, H = high

Table 5 shows regressions of Importance to Student Learning Scores, with results similar to the Frequency analysis. The total effect of each variable was large in the full model, but the indirect effects represent a considerable amount of the contribution. Both Facet A and Facet B (Coordination and Cooperation) appear to contribute substantially to Facet C (Integrated Instruction) (Facet A Direct/Indirect: .40/.23; Facet B Direct/Indirect: .33/.28).

Further examination of the patterns of responses was required to determine whether there was a clear hierarchy of responses. To identify patterns of responses, mean values were used. Values above the scale mean (2.5) were considered high (H) and scores at or below the mean were considered low (L). Table 6 identifies three assumptions about the hierarchical order of the facets and the most common patterns, which would be expected. The first assumption is that Coordination is a precursor of Cooperation. The second assumption is that Coordination is a precursor of Cooperation, which is a precursor of Integrated Instruction.

Table 7: Frequency of Occurrence and Importance to Student Learning response patterns for first three facets

Response	Frequency of Occurrence		Importance to Student Learning	
	Frequency	%	Frequency	%
LLL	127	62.25	21	10.29
HHH	16	7.84	102	50.00
HHL	15	7.35	41	20.10
HLH	1	0.49	5	2.45
HLL	9	4.41	7	3.43
LHH*	8	3.92	9	4.41
LHL*	27	13.24	14	6.86
LLH*	1	0.49	4	1.96
LH_*			1	0.49

* Response patterns that would not conform to a possible hierarchy

Finally, Coordination is a precursor of Cooperation, which is a precursor of Integrated Instruction, but Cooperation is not a precursor to Integrated Instruction.

Table 7 shows the frequency of each of the response patterns for both Frequency and Importance to Student Learning scales based on the analysis of high or low values for each facet.

The most common response pattern for Frequency on Coordination, Cooperation, and Integrated Instruction was LLL (62%). However, the most common pattern for Importance to Student Learning was HHH (50%) on all three facets of collaboration, indicating that these facets were considered important, even though they were not necessarily carried out frequently. With the exception of the pattern of low on Coordination, high on Cooperation, and low on Integrated Instruction (LHL), with 13% of responses, patterns were within possible hierarchical orderings (HHH, HHL, and HLL). For Importance to Student Learning, the second most common response was high on Coordination, high on Cooperation, and low on Integrated Instruction (HHL), with 20% of responses and low on all three construct (LLL) with 10% of responses. In general, the response patterns were hierarchical, indicating that Integrated Instruction is not likely to be high when Cooperation is not.

Discussion

Results from this study indicate that teachers generally perceive that they are involved in collaboration with school librarians at some level across all facets. This study supports previous findings that teachers are more engaged with school librarians in the types of collaborative activities which are generally considered traditional practices than those considered high-level collaboration (Montiel-Overall 2005). However, regardless of the extent or type of collaborative effort between teachers and school librarians, teachers perceive all collaborative practices as important to student learning. The most commonly rated teacher and school librarian endeavours were those labelled "traditional cooperative roles between teacher and school librarian" in an earlier study by the author (Montiel-Overall 2009). These endeavours include school librarians helping teachers find library resources and materials (books, websites, references) and school librarians gathering resources for lessons taught by teachers. Higher ratings for items representing traditional roles for school librarians support the findings of other studies, which also indicate that teachers and school librarians engage primarily in traditional roles when they work together (Shultz-Jones 2009; Webb and Doll 1999).

Information from this study also indicates that teachers generally do not perceive that they frequently engage in collaborative endeavours, which school librarians consider to be integral to school librarians' responsibilities. For example, teachers did not perceive that they shared responsibilities with school librarians, as became apparent from the responses of a large number of teachers indicating that they rarely divided tasks when jointly working together. For school librarians, dividing tasks "into pieces based on the strengths of individuals" (Lemke 2002, 21) is considered a common practice (Harada 2002). Another example of teachers' perceptions differing from what is considered important practices between teachers and school librarians in school library literature were the low ratings by teachers on school librarians' involvement in evaluation of students. Unlike school librarians, who generally consider evaluation of students an important part of their responsibility (Callison 2006), teachers did not perceive that evaluation occurred frequently or that it was important to student learning. For school librarians, this activity is considered "as important, if not more important" than managing library resources (Callison 2006, 414). In general, collaborative practices requiring greater involvement of school librarians in teaching generally did not appear to occur frequently. This sharply contrasts with

the focus within school librarianship to increasingly work with teachers in a teaching capacity (Callison 1997; 2006; Donham 2005; Harada 2002; Haycock 2003; Small 2002; Todd and Kuhlthau 2005a; 2005b).

