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Strategies for Efficient and Effective Collaborative Practice
in the School Library

A Graduate Project

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ABSTRACT

This action research study involved the school librarian, principal and one classroom teacher in Elementary School A. The researcher asked what strategies, actions, and organizers were necessary to facilitate effective collaborative guided inquiry practices. Data from planning one guided inquiry lesson, interviews, emails, conversations, observations, formative assessments, reflections, lesson plans, a curriculum map, and ongoing field notes showed that brief meetings and communication make collaboration time efficient and meaningful. Additional findings indicate that by developing ongoing, meaningful, professional relationships, working to eliminate unnecessary tasks, and making the most of available time and resources could improve the collaborative climate in Elementary School A.

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CHAPTER 1

INTRODUCTION

The Partnership for 21st Century Skills (2009a), the American Association of School Librarians (AASL), as well as fourteen states have chosen to address the importance of teaching skills that each of these entities asserts will prepare students for life beyond school. The turn of the century has brought about a resurgence of interest in development of important skills related to life beyond school. The Partnership for 21st Century Skills delineates these as information, media and technology skills; learning and innovation skills; and life and career skills. Concern about such skills has been in the literature of school librarianship for decades.

The phrase *information literacy* first appeared in print in a 1974 report by Zurkowski, written on behalf of the National Commission on Libraries and Information Science. Zurkowski (1974) used the phrase to describe how techniques and skills are used to mold solutions to our information problems. Furthermore, the library profession has advocated for the school librarian to be the "vanguard of those who are advocating the use of technology in the school" (Vandergrift, 1979, p. 10). While the technologies have changed, the roles and responsibilities have been consistent for the past 30 years or more.

Also appearing in school library professional literature and guidelines for decades is the practice of collaboration between the librarian and classroom teachers. Cleaver and Taylor (1989) recount the commitment to collaboration:

> The 1969 *Standards for School Media Programs* suggested several ways for professional staff to implement the library media program through curriculum and instructional development:
> - Working with teachers in curriculum planning
> - Serving as instructional resource consultants and materials specialists to teachers and students
> - Working with teachers to design instructional experiences
> - Serving on teaching teams. (p. 5)

Cleaver and Taylor (1989) further delineated the history of collaboration when these recommendations pointed to a more integral role in classroom development:

- Initiating and participating in curriculum development and implementation
- Designing in-service education
- Developing materials for self-instructional use by learners for specified objectives
- Determining the effectiveness or validity of instructional materials and sequences

These recommendations pointed to a more integral role in classroom development (p. 5).

Despite the imperatives in the school library literature over these years to teach skills associated with information literacy, to lead the implementation of technology in schools, and to collaborate with teachers, at the end of the first decade of the 21st century, these practices still have not become commonplace in American schools. This is shown in the continued emphasis on advocacy in the profession, exemplified in this assertion from a teacher librarian in Massachusetts.

There is a loud cry across the nation to teach students critical thinking and 21st century information technology skills. Even though education leaders know that students need science, technology, engineering, and math (STEM) skills, many still do not know that library media specialists are capable of providing tools and resources, along with the skills to use them, for every student and teacher. Library media specialists need to be persistent and vocal in educating these constituencies (Kelly, 2008, para. 7).

Justification

Today's students need innovative support systems to prepare them to seek gainful employment upon graduation in an economy that now competes and communicates globally. The Partnership for 21st Century Skills (2009b) identified key core subjects and 21st century themes on a national scale. Iowa, along with thirteen other states, addressed 21st century skills by designing their own standards, assessments, and professional development programs. On a state-by-state level, each state fused the reading, writing and math with critical thinking, communication, collaboration, and creativity (2009b). State ownership of this initiative brought local businesses, administrators, teachers and parents together to address and support the movement toward a relevant educational

model.

