Teaching Support of Taipei Senior High School Libraries

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The school library is the center for collecting, organizing and using information resources, and is therefore an indispensable part of school teaching activities. Teachers could better choose teaching materials, develop curriculum, and evaluate programs with school librarian support. Library literatures show that teacher and media specialist collaboration can effectively enhance student learning. This study investigates the ideal school library media center model in Taipei. Using Document analysis, website visitation, and in-depth interviews to collect data. Nine cases are chosen for study. Findings show that teaching support services provided in most cases come under the "coordination" and "cooperation" stage, according to the Pollard and Montiel-Overall taxonomy framework, and very few senior high school libraries provide "collaboration" stage services. This study discusses difficulties encountered in library management and successful factors of promoting teaching support services to a further stage, as well as innovative services. Finally, suggestions are made for future consideration.

Introduction

The IFLA/UNESCO School Library Manifesto states that school libraries offer learning resources that enable all school community members to become critical thinkers and effective information users. The school library should be integral to the educational process. Teachers can improve student quality time in the library as well as enrich their own lesson units by integrating school libraries into the curriculum. (Mokhtar & Majid, 2005) Students achieve higher demonstrable levels of literacy, reading, learning, problem-solving and information technology skills when librarians and teachers work together. Four state wide studies in USA conducted by Lance and others show that quality library media programs affect academic achievement. (Lance, 2001)

However, senior high school libraries in Taiwan only serve as administration units rather than teaching support, and do not actively provide curriculum or teaching activities. School librarians must competently plan and teach different information-handling skills to both teachers and students in an increasingly networked environment. Recent rapid information technology development, the establishment of various cooperative opportunities, and several

Taiwan government educational policies present opportunities for senior high school libraries in Taipei to provide better services. Some schools have begun transforming their libraries into instructional resource centers, assisting teachers in creating teaching materials, and making better use of information technologies in teaching, such as building up an e-learning platform, providing social software, and other internet applications, etc.

This research therefore investigates Taipei senior high school libraries, to identify teaching support service level, to find out problems encountered, and how to do more with less.

Literature Review

The roles of School libraries

The UK library Association guidelines for secondary school libraries highlight five main roles school libraries and information services should assume: (The Library Association, 1998)

1. A central learning resource that supports school culture and curriculum, while at the same time promoting an interest in lifelong learning.

2. An important and indispensable part of teaching and learning in the school.

3. At the core of information skills development in the school.

4. Fulfils its traditional role of providing opportunities for students to quench their thirst for reading and gaining knowledge.

5. Provides a vital place in the school for students to meet their recreational and leisure needs.

The school library's role in campus learning should: (Trevillion, 2004)

1. Commit to wider involvement in school planning.
2. Focus on today's curriculum pedagogy and be very familiar with various syllabus documents.
3. Continually offer collaborative development opportunities for student research with the teacher librarian.
4. Continue collaborative development of resources, which underpin school curriculum.
5. Assist teachers to integrate Information Skills and ICT's into their lessons, by providing effective learning and teaching areas, appropriate in-servicing, and effective teaching support within the library
6. Offer special programs enhancing student learning through continued development of critical thinking and independent learning skills.
7. Focus on various student needs within the library learning and teaching environment
8. Accept the challenging changes in current education, and the ongoing need for flexibility, collaboration, and integration to enhance learning in the whole school community.

In other words, school libraries today should not only provide a wide range of resources and services and introduce new learning technologies, but more importantly, help develop teaching and learning for a more appropriate library resource center. (Silva & Turriff,1993)

School library transformation

A 2001 study on transformation of Taipei senior high school libraries found that most professionals in charge agreed with the transformation. Difficulties encountered concentrated mainly on shortage of professional staff, budget, and facilities, followed by library status in school administrative offices, and teacher and student perceptions of school library image. Therefore, to successfully transform Taipei senior high school library, librarians should: (Huang, 2001)

1. Carry out functions of the learning resource center, as well as the traditional library.

2. Increase library staff, including media personnel and IT personnel, and upgrade professional quality.

3. Integrate schoolteacher and student manpower into the school library.

4. Enrich library collections, media, IT hardware and software, and other equipment.

5. Promote library use to enhance library awareness and use.

6. Meet the national overall education policy, i.e. Multi-Opportunities for School Entrance.

The Taipei Municipal Wan Fang Senior High School library in 2005 provided good evidence of transforming to a user-learning center, becoming an administration management unit to develop information education for the whole school and actively participate in teaching activities. Changes in staff, facilities, and library use education included: (Chen, 2005)

