

**Interdisciplinary Information Science Ph.D  
Student/Faculty Research Grant Program**

**Submission:  
Library Automation Projects in Thailand: An Impact Study**

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## **Introduction**

In June of 2003 and May of 2004 a group of UNT SLIS students and faculty members implemented automated library systems in two Montessori Schools in Thailand. Two vendors, based on limited information provided by the Montessori schools, and primarily as a result of vendor contact with Dr. Carol Simpson, donated the automated library systems. The installation of the systems and retrospective conversion of the English language materials was accomplished in a two-week period. In both cases the automated library systems were turned over to the Thai library personnel for ongoing maintenance and use. Dr. Carol Simpson and Barbara Schultz-Jones participated and led both automated library system implementation projects.

The projects are considered a win-win opportunity for SLIS students and the Thailand Montessori schools. SLIS students receive the benefit of participating in all aspects of a retrospective conversion to a library automation system that contributes to their understanding of project management and library automation system components. The Montessori schools acquire an implemented system with the expectation of the ongoing benefits of operating their library in an automated environment.

The impact of introducing an automated library system in a short span of time, with limited onsite support from the project team is examined for impact and concerns.

## **Statement of problem**

The study will address the following research questions:

1. How has the automated library system impacted the following?
  - a) Library procedures
  - b) Library usage
  - c) Patron expectations
  - d) Curriculum development
  - e) User training
2. How are Thai language materials impacted?
3. What is the impact of system maintenance requirements?
4. What are the implications of using this implementation model for future automated library system projects in distant locations.

## **Background and literature review**

In June of 2003 a group of ten UNT SLIS students and two faculty members implemented a Follett automated library system at the Chiang Rai Montessori School (CRMS) in Chiang Rai, Thailand. The Follett system was donated to Dr. Simpson through her professional association with various Follett representatives. The size and scope of the system was determined by the size of the CRMS library collection (approximately 5,000 items) and the size of the K-8 school. The school is taught in English since knowledge of the English language is a pathway to high school and international universities. However, the Thai language dominates some

classroom instruction and a significant percentage of the school population (teachers, parents and students). The student, parent and teacher population are multicultural: Thai, American, German, French, and Canadian. The Thai language materials in the collection were not catalogued. It was expected that the CRMS librarian would introduce those materials to the Follett system after the SLIS students departed.

Technical difficulties occur regularly as a result of limited onsite expertise. Additional difficulties include the electrical system of northern Thailand that is unreliable, at best.

The administrators, librarian, teachers, and students seemed interested and committed to the retrospective conversion. An introduction to the Follett system on the last day of the project term was their opportunity to demonstrate their excitement and enthusiasm about the opportunities they would enjoy with an automated library system.

Despite their commitment and enthusiasm, system difficulties plagued the system after we departed. The technical support person deleted the entire system following a power outage and all data was lost. The system was partially restored, through communication with Dr. Simpson and Barbara Schultz-Jones. In May of 2004 we returned to the Chiang Rai site to deliver a flash drive for system back up. During this visit it was apparent that the momentum of the initial implementation had been interrupted and a large volume of materials remained uncatalogued. A number of opportunities still exist to optimize the system and in May of 2005 we will return with a group of 10 UNT SLIS students to review and secure the Follett library automation system.

In May of 2004 a group of ten UNT SLIS students, one faculty member and one adjunct faculty implemented an automated library system at the Rawai Montessori School in Rawai, Phuket, Thailand. The Athena system was donated through Dr. Simpson to the Rawai Montessori School in response to vendor requests by Dr. Simpson. The size and scope of the collection was larger than in Chiang Rai, with 1,000 more items to catalog and a higher percentage of nonfiction materials. The teaching situation in the Rawai Montessori School was similar to the Chiang Rai Montessori School.

The installation of both systems and retrospective conversion of the English language materials was accomplished in the two-week period. During that time, weeding, repairing, cataloging, classification, data entry, and training were performed. The electric system is as challenging on Phuket as it was in Chiang Rai so system interruptions are standard in these locations. The two-week time frame is challenging and opportunities exist for additional system enhancements. As a result, we will return for a few days as part of the May 2005 Thailand library automation systems trip.