Iowa developed the Iowa Core Curriculum (Iowa Department of Education, 2008) to address 21st century skills across all areas of instruction. Iowa schools are directed to follow this initiative to address the needs of today's students in the state. The Iowa Core Curriculum 21st Century Skills Committee affirms the need to address technology in the classroom to enable students to eventually compete in the global economy:

> Iowans in the 21st century live in a global environment marked by a high use of technology, giving citizens and workers the ability to collaborate and make individual contributions as never before. Iowa's students live in a media-suffused environment, marked by access to an abundance of information and rapidly changing technological tools useful for critical thinking and problem solving processes. Therefore, technological literacy supports preparation of students as global citizens capable of self-directed learning in preparation for an ever-changing world. (para, 1)

The library community addressed the teaching of 21st century skills in the booklet entitled, *Standards for the 21st-Century Learner in Action* (AASL, 2009). Here the AASL defined four strands of learning: Skills, Dispositions in Action, Responsibilities, and Self-Assessment Strategies. In short, skills taught in context become dispositions that guide student's thinking, which is then measured through their actions. AASL takes the position that librarians, in collaboration with classroom teachers, are key to assist in the teaching of dispositions in action, responsibilities, and self-assessment strategies throughout various curriculum areas.

Teachers and teacher librarians require practical guidance to incorporate 21st century skills in their schools. The book, *Guided Inquiry, Learning in the 21st Century* (Kuhlthau, Maniotes, & Caspari, 2007) specifically directs educators to work with librarians to help students become successful and productive as our world experiences unpredictable changes. Kuhlthau et al. explained how through guided inquiry students

creatively use various sources to enrich their understanding of problems, topics, and issues.

With guided inquiry, students gain proficiency through the guidance of teachers in collaboration with the school librarian along with additional staff and outside resources to access various levels of information. Various studies show learning takes place through this collaborative approach. Davidson and Stone's (2009) research showed successful collaborative teaching ultimately depends upon the support from all stakeholders involved. Assessing the reaction of those in the field, Mardis and Dickinson (2009) found pressures felt by individual teachers, school administrators, and parents affect implementation plans of new standards. Zimmerman (2006) concluded resistance to new initiatives happen when stakeholders will not recognize the need to make changes on account of a fear the unknown, threatened by perceived power, hindered by time factors, and affected by social relationships.

Addressing how well teachers and librarians work together, Kuhlthau et al. (2007) identified what commonly happens when progress toward guided inquiry teaching stalled in some schools. There were three main reasons: time, role confusion, and poorly designed assignments. Not only did teachers and librarians lack the time needed to plan adequately, but students had too little time to thoroughly work through the lessons designed for them to investigate. Without adequate time to plan and carry out lessons, teachers and librarians regressed back to traditional isolated roles as opposed to taking sufficient time to explore and identify new roles. Lastly, assignments in stalled programs lacked inquiry learning, authenticity and relevance. Of equal importance, Kuhlthau et al. (2007) found programs that enabled successful outcomes contained a "constructivist view

of learning, team approach to teaching, competence in designing process assignments and a commitment to developing information literacy" (p. 52). The common thread found in the successful schools boiled down to administrative support. When a principal demonstrates value in how well teachers and librarians collaborate together, collaborative-guided inquiry programs thrive.

For students to become well educated in the 21st century, essential concepts and skills can be taught collaboratively in a student-centered environment with a guided inquiry approach. Recognizing resistance and its origin, Davidson and Stone (2009) concluded the benefits far outweigh the problems and argued against honoring excuses to avoid teaching 21st century skills. Davidson and Stone concluded that for the sake of student achievement, "educators must dive in and begin their transformation" (para. 17).

Given the amount, availability, and speed in which information is now available demands educators pool resources to enhance instruction. Transformation means teachers work side by side with colleagues and students in an effort to prepare graduates for the 21st century. Elementary School A, the school represented in this action research study, identified co-teaching as a building goal, listing it as a strategy for student achievement in both reading and math in its 2009 – 2010 District and Building Goals School Improvement Plan, stating that, "Teachers will continue to learn and implement co-teaching strategies" as well as to "[i]mprove student achievement through effective instructional and assessment practices" (p. 3). Several classroom teachers working at Elementary School A have commented on the value of co-teaching with the teacher librarian, but lack a detailed plan to carry out curriculum related units on a regular basis. Several do however recognize its value and wish to attempt collaboration in the library.