Although teachers indicated that they were engaged in traditional practices between teachers and school librarians, there is some evidence of movement toward higher levels of collaboration involving school librarians in teaching. It would appear that while not all teachers perceive school librarians' responsibilities to include activities involving classroom teaching processes such as planning objectives, implementing instruction, and evaluation of students, some are involved in these higher levels of teacher and school librarian collaboration. It is noteworthy that a large number of teachers generally perceive these endeavours to be important to student learning. This may have been the result of a strong voice by school librarians in the community where the survey was administered. For example, during the past decade in one school district where school librarians are referred to as "teacher-librarians," teaching aspects of the school librarian position have been emphasized. In that school district, instructional standards for school librarians were approved in 2005 by the school district governing board. This may have resulted in slightly over half of the teachers indicating that they engaged in planning instructional activities with school librarians at least once a month. While these results are encouraging, it should be noted that an almost equal number of teachers indicated that they never worked with school librarians in teaching, planning, or evaluation of students' progress.

Also of interest was that over a third of the teachers indicated that they integrated library curriculum into their own teaching. Several questions arise from this perception. First, a clearer understanding is needed of what teachers consider the library curriculum to be. Second, a better understanding of how the library curriculum and content curriculum are integrated is needed. Future research will be needed to address these questions.

Finally, although a causal link is not made between the facets, there does appear to be a relationship among the facets, as shown by the hierarchical order of collaborative endeavours. This supports findings from an earlier qualitative study by the author (Montiel-Overall 2008a). In that study, expert school librarians indicated that a considerable amount of time working with teachers in traditional ways was needed to develop relationships and trust with teachers. Once these relationships and trust were

established, high-level collaborative efforts between teachers and school librarians were more likely to occur.

Implications for future studies

This study contributes to the literature on teacher and school librarian collaboration by providing empirical data on teachers' perspective of teacher and school librarian collaboration. The newly developed instrument, the TLC-II Survey, is a promising instrument for evaluating collaborative endeavours. However, further revisions of items will be required.

Future studies will be needed to examine teacher perceptions further to explain why teachers do not routinely engage in educational practices that they think are important to student learning (e.g., jointly plan lessons with school librarians). Previous studies on collaboration between teachers indicates that teachers desire it but are unprepared in carrying it out and are also dissatisfied with scheduling sufficient time for it (Leonard 2002). Teachers have also indicated that lack of administrative support affects collaborative efforts (Leonard and Leonard 2001a). Recent findings in the field of library and information science provide some evidence that expert school librarians can overcome these challenges by nurturing relationships with teachers and demonstrating to them the benefit of teacher–school librarian collaboration (Montiel-Overall 2008a). Once convinced of the educational benefits for students from collaborating with the school librarian, teachers were willing to invest the effort required for joint planning, regardless of time or place (lunch, before and after school, in school parking lot). A critical piece of information needed to more fully evaluate teachers' perception of teacher and school librarian collaboration is whether they are aware of the teaching role of school librarians and what they know about school librarianship. Future research must address what teachers know about school library guidelines such as the "Standards for the 21st-Century Learner" (American Library Association 2006), as well as the extent to which teachers understand the role of school librarians in helping students meet these standards.

Conclusion

This study provides some information about teachers' perceptions of how frequently teacher and school librarian collaboration occurs and how important that collaboration is to student learning. Initial findings indicate that such collaboration currently recommended by library and

information science professionals has not been achieved. Although it is significant that teachers perceive collaborative endeavours to be important to student learning, even when teachers are not themselves engaged in collaborative activities with school librarians, clearly teachers continue to perceive their interaction with school librarians in traditional ways. However, teachers' perception could shift if school librarians made greater effort to demonstrate to teachers that they could be called on to teach and evaluate students. The benefit of teachers working with school librarians to link information gathering with instruction of subject content within classrooms must also be fully understood by teachers for the shift to occur. This will require greater inclusion of teachers in discussions about what teacher and school librarian collaboration involves, how such collaborative efforts can be efficiently carried out (saving teachers valuable time), and benefits of integrating library instruction and subject content for students (e.g., improved understanding of content) and for teachers (e.g., being able to spend more time developing higher-order thinking).