The return trip to Thailand provides the opportunity to explore the impact of our efforts. A literature review revealed some investigation of the impact of technology in the United States and recognition of the role that school librarians can play in curriculum enhancement. A 1999 survey of the impact of technology on school libraries in the United States revealed the following: added complexities to support the systems, the need for more computers, increased budget needs for software, a new emphasis on technology, more research done by teachers,

more and ongoing classes in library research instruction, more and ongoing classes in computer use, issues of filtering content, and less time for book selection (The School Librarian's Workshop, 1999).

Beyond the workload impact of technology, opportunities exist for the librarians to collaborate with teachers and support the curriculum (Tilke, 1999). If their efforts and expertise are enhanced by the use of an automated system their contribution to the academic achievement of their institutions may be realized (Lance, 2001).

Academic and public libraries in Thailand have been installing automated library systems since the late 1980's. School libraries, with smaller catalogs and limited resources, employ some automated systems (mostly in Bangkok) and are linked to the Internet (Siriwongworawat, 2003).

A literature review reveals articles that detail library automation systems reviews in academic and public libraries but only occasional references to k-12 school libraries in Thailand. No impact studies that address the implementation of school library automated library systems in multicultural settings were found.

### **Research design and methodology**

The study will employ a combination of naturalistic enquiry and purposive sampling. A variety of techniques will be used, including: documentation review, field observation, interviews, and surveys.

The study will take place on site in two Thailand locations: the Chiang Rai Montessori School in northern Thailand and the Rawai Montessori School on the island of Phuket, Thailand.

Field observation in this setting will include several techniques. Observation as a form of research will be conducted in both settings: observing the use of the system by administrators, teachers, parents and students. Interviews with each of the administrators, teachers and librarians will explore the intended and actual use of the system and the impact on each of the constituents and the curriculum. A survey will be designed and delivered to the parents, many of whom are Thai speaking, to gather information on library and system use from their perspectives. The observation and interview schedule will be arranged in advance with the assistance of the administrator contacts for the projects. The parent survey will be sent to the Rawai administrator for distribution in advance of our visit, since we intend to spend only a few days at this site.

Human subjects will be invited to participate and will not be impacted in any way by the study. A consent form will be provided for survey and interview participation. Children will be observed when they are in the library but will not be asked to participate.

Qualitative data will be coded by the doctoral student and analysis will be assisted by the NUD\*ist software package, version N6. Demographic information will be used to enable comparisons of user categories.

## Importance and expected benefits of research

Understanding the impact of the implementation of an automated library system in a multicultural setting using an intense period of implementation will inform project management and design for future endeavors. It will reveal areas of strength and weakness in the project design and define opportunities to enhance the current operations in Chiang Rai and Rawai, Thailand. It will also inform future opportunities since our efforts are generating significant interest in Thailand and additional project sites have identified themselves and requested our assistance.

## Project schedule

The project schedule allows for the preparation of materials before onsite data collection. The distribution of surveys to the Rawai site is ahead of the onsite visit due to the limited time available for data collection in this site.

Design and preparation of survey, interview questions	January 15 – February 28	6 weeks
Permission to enter the field School administrator approval	March 7-11	1 week
Data collection Rawai, Phuket, Thailand Survey distribution (mail)	May 2nd	4 days
Data collection Chiang Rai, Thailand Administrator interviews Survey distribution and collection Librarian interview Teacher interviews Parent interviews Student interviews Individual observation	May 23 – May 31	10 days
Data collection Rawai, Phuket, Thailand Administrator interviews Survey collection Librarian interview Teacher interviews Parent interviews Student interviews Individual observation	June 1 – June 3	3 days
Data analysis	June	1 month
Report writing	July	1 month
Presentation of results	August	1 month
<b>Total</b>		<b>8 months</b>

## Qualifications of the investigators

Barbara Schultz-Jones is a doctoral student in the Interdisciplinary Ph.D. Program in information Science, University of North Texas. She has worked as a research assistant for Dr. W.E. Moen on the ZLOT Project for the Texas State Library and Archives Commission (TSLAC). She is currently working as a teaching assistant for Dr. Barbara Stein and Dr. Carol Simpson in WebCT course design and support, and as a GLA Reference Librarian in the Science and Technology Library. Her study interests include group process and network theory, information seeking behavior, technology impacts, and reference behavior. The qualitative data analysis software package is the same package that she intends to use in her doctoral research and analysis of network theory.

Dr. Carol Simpson is an Associate Professor in the School of Library and Information Sciences, University of North Texas and a Fellow of the Texas Center for Digital Knowledge. One of her primary research interests is Web-based instructional design and she is one of the major advisors in the School Librarian Certification Program.

## References

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