Ideally, collaborative interaction helps students develop a sense of civic responsibility that lasts into adulthood (Montiel-Overall, 2005). Lifelong learning and civic responsibility not only impact our immediate community, but also affect poverty in foreign countries, evidenced in Sanderson's (2009) article about Bomet, a Kenyan youth, living in Iowa, who has inspired thousands to join him in building a school in Africa. Bomet (2010) uses 21st century skills to communicate the cause he is passionate about. Helping students recognize their role in a global society calls on the stakeholders to support teachers working collaboratively with their teacher librarian, other support staff, and the community at large.

Problem

Collaboration efforts between teachers and the librarian in Elementary School A vary from teacher to teacher. The culture of collaboration could improve with input from the school principal and an experienced classroom teacher who values collaboration with the librarian to engage 21st century learners.

Purpose

The purpose of this action research study is to determine strategies, actions, and organizers to enable Elementary School A's teacher librarian and classroom teachers to use collaborative 21st century guided inquiry lessons that engage all learners.

Research Questions

1. What strategies for effective collaborative practices would be useful at Elementary School A?

2. What specific actions (e.g. scheduling, meetings…) are necessary to implement effective collaborative guided inquiry lessons for 21st century learning at Elementary School A?

3. What organizers may be put in place to facilitate effective collaborative guided inquiry practices at Elementary School A?

Assumptions

It is assumed Elementary School A's teachers understand the Iowa Core Curriculum mandate and agree that teaching *21st Century Skills* (Metiri Group & NCREL, 2003) in collaboration with the teacher librarian will have a positive effect on student learning, specifically: dispositions in action.

Limitations

This research will be limited to one teacher, principal and teacher librarian at Elementary School A.

Significance

This research could reveal deficits surrounding collaboration skills of Elementary School A's teacher librarian and the classroom teacher. This research could aid teachers, principals, and school librarians by acquainting them with effective collaborative guided inquiry practices and tools.

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Definitions

21st Century Skills: The application of skills, dispositions, responsibilities and self-assessment needed to gain knowledge and habits necessary to compete in the ever-changing global economy (AASL, 2009).

Collaboration: "Collaboration occurs when educators co-design, co-plan, co-teach, and/or co-assess curriculum-based lessons or units of study" (Moreillon, 2008, para 6).

Dispositions in Action: Outward actions on the part of students who "draw conclusions, make informed decisions, apply knowledge to new situations, and create new knowledge" (AASL, 2009, p. 2).

High-end collaboration: "Through a shared vision and shared objectives, student learning opportunities are created that integrate subject content and library curriculum by co-planning, co-implementing, and co-evaluating students' progress throughout the instructional process in order to improve student learning in all areas of instruction" (Montiel-Overall, 2005, p. 145).

Information Literacy: "to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information" (Ambach, et. al., 1989, para. 3).

School Library Media Program (SLMP): "offers a highly-qualified school library media specialist (a term used interchangeably with librarian), equitable access to up-to-date resources, dynamic instruction, and a culture that nurtures reading and learning throughout the school" (AASL, 2007, p. 5).

CHAPTER 2

LITERATURE REVIEW

The purpose of this action research study is to determine strategies, actions, and

organizers to enable Elementary School A's teacher librarian and classroom teachers to

collaboratively implement 21st century skills through guided inquiry instruction in a time

efficient manner. The review of the literature is intended to explore roles, perceptions

and expectations of teacher librarians and school library programs. The first section is

concerned with exploring the evolving role of the teacher librarian. The second section

examines tools and processes that contribute to a valuable school library program. The

final section examines attitudes and strategies librarians hold and employ to create

collaborative opportunities with teachers.