1. All personnel who were experts in information were transferred to the library.

2. Reorganized space.

3. Set up a studio room for digital teaching materials production.

4. Developed an on-line equipment repairing and maintenance system

5. Provided a digital learning platform.

6. Conducted seminars and contests for teachers to create digital teaching materials.

7. Upgraded student information literacy by planning courses and holding essay contests.

The role of school library media specialists also changed in the transformation into dimensions of resource management, information management, instructional consultant, curriculum development, staff development, and learning management. (Silva & Turriff, 1993; Cleaver & Taylor, 1989)

School librarians, in fulfilling transforming roles, could take advantage of knowledge management (KM) functions in high school libraries: (Chiu, 2005)

1. Operation and management

2. Library Instruction

3. Lecturing and research activities

4. Self-learning

5. Design a portal website connecting to diverse subjects website for instruction use.

6. Design library pages, with teaching activities and librarian resources, including information and knowledge management. librarian preparation

The KM platform applies to various disciplines as well as administrative management. Librarians can encourage teachers to design teaching materials and explicate their subject expertise through the platform. The KM platform also combines e-learning functions for increased student learning. (Lee, 2005)

Mentoring programs can also help school librarians survive the transformation as they embrace a positive attitude towards library service goals. Combining initial teacher-librarian training programs and induction and in-services training achieves librarian competence. Therefore, comprehensive school relies on cooperative educational authority, teacher-training institutes, and school librarians. (Sit, 2003)

Teacher and librarian collaboration

Teacher-librarian collaboration means co-planning, co-implementation, and co-evaluation among classroom teachers and teacher-librarians to enhance student learning.

Relationship levels

Loertscher's taxonomies show the evolving collaboration process in teacher-librarian relationships. Donham (2005) takes the taxonomies as "a structure for envisioning the roles library media specialists play in teacher collaboration."

Loertscher (1999) develops a teacher and librarian involvement classification in school environments. The taxonomies describe ten varying involvement levels among teachers and librarians from no involvement to full participation in school curricular development.

Patricia Montiel-Overall (2005) combines levels of Loertscher's The Library Media Specialist Taxonomy manifesting similar characteristics to four Teacher and Librarian Collaboration (TLC) models: Model A Coordination, Model B Cooperation, Model C Integrated Instruction, Model D Integrated Curriculum.

These four Montiel-Overall models can be used to classify teaching support services in Taipei senior high school libraries.

Approaches to Collaboration

Collaboration factors and relative strategies in school library literatures provide collaboration approach guidelines. Successful collaboration factors include: (McGregor, 2003; Haycock, 2004)

- Environment
- Faculty/staff characteristics

    principal's mental model

    ♦ teacher librarian's curriculum knowledge

    ♦ teachers' prior knowledge and experience

    ♦ ability to see the big picture

    ♦ ability to lead

- ■ Process and structures of collaboration
  - ♦ communication
  - ♦ shared purpose
- ■ Resources

The preconditions and enablers for successful relationship levels are identified as Table 1. (Pollard, 2005; Montiel-Overall, 2005).

Table 1. Levels of coordination, cooperation, and collaboration

	Coordination	Cooperation	Collaboration
Corresponding to Loertscher's taxonomies	♦ Smoothly Operating Information Infrastructure ♦ Individual Reference Assistance ♦ Individual Reference Assistance	♦ Cursory Planning ♦ Planned Gathering ♦ Evangelistic Outreach/Advocacy	♦ Collaboration implementation, Reading Literacy, Enhancing Learning through Technology, and Information Literacy ♦ The Mature LMC Program ♦ Curriculum Development
Preconditions for Success ("Must-Haves")	♦ Shared objectives; ♦ Understanding who needs to do what, when	♦ Shared objectives; ♦ Acknowledgment of mutual benefit of working together ♦ Mutual trust and respect; ♦ Propensity to share ♦ Equality ♦ Reciprocity	♦ Shared objectives; ♦ Mutual trust and respect; ♦ Propensity to share ♦ Equality ♦ Reciprocity ♦ Dynamic process; ♦ Sense of belonging; ♦ Open communication; ♦ Sense of urgency and commitment ♦ Expertise recognized ♦ Complementary, diverse skills and knowledge; ♦ Intellectual agility
Enablers (Additional "Nice to Haves")	♦ Problem resolution mechanism ♦ Project management tools with schedules, roles, critical path (CPM), PERT and GANTT charts; ♦ "Who will do what	♦ Frequent consultation and knowledge-sharing between participants; ♦ Clear role definitions; ♦ Systems thinking; ♦ Analytical tools	♦ Right mix of people; ♦ Collaboration skills and practice collaborating; ♦ Good facilitator(s); ♦ Collaborative 'Four Practices' mindset ♦ Appreciative inquiry; ♦ Open Space meeting

	when" action lists	(root cause analysis etc.)	protocols; ♦ Four Practices; ♦ Conversations; ♦ Stories