School librarians must ensure that teachers have a more complete understanding of goals and objectives for the school library curriculum, including information literacy standards and standards for the twenty-first-century learner. At the same time, school librarians must know state standards for content areas across grade levels as well as structured English instruction standards for English-language learners in order for a true partnership between teachers and school librarians as co-instructors to occur.

Professional responsibilities of school librarians explained in Information Power (AASL and AECT 1998) must be fully described to teachers so that they clearly understand the changing role of school librarians as teachers and instructional partners. Since many school librarians are educated outside of colleges and schools of education, contact between teachers and librarians is often limited. Thus school librarians must actively seek to educate teachers, principals, and governing school boards about their role as "teacher-librarians". The efforts of some librarians in this study to make teachers aware of their role as collaborators are exemplary and should be replicated nationwide. However, this study indicates that much more must be done. It is clear that a national agenda should be undertaken by the school librarian community to inform the education community about teacher and librarian collaboration. This is essential if the hierarchical order of collaborative endeavours is to change from high on Cooperation and low on Integrated Instruction, to high on both.

Notes

1. The term *school librarian* is used throughout to avoid confusion in the discussion of teacher and teacher–school librarian collaboration. The American Association of School Librarians officially recognizes teacher-librarian as the preferred term for school librarians. Other terms used to describe school librarians include *school library media specialist, information specialist*, and *media specialist*, which do not fully appreciate the teaching role of school librarians.

References

American Association of School Librarians and the Association for Educational Communications and Technology. 1988. *Information Power: Guidelines for School Library Media Programs.* Chicago: American Library Association.

——. 1998. *Information Power: Building Partnerships for Learning.* Chicago: American Library Association.

American Library Association. 2007. ''Standards for the 21st-Century Learner.'' http://www.ala.org/ala/mgrps/divs/aasl/guidelinesandstandards /learningstandards/standards.cfm.

Bainbridge, Joyce, Mike Carbonaro, and Brenda Wolodko. 2002. ''Teacher Professional Development and the Role of the Teacher Librarian.'' *International Electronic Journal for Leadership in Learning* 6 (12). http://www.ucalgary.ca/iejll/bainbridge_carbonaro_wolodko.

Barron, Daniel D. 1987. ''Communicating What SLM Specialists Do: The Evaluation Process.'' *School Library Journal* 33 (2): 95–9.

Berkowitz, Robert, and Michael B. Eisenberg. 1989. ''The Curriculum Roles and Responsibilities of Library Media Specialists.'' ERIC Digest. Syracuse, New York: ERIC Clearinghouse on Information & Technology. (ED 308 880)

Breivik, Patricia S., and J.A. Senn. 1998. *Information Literacy: Educating Children for the 21st Century.* New York: Scholastic.

Buzzeo, Toni. 2003. ''Collaborating to Meet Standards: Teacher/Librarian Partnerships K–12.'' *Knowledge Quest* 32 (1): 29–30.

Callison, Daniel. 1997. ''Expanding Collaboration for Literacy Promotion in Public and School Libraries.'' *Journal of Youth Services* 11: 37–48.

——. 2006. ''Lesson Plan.'' In *The Blue Book on Information Age Inquiry, Instruction and Literacy*, edited by Daniel Callison and Leslie Preddy, 201–24. Westport, CT: Libraries Unlimited.

Callison, Daniel, and Leslie Preddy, eds. 2006. *The Blue Book on Information Age Inquiry, Instruction and Literacy*. Westport, CT: Libraries Unlimited.

Council of Chief State School Officers. 1992. ''Student Success through Collaboration: A Policy Statement of the Council of Chief State School Officers.'' Education Resources Information Center. http://www.eric.ed.gov/PDFS/ED362334.pdf.

Craver, Kathleen. 1986. ''The Changing Instructional Role of the High School Library Media Specialist: 1950–1984.'' *School Library Media Quarterly* 14 (4): 183–91.

Donham, Jean. 1999. ''Collaboration in the Media Center: Building Partnerships for Learning. *NASSP Bulletin* 83 (605): 20–6.