Role of the Teacher Librarian

Pickard (1993) noted her purpose was to determine if a gap exists between what is

described in literature as a theoretical instructional role versus what school librarians

experience in the field. The problem Pickard addressed related to how school librarians in

DeKalb County Public Schools perceived their instructional roles. The author posed the

following questions for her research:

> 1. How important do the library media specialists perceive the instructional role
> of design and consultation to be?
> 2. To what extent are the library media specialists practicing the instructional role
> of design and consultation?
> 3. What demographic variables relate to the library media specialists' perceived
> importance and practice of the instructional role? (para. 8)

Pickard (1993) collected responses from 129 school librarians. The librarians

were asked to rate 17 statements based on a 1980 Taxonomy developed by Loertscher

(2000) entitled, *Taxonomy of the School Library Media Program.* Results feed into one

of three categories: *Reactive, Proactive* and/or *Interactive* on the part of the participants. Although respondents viewed their instructional roles as important, they also identified their roles as merely, supportive. A higher percentage of librarians found in the secondary setting, and with eleven years experience or more, identified their role as Interactive. Although the study did not set out to account for the discrepancy between Interactive labels for importance and practice, Pickard cited scheduling factors, at the elementary level, to be among the reasons why librarians are not all at the Interactive level of practice. Pickard concluded that successful library media programs have "strong, informed, and active partnerships forged among the principal, the classroom teachers, and the library media personnel" (para. 39).

Dynamic library programs depend upon effective professional partnerships; likewise the research of Emery (2008) highlights additional considerations regarding the changing role of the teacher librarian and the art of creating a culture of collaboration. Emery stated the purpose of her research project was to develop teacher orientation materials identifying collaborative roles and services between teachers and the teacher librarian.

Emery (2008) applied her findings from the literature review and teacher surveys to develop materials, which included a DVD, guide, and curriculum resource as part of the school's new teacher in-service training kit. Data analysis consisted of evaluating the effectiveness of the materials and collecting a second set of anecdotal information from newer teachers regarding librarian requests and school library use. A shift in regard to teacher requests to use the library for "teaching, learning and independent reading" (p. 49) was noted following instruction with the kit Emery developed. At that point, requests

for project planning and instruction regarding information seeking increased

collaboration, similar to that which was modeled in the DVD created for the research

project. Emery suggested further studies could investigate journaling to gather data about

the various roles and aspects of collaboration.

While developing a training kit for new teachers is one option, some librarians

have expanded their role to include virtual libraries such as those found in Second Life

(www.secondlife.com). Blankenship and Hollingsworth (2009) constructed a study to

"analyze the ongoing issues and concerns of Second Life librarians who are attempting to

balance both their virtual library tasks and assignments along with their real world library

tasks and assignments" (p. 430). The problem addressed in the study had to do with time

management issues librarians faced when creating virtual world libraries in Second Life.

Not a game, Second Life is a multi-user virtual environment (MUVE) (Floyd,

Frank, & McCook, 2007) populated by avatars. Second Life residents interact with

people in real-time from anywhere in the world. This MUVE created its own economy

and currency exchange. School libraries, created and monitored by their librarians, along

with a myriad of services and businesses may be found on Second Life (Blankenship &

Hollingsworth, 2009).

During the summer of 2008, Blankenship and Hollingsworth (2009) invited 800

members from Second Life Librarians along with 1,910 librarians of the Library and

Information Technology Association to participate in an on-line survey, emailing

invitations to targeted participants. Most of the libraries surveyed were academic

libraries, 10% were school libraries. Responses from the participants indicated an overall

lack of support from library administration regarding the perceived importance of

librarian's work in virtual world libraries. Several respondents made a connection, comparing the same lack of support librarians initially received for Internet services in its beginning stages with a similar reaction to MUVEs such as Second Life. Blankenship and Hollingsworth noted the lack of technical support and broadband access to the Internet in the library required more time to complete work on Second Life libraries outside of regular working hours.

The role of the librarian continues evolving to adapt and serve 21st century learners in a 21st century environment. Pickard (1993) suggested successful library programs depend upon effective professional partnerships, and Emery (2008) devised tools to assist in creating a culture of collaboration. Furthermore, Blankenship & Hollingsworth (2009) reviewed the value of MUVEs, such as Second Life. Considering the accessibility of technological tools, further studies have investigated attitudes of stakeholders affecting collaborative actions in schools.

Twenty-first Century Libraries

The purpose of Liaw, Chen, and Huang's (2006) study was to research learners' attitudes toward Web-based learning systems that support collaboration and enrich learning for individuals, group knowledge sharing, and the exchange of ideas. The study took place at a central university in Taiwan with 178 students who were asked to fill out a questionnaire after using the Web-based collaborative learning system for six weeks; 131 responses were collected using quantitative data collection. Researchers set out to discover why college students responded favorably or unfavorably to Web-based collaborative learning systems with three possible hypotheses.