Reference: Pollard, D. "Will that be coordination, cooperation, or collaboration?" (2005)
Retrieved 2007/2/24, from http://blogs.salon.com/0002007/2005/03/25.html

Library literature reveals successful collaboration strategies: (American Association of School Librarians, 1998; Silva & Turriff, 1993; Donham, 2005)

- Teaching information skills;
- Developing LRC policies;
- Including curriculum issues within LRC targets;
- Sharing resources about teamwork;
- Becoming an expert on curriculum goals
- Delivering ideas for teaching and learning strategies;
- Providing IT facilities;
- Including the LRC in departmental review procedures;
- Running book clubs;
- Showing connections between information literacy and content-related objectives;
- Participating in course planning;
- Including the LRC as part of course evaluation;
- Soliciting teacher assistance in library media program development;
- Flexibility in expectations and timing;
- Persistence.

Using school libraries

A 2005 study in Singapore shows that teachers with prior library work experience use their school library more often than those without such experience. Teacher lack of interest in using school libraries is also due to limited awareness about the role school libraries play in school curriculum, and resource inadequacy for meeting school curriculum needs. (Mokhtar & Majid, 2005)

South Africa's constructivism based Outcomes-Based Education curriculum, assumes that teachers and students have access to rich teaching and learning resources, and is understandably a library-centered curriculum. However, Dubazana & Karlsson' s case study in 2006 finds that the only two isolated and unsupported strategies, such as structured timetabled school library use and the project approach without regular collegial collaborative planning and follow up meetings for teachers and school librarians, cannot ensure that students develop reading habits and library use. (Dubazana & Karlsson, 2006)

The Wide Reading program at St. John the Evangelist Catholic High School in Australia in contrast, makes a difference. This difference is due to Wide Reading Information and ICT Skills integrated into other programs librarians collaboratively develop with Administrator support and other interested coordinators. Persistence and administrator and team member support in this case make the successful program possible. (Trevillion, 2004)

Researches in the Taipei school library community find that teacher perceptions in the Likert Scale of services school libraries "should do" are higher than their service satisfactions, meaning that teachers expect senior high school libraries to do more. High-level instructional services, such as instructional consultant, improving instruction, and collaborative curriculum design, have less teacher expectation priority than other services, such as integrating resources, and assisting in material producing. (Huang, 2002; Yang, 2004)

Research Method

This study investigates the ideal school library media center model in Taipei. Document analysis, website visiting, and in-depth interviews for collecting data help reach these goals.

The study chooses nine cases based on the following criteria: (1)directors were members of senior high school library counseling groups and (2) were recommended by counseling group members. The cases chosen are shown in Table 2.

Table 2. Research cases

School Name	Library website
A. Affiliated Senior High School of National Taiwan Normal University	http://140.122.122.100/web/
B. Blessed Imelda's school	http://210.70.119.103/tc/web/index.asp
C. Taipei Municipal Chung Shan Girls' Senior High School	http://lib.csghs.tp.edu.tw/
D. Taipei Municipal First Girls' High School	http://lib.fg.tp.edu.tw/
E. Taipei Municipal Huajiang High School	http://203.72.56.5/~sch181/
F. Taipei Municipal Jianguo High School	http://lib.ck.tp.edu.tw/
G. Taipei Municipal Tatung High School	http://www.ttsh.tp.edu.tw/lib/
H. Taipei Municipal Wan Fang Senior High School	http://lib.wfsh.tp.edu.tw/
I. Taipei Muzha Vocational High School	http://lib2.mcvs.tp.edu.tw/

Observations and dialogues with Taipei professionals, found best practices, identified problems, and illustrated information technology application.

Findings

This research uses the Pollard and Montiel-Overall taxonomy as a framework. The teaching support services classified in three stages provided by these nine senior high school libraries are analyzed in Table 3.

Table 3. Teaching Support Services

Stage	Service	A	B	C	D	E	F	G	H	I
Coordination	Providing IT facilities		◎	◎	◎	◎	◎	◎	◎	◎

Stage	Service	A	B	C	D	E	F	G	H	I
	Purchasing E-learning platform			◎	◎	◎		◎	◎	
	Developing E-learning platform		◎				◎			◎
Cooperation	Cultivating students' information literacy	◎		◎	◎	◎	◎	◎	◎	◎
	Cultivating students' reading literacy	◎	◎	◎	◎	◎	◎	◎	◎	◎
	Leading teachers' professional growth	◎	◎	◎	◎	◎	◎	◎	◎	◎
Collaboration	Integrating library program into curriculum in collaboration with teachers							◎	◎	◎
	Involvement in information curriculum development							◎		

Table 3 shows teaching support services provided by most cases are in the coordination and cooperation stage, and that few senior high school libraries provide collaboration stage services. Library management difficulties and successful factors of promoting teaching support services to the further stage, as well as innovative services, are described below.