——. 2005. *Enhancing Teaching and Learning.* 2nd ed. New York: Neal-Schuman.

Eisenman, Laura, Douglas Hill, Rodney Bailey, and Carrie Dickinson. 2003. ''The Beauty of Teacher Collaboration to Integrate Curricula: Professional Development and Student Learning Opportunities.'' *Journal of Vocational Education Research* 28 (1): 85–104.

Guttman, Louis. 1955. ''A Generalized Simplex for Factor Analysis.'' *Psychometrika* 20 (3): 173–92.

Harada, Violet. 2002. ''Taking the Lead in Developing Learning Communities.'' *Knowledge Quest* 31 (2): 12–16.

Hatcher, Larry. 1994. *A Step-by-Step Approach to Using the SAS(R) System for Factor Analysis and Structural Equation Modeling.* Cary, NC: SAS Institute.

Haycock, Ken. 2003. ''Collaboration: Because Student Achievement Is the Bottom Line.'' *Knowledge Quest* 32 (1): 54.

Hord, Shirley M. 1997. *Professional Learning Communities: Communities of Continuous Inquiry and Improvement.* Austin, TX: Southwest Educational Development Laboratory.

Immroth, Barbara, and Bill Lukenbill. 2007. ''Teacher-School Library Media Specialist Collaboration through Social Marketing Strategies: An Information Behavior Study.'' *School Library Media Research* 10. http://www.ala.org/ala/mgrps/divs/aasl/aaslpubsandjournals/slmrb/slmrcontents/volume10/immroth_teacherslmscollaboration.cfm.

Interstate Teacher Assessment and Support Consortium. n.d. ''Interstate Teacher Assessment and Support Consortium (INTASC) Core Standards.'' http://www.ecu.edu/cs-educ/teached/upload/INTASCStandardsIndicators.pdf.

Lance, Keith Curry. 1994. ''The Impact of School Library Media Centers on Academic Achievement.'' *School Library Media Quarterly* 22 (3): 167–70.

——. 2001. ''Proof of the Power: Quality Library Media Programs Affect Academic Achievement.'' Information Today. http://www.infotoday.com/MMSchools/sep01/lance.htm.

——. 2002. ''What Research Tells Us about the Importance of School Libraries.'' White House Conference on School Libraries. Washington, DC. Institute of Museum and Library Services. http://www.imls.gov/news/events/whitehouse_2.shtm#kcl.

Lance, Keith Curry, Christine Hamilton-Pennell, and Marcia J. Rodney. 1999. ''Information Powered: The School Librarian as an Agent of Academic Achievement in Alaska.'' Alaska State Library. http://www.library.state.ak.us/pdf/anc/infoemxs.pdf.

Lance, Keith Curry, Marcia J. Rodney, and Christine Hamilton-Pennell. 2000. *How School Library Media Specialists Help Kids Achieve Standards: The Second Colorado Study.* San José, CA: Hi Willow.

——. 2001. *Good Schools Have School Library Media Specialists: Oregon SLMSs Collaborate to Improve Academic Achievement.* Salem, OR: Oregon Educational Media Association.

——. 2002. *How School Libraries Improve Outcomes for Children: The New Mexico Study.* Salt Lake City, UT: Hi Willow.

——. 2005. ''Powerful Libraries Make Powerful Learners: The Illinois Study.'' Illinois School Library Media Association. http://www.islma.org/pdf/ILStudy2.pdf.

Lance, Keith Curry, and Becky Russell. 2004. ''Scientifically Based Research on School Libraries and Academic Achievement: What Is It? How Much Do We Have? How Can We Do It Better?'' *Knowledge Quest* 32 (5): 13–17.

Lance, Keith Curry, Linda Wellburn, and Christine Hamilton-Pennell. 1993. *Impact of School Library Media Centers on Academic Achievement.* Castle Rock, CO: Hi Willow.

Lemke, Cheryl. 2002. ''enGauge 21st Century Skills: Digital Literacies for a Digital Age.'' Office of Educational Research and Improvement. Naperville, IL: North Central Regional Educational Lab.

Leonard, Lawrence. 2002. ''Schools as Professional Communities: Addressing the Collaborative Challenge.'' *International Electronic Journal for Leadership in Learning* 6 (17). http://www.ucalgary.ca/iejll/leonard.