Liaw et al. (2006) gathered data through a questionnaire about the system for

knowledge management. Participants rated their attitudes toward the system on a 7-point scale as it related to computers and programs, system acceptance, system functions, collaborative activities, users' attitudes, and system satisfaction. The results supported the researchers' hypothesis that learning Web-based systems is dependent upon the "system functions, collaborative activities, learners' characteristics, system acceptance, and system satisfaction" (para. 34). The authors concluded that students work best through group discussion in a Web-based system that enriches collaborative learning activities.

Just as Liaw et al.'s (2006) research demonstrated the way college students respond to Web-based collaborative learning systems, Mardis and Dickinson's (2009) research set out to determine the "likelihood to support and implement new information-centered approaches to student learning" (para. 1) when implementing the *AASL Standards for the 21st Century Learner* (AASL, 2009). Mardis and Dickinson acknowledged that although the standards are useful; they are "only useful if they are implemented" (para. 8). Data were collected from a pool of 18 preservice school library media specialists (SLMS) enrolled in a master's level school library course during fall and winter semesters of 2007 - 2008 at an urban university in Michigan. Research questions dealt mainly with the *Standards for the 21st Century Learners*, as it relates to how preservice librarians will implement these standards upon graduation.

Small groups of the SLMS's were given a set of discussion questions, followed by larger group debriefing sessions; researchers recorded these large group sessions, noting common themes. These discussions provided professional dialogue and reflection on successful learning strategies used in school libraries. Mardis and Dickinson (2009)

compiled their results, using qualitative data collection to report their findings.

Mardis and Dickinson's (2009) findings overwhelmingly endorsed the new standards as more empowering, applicable, and relevant to new ways of learning than the older standards. Additionally, Mardis & Dickinson determined respondents found the new standards to contain a heightened degree of understandable language.

The SLMSs agreed that to successfully implement the standards, they should "hone their abilities to facilitate learner-centered, interdisciplinary atmospheres that reflect student interests in school and personal topics" (Mardis & Dickenson, 2009, para. 75). Mardis and Dickenson suggested further study on how to enhance implementation, student achievement and professional excellence related to 21st century learning.

Before Mardis and Dickenson's (2009) study, Kuhlthau (1993) explored what inhibits or enables successful library media programs. Kuhlthau had observed some programs flourish, while others, designed with equally good intentions "are confined to narrowly defined roles" (para. 2). Using a process approach, a training institute was developed for library media specialists to practice, reflect, and find ways to help students engage in problem-driven research by experiencing this method of learning themselves. Participants were given "intensive firsthand experience with the information search process" (para. 24). They designed activities for students together, reflecting on what they were learning to gain a deeper understanding of the topics.

At the close of the institute, participants were surveyed to determine any changes in their perception of the mission of library media programs. These surveys "revealed considerable change in perception of the mission of library media programs, understanding of the information search process, and commitment to adopt a process

approach to information skills instruction" (Kuhlthau, 1993, para. 26). Participants of the institute were given the opportunity to implement the process approach in their libraries and complete a questionnaire at the end of six months. The researcher collected these responses for two years.

Kulthau (1993) asked participants what worked well and what did not; what advice they might have for others starting a process approach; and what their future plans were for a process approach in their library program. The researcher noted themes in the answers regarding inhibitors as: "lack of time, confusion of roles, and poorly designed assignments" (para. 29). Participants noted they did not have enough time to present to students, or enough time to plan with the cooperating teacher. These limitations affected the librarians' and teachers' roles. Participants also noted that assignments were confusing, often added on instead of "directly integrated into the subject-area curriculum" (para. 33). Contrasting these with elements of success, the researcher noted struggling programs tended to dwell on logistics of establishing the program instead of program content.