Difficulties encountered in Taipei senior high school library management

Budget shortage: An educational budget cut is made in addition to the library budget shortage.

Lack of professional librarians: Taiwan school libraries have few professionally trained librarians. Some senior high schools do not have formal positions for professional school librarians, and some senior high school libraries are managed by teachers or faculty without complete professional library training.

Tedious work: Library technicians operate and maintain computer equipment. Maintaining equipment is tedious and time consuming. Librarians who are also teachers simply cannot devote enough time to the library with their teaching workload.

Legal issues: Although there is consensus for transforming the school library into a library resource center, its realisation encounters legal problems in Taiwan. While school libraries are called "Instructional Resource Centers" informally on campus, the name "library" is still used formally in Senior High School Law and in administrative affairs, making the school library role confusing.

Tight course schedule: Many teachers do not have additional time to collaborate with librarians due to tight student course schedules and teacher standardized testing demands. Many school librarians mention tight course schedule as a factor in decreased collaborative projects.

Successful teaching support factors

Unique personality: includes public relationships, communicational skills, devoted spirit, and senior working experience.

1. Public relationships: The librarians interviewed who worked smoothly were those practicing effective interpersonal relationships in educational communities. They developed rapport relationships with principals, teachers, and faculty through participation in meetings and activities, and through addressing teaching need or administrative need, especially on ICT support. Some school libraries shared platforms and materials with each other. They also cooperated with vendors to provide teacher seminars.

2. Communicational skill: Clearly communicating the mission, goals, functions, and impact of the library media program is necessary to program effectiveness. (ALA, 1998) Taipei senior high school libraries evidenced communicational skill importance. Some librarians reported regularly on the program's plans, policies, and student achievements to the principal, teachers, and parents, gaining their confidence. School librarians can successfully integrate the knowledge power of subject teachers and library technicians, and the administration power of principal and subject deans.

3. Devoted spirit: Necessary for successful programs. Librarians with enthusiasm will try hard to continually enhance teaching and learning.

4. Senior work experience: Helps librarian to know the people who play specific program roles.

Administration support: Principal leadership is a critical policy maker for budgetary and personnel matters, as well as an influential supporter of collaboration levels among teachers and librarians. Therefore, some school librarians help their principals understand how the library can be important and indispensable to school education by communicating participation in library programs, and making qualitative improvements in students' academic performance.

Teachers' willingness: Many librarians indicate their willingness to provide teaching support service on teachers' demand. Therefore, teacher willingness is key to teaching support. Librarians also mention that a campus atmosphere of innovation, teaching needs, and incentive could influence teacher willingness.

Innovative Services

School librarians try hard to promote technology use to enhance learning. Innovative services provided to realize the goal are summarized and described as follows:

1. *Assisting teachers to integrate ICT into their lessons.*

Most library resource centers visited provide e-learning platforms and IT facilities, when the budget allows. Resource centers also lead professional growth in ICT teaching and teacher information literacy by holding seminars in database information retrieval, teaching material software, and IT facility use and maintainence.

(1) English vocabulary contest in Taipei Muzha Vocational High School: An on-line vocabulary contest developed by the library technician in cooperation with English teachers helps students memorize English vocabulary. Teachers record vocabulary pronunciations and correct spelling in the database. Moreover, the principal presented a certificate in recognition of students' good work at librarians' request.

(2) A teaching platform (PULI) developed and shared with other schools by Blessed Imelda's school: The technician, an information teacher, developed PULI to support teaching needs of teachers. PULI provides: teachers' teaching website (including teaching program, teaching schedule, teaching materials and students' homework), questionnaire survey mechanism, online hard disk, recommended topical websites, testing systems, and student seating charts, etc.

2. *Integrating library programs into curriculum.*

Most Taipei senior high school libraries hold activities for student exploration, discovery and intellectual skill application for lifelong learning. Activities include freshman library visits, introducing new collections, holding essay contests, and running class book clubs for upgrading student literacy. Some libraries also collaborate with teachers to integrate curriculum programs.