Leonard, Lawrence, and Paula Leonard. 2001a. ''The Collaborative Prescription: Remedy or Reverie.'' *International Journal of Leadership in Education* 4 (4): 383–99.

——. 2001b. ''Assessing Aspects of Professional Collaboration in Schools: Beliefs versus Practices.'' *Alberta Journal of Educational Research* 47 (1): 4–23.

——. 2003. ''The Continuing Trouble with Collaboration: Teachers Talk.'' *Current Issues in Education* 6 (15). http://cie.ed.asu.edu/volume6/number15/.

Lieberman, Ann. 1986. ''Collaborative Work.'' *Educational Leadership* 43 (5): 4–8.

Loertscher, David. 1988. *Taxonomies of the School Library Media Program.* Englewood, CO: Libraries Unlimited.

Long, Deborah. 2007. ''Increasing Literacy in the High School Library: Collaboration Makes It Happen.'' *Teacher Librarian* 35 (1): 13–17.

Mattessich, Paul W., and Barbara R. Monsey. 1992. *Collaboration—What Makes It Work: A Review of Research Literature on Factors Influencing Successful Collaboration.* St. Paul, MN: Amherst H. Wilder Foundation.

Mokhtar, Intan Azura, and Shaheen Majid. 2006. ''An Exploratory Study of the Collaborative Relationship between Teachers and Librarians in Singapore Primary and Secondary Schools.'' *Library and Information Science Research* 28 (2): 265–80.

Montiel-Overall, Patricia. 2005. ''Toward a Theory of Collaboration for Teachers and Librarians.'' *School Library Media Research* 8. http://www.ala.org/ala/aasl /aaslpubsandjournals/slmrb/slmrcontents/volume82005/theory.cfm.

——. 2008a. ''Teacher and Librarian Collaboration: A Qualitative Study.'' *Library and Information Science Research* 30 (2): 145–55.

——. 2008b. ''A Qualitative Study of Teacher and Librarian Collaboration: A Preliminary Report.'' *Scan* 27 (4): 23–24.

———. 2009. ''Teachers' Perceptions of Teacher and Librarian Collaboration: Instrumentation Development and Validation.'' *Library and Information Science Research* 31 (3): 182–91.

Muronaga, Karen, and Violet Harada. 1999. ''The Art of Collaboration.'' *Teacher Librarian* 27 (1): 9–14.

National Board for Professional Teaching Standards. 2009. ''Creating Change through Collaboration.'' http://www.nbpts.org/for_nbcts/network_affiliates.

National Staff Development Council. 2001. ''Collaboration Skills: The Standard.'' http://www.nsdc.org/standards/collaborationskills.cfm.

Pretlow, Delores Z. 1987. ''School Libraries: A Time for Change.'' *School Library Journal* 34 (2): 48.

Schultz-Jones, Barbara. 2009. ''Collaboration in the School Social Network.'' *Knowledge Quest* 37 (4): 20–5.

Small, Ruth. 2002. ''Collaboration: Where Does It Begin?'' *Teacher Librarian* 29 (5): 8–11.

Todd, Ross. 2006. ''School Libraries and Evidence-Based Practice: An Integrated Approach to Evidence.'' *School Libraries Worldwide* 12 (2): 31–7.

Todd, Ross J., and Carol C. Kuhlthau. 2005a. ''Student Learning through Ohio School Libraries, Part I: How Effective School Libraries Help Students.'' *School Libraries Worldwide* 11 (1): 63–88.

———. 2005b. ''Student Learning through Ohio School Libraries, Part II: How Effective School Libraries Help Students.'' *School Libraries Worldwide* 11 (1): 89–110.

Webb, Norman, and Carol A. Doll. 1999. ''Contributions of Library Power to Collaborations between Librarians and Teachers. *School Libraries Worldwide* 5 (2): 29–44.

Appendix A

Example of Question 1

Please rate each statement for frequency and importance to student learning.					Importance to Student Learning			
Frequency per Month				Circle Response				
Never	Rarely (1–3 times)	Frequently (4–8 times)	Always (9 or more times)	Answer the statements below about frequency of practices between the librarian and you that may occur at your school (left side) *and* How important those practices are to learning by your students (right side)	Not at all important	Somewhat important	Important	Always Important
N	R	F	A	1. Working with the librarian to arrange time periods for students to use the library	NI	SI	I	AI