Kuhlthau (1993) described "the need to develop new ways to help students form a focused perspective as they gathered information" (para. 35) in an effort to address students who learn differently. Focus interviews and site visits discussed the program; researchers used qualitative methods to collect data and provide insight to "investigate and identify basic elements underlying successful implementation" (para. 36). As a result, the researcher conducted a longitudinal case study investigating successful implementation over a four-year period, from 1990 to 1993, at a junior high school in

Manhasset, New York. Manhasset Junior High School was chosen for its "long-standing reputation for quality education" (para. 37).

Kuhlthau's (1993) study produced overlapping data resulting from the various forms of questionnaires, interviews, materials, and student projects revealing ten critical elements of success that were condensed into four basic "enablers" in their successful program:

> 1. A team approach to teaching with administrators, teachers, and library media specialists playing essential roles in the instructional team.
> 2. A mutually held constructivist view of learning compatible with the process approach that provided the foundation for actively engaging students in problem driven inquiry.
> 3. A shared commitment to teaching skills for lifelong learning and for motivating students to take responsibility for their own learning.
> 4. Competence in designing activities and strategies to improve student learning. (para. 43)

In conclusion, Kuhlthau (1993) found that for participants, identifying inhibitors was easier than pinpointing elements of a successful program. Liaw et al. (2006), concluded that students work best through group discussion in a Web-based system that enriches collaborative learning activities. Mardis & Dickenson (2009) found library media programs that address enablers and inhibitors in an effort to implement collaboration "are likely to experience success in integrating the use of ideas and information across the curriculum" (para. 65), noting that programs such as these show promise toward making substantial contributions to 21st century learning. These findings lay the groundwork for successful collaboration between teachers and teacher librarians.

Successful Collaboration with Teachers and Teacher Librarians

Latrobe and Masters (2001) discussed what is required of a school district to facilitate a collaborative environment. Using *Information Power* (AASL & AECT,

1998), researchers implemented a strategy that simultaneously informed teachers, administrators, and library media specialists how library media programming supported school standards. This process allowed the schools within the district to subsequently apply findings to annual school action plans. The school district in the southwestern United States "was not selected for study because it is typical but rather because it is exemplary and represents best practice" (para. 2). It won awards for excellence in education and was one of ten regional educational laboratories sponsored by the United States Department of Education, who sent in a research team to document its professional development strategies.

Following the publication of *Information Power* (AASL & AECT, 1998) the school district sought to implement strategies, seeking to institutionalize the guidelines "as an ongoing force for program change, not merely the subject of a series of workshops" (para. 3). The district assessed stakeholders through a survey tool, which identified strengths and weaknesses of its libraries and allowed for reflection.

Latrobe and Masters' (2001) three semester plan of action began in the fall of 1998 when teachers, administrators, and school media specialists analyzed *Information Power* guidelines and began to document, then share how information literacy standards were integrated at each grade level. In the spring of 1999, district principals and administrators collaborated with building-level school library media specialists, examining how information literacy standards had been integrated in the district. In the fall of 1999, principles of *Information Power* (AASL & AECT, 1998) along with information literacy standards were introduced to the district's teachers. Numerous meetings were held at various school sites. All completed surveys for evaluation.

Latrobe and Masters (2001) considered how teachers, principals and librarians answered the surveys and found that while the answers to these questions were specific to each district, the methods could be adapted in other school libraries for planning and evaluation. Additionally, Latrobe and Masters argued that data analysis could develop into other research studies, specifically related to program satisfaction; comparing the different needs and perceptions among elementary and secondary school library media specialists and library media program evaluation. Notably, Latrobe and Masters found that among librarians, principals, and teachers, it was the librarian whose behavior was the best predictor of program progress. Latrobe and Masters concluded, "there is a need for the study of data collection methods and instruments that can best inform the practice of planning and evaluation within library media programs" (para. 26).

Working directly with preservice teachers in training is another method to affect collaboration in today's schools. Moreillon (2008) set out to identify which interventions most influenced new teachers' understanding and practice of collaboration with teacher librarians. Moreillon, a professor and researcher, asserted that although quantitative research studies have correlated the work of a full-time, certified School Library Media Specialist with positive student achievement, classroom-library collaboration is not as common as it could be.