(1) Reading activities such as "Reading, Telling, and Showing," promoted by Taipei Muzha Vocational High School: The librarian surveys course schedules each semester, and recommends content related books to teachers, and discusses appropriate activities. For example, students in a performing contest performed stories in books relative to a Chinese textbook with a teacher guide. History teachers also assigned library recommended books to students, for a class presentation.

(2) Reading comprehension test as another approach used by some senior high schools: School libraries purchased or developed test platforms, and librarians, teachers, and faculty asked questions after reading a book to establish a test database. Books used for the comprehension test were relative to subject content.

3. *Participating in curriculum development*

Some Taipei senior high school libraries attended teaching committee meetings and engaged in collaborative teaching to gain information of teacher needs, promote teaching support services, introduce new learning technologies, and participate in curriculum development.

Tatung High School library also held informational development meetings, to which representatives of subject teachers, Deans, and principals attended. The meeting discussed, (1) campus information facility allocation, (2) information integration into courses, and (3) information curriculum content. Teachers in the

teaching committee meetings also demonstrate their courses including information literacy, which the librarian attends to.

The Tatung High School library also collaborated with teachers in classes. Teachers and librarians tried many teaching approaches. Teachers and librarians in English class used multimedia facilities to train students' listening ability, provided comic pictures for practicing dialogue, and held role-playing activities, in which librarians helped students gather information for costumes designing, build blogs for team discussion, draw pictures with software, and use video and projector presentations. Results show that librarian and teacher collaboration makes subject courses more interesting and more attractive to students.

Suggestions

This work makes some concluding suggestions for solving problems and promoting quality teaching support based on the library literature and the dialogue with Taipei senior high school librarians:

Approaches to solve library management problems

Solutions for budget shortage, lack of professional librarians, tedious work, and tight course schedules are as follows:

1. Practical approaches for acquiring sufficient funding:

    (1) Fund raising: School libraries could request donations from those who care about school education, such as parents, community organizations, or education-related enterprises.

    (2) Undertaking Government projects: Helpful for enriching IT facilities and other equipments.

    (3) Strategic alliance: Formed by educational partners, such as vendors, administrators, other administrative units, and may provide funding and other resources such as products, equipment, knowledge, or expertise to reduce budget shortage.

2. Libraries could provide in-service education opportunities to librarians to solve the lack of professional librarians. School libraries can also make better use of manpower by:

    (1) Soliciting teacher assistance in library media program development

    (2) Delegating clerical and maintenance tasks to volunteers and student assistants

    (3) Inviting vendors to introduce their products, such as databases, learning platforms, and software.

3. School libraries could release librarians from endless tedious work for further collaborative services, by raising teacher's IT use ability and solving problems by:

    (1) publishing IT facility manuals.

    (2) offering ongoing staff development programs.

4. Librarians could break though students' tight course schedules and teachers' heavy teaching load, by using the difficulties as teaching support opportunities. Teaching support service strategies include:

(1) Meeting education partner needs. Integrating teaching resources.

(2) Providing teachers with incentive, which could be encouraged by complete policies.

Enhancing teaching support

The school library must openly face our dynamic rapidly changing digital age. School librarians can enrich teaching and learning by:

1. Enrich library collections in all kinds of media format to support curriculum teaching and learning activities.

2. Provide E-learning platforms to teachers.

3. Make better use of social software, such as wiki, iTunes, blog.

4. Issue newsletters for communicating teaching support promotion services and new learning technologies.

5. Assist in teachers' personal knowledge management.

6. Take responsibility for cultivating student information literacy, integrating it into subject learning.

Partnering in learning and teaching requires a shift from how to achieve an empowerment model towards intellectual inquiry and knowledge construction in the learning community. (Sit, 2003) Therefore, in addition to the above discussions of what librarians can do, educational authorities, professional associations, mentoring organizing bodies, and school librarians should jointly explore feasible strategies to enhance school librarian professionalism and commitment. School librarian professional growth and school library development policy should reflect the situation. In-service education, such as workshops, seminars, and mentoring programs, should prepare school librarians to confront challenges and transformations with confidence and technical knowledge in all local school cultures.

Conclusions

Today's educational challenge is for libraries to provide non-barrier learning and a teaching environment by offering programs, teaching support, resources and equipment to support school curriculum requirements and to enhance students' academic performance.

Taipei senior high school libraries try very hard to transform instructional resource centers and support teaching in spite of many difficulties. Some school libraries have already developed up to the "collaboration" stage and have established close teacher relationships to enhance student learning, preparing them for life-long learning in the digital age.

Desired outcomes may not immediately display during the initial period of moving to a further teaching support stage. However, persistence in cultivating student problem solving

abilities and life-long learning is the mission of senior high school librarians today. Indeed "nothing is impossible to enthusiastic school librarians!"

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