Participants in the study were juniors enrolled in an undergraduate teacher preparation program at a state university in Arizona in the 2004-05 academic year; they became seniors the following year. Fourteen of the fifteen participants who began the study completed all four of the surveys involved in the study. All participants completed their student teaching in the same geographical area; twelve of the fourteen began

teaching in Arizona in the fall, 2007. Moreillon (2008), a faculty leader for this teacher education program, designed interventions to influence "participants' values, expectations, and eventually, their collaborative teaching practices" (para. 15).

These participants voluntarily responded to three online surveys and one written survey. Essential to analyzing the study's data was the meaning of the word, collaboration. "Collaboration occurs when educators co-design, co-plan, co-teach, and/or co-assess curriculum-based lessons or units of study" (Moreillon, 2008, para 6).

Moreillon (2008) focused each of the four surveys "on the participants' developing knowledge and practice of collaboration" (para. 6) with the overarching question being, "What are the factors that influence preservice and first-year classroom teachers' understanding and practice of classroom-library collaboration?" (para. 6).

The first survey, given their junior year at the beginning of undergraduate K-8 coursework; the second before beginning a student teaching experience; the third survey after the student teaching experience. This survey also contained several open-ended interview questions, which were audio taped. Lastly, participants took the fourth survey after their first year of teaching. Although the study involved only a small number of participants, "their experiences shed light on the supports and obstacles experienced by novice teachers in relationship to their practice of classroom-library collaboration" (Moreillon, 2008, para. 22).

Throughout the time of instruction, speakers and groups presented and discussed various aspects of collaboration (Moreillon, 2008). However, despite repeated exposure to the positive aspects of library collaboration, Moreillon found that not every school embraced the concept once these teachers entered the field. After one year of teaching,

final surveys showed these teachers were more apt to co-design, co-plan, and co-teach with SLMSs, but effective follow-through ultimately depended upon where they were hired. Nonetheless, Moreillon concluded that collaboration is more likely to be successful when SLMSs address disabling factors. Moreillon's study of preservice teachers runs parrellel to Montiel-Overall's (2008) which researched a successful collaborative model.

Montiel-Overall (2008) identified that limited resources and increased challenges exist in 21st century schools. This research examined the practices of highly collaborative librarians and teachers who then identified what happens within a school that facilitates high-end collaboration. Montiel-Overall conducted an extensive literature review of instructional models from various perspectives related to collaborative practices and theories. Researchers interacted with school staff to develop a definition for collaboration through interviews, observations and field notes. In this study collaboration was defined as "shared thinking, shared planning, and shared creation of something new" (p. 150).

The data produced five themes, recognizing the following essential successful collaboration elements: school culture, attributes of collaborators, communication, management, and motivation to collaborate. The purpose of Montiel-Overall's (2008) study was to "explore (a) how high-end collaborators define collaboration, (b) how they describe the collaborative process and activities included in the process, (c) how they manage time, and (d) which factors enable and/or inhibit collaboration" (p. 145).

Montiel-Overall (2008) sought three highly collaborative school librarians to participate because they possessed knowledgeable and collaboration experience as

recommended in *Information Power* (AASL & AECT, 1998). The librarians in turn recommended fifteen collaborating teachers and three principals from their schools.

Montiel-Overall (2008) found school cultures overcome the barriers of time management and factors that inhibit collaboration, such as varying worldviews when student success is a common goal. Montiel-Overall's results showed the importance of how multiple facets of collaboration produce successful results related to student achievement. This success was not attributable to any one particular strategy. A librarian participating in the study felt that "when teachers and librarians worked together, all the pieces of the model fit together" (p. 181).

As the teachers grew in their trust of one another, there was an increased sense of community and trust whereby the classroom teacher allowed the librarian to instruct collaboratively, despite differences in their personal worldview. Teachers and librarians still felt time management was a concern, but having clear goals, being focused, and flexible allowed them the needed energy to carry out tasks for the sake of the learning community. For instance, Montiel-Overall (2008) found participants worked outside school hours to achieve successful collaborative lessons were willing to put forth the extra effort to achieve successful learning experiences for their students.

Summary

Pickard's (1993) study concluded that successful library media programs have active partnerships between the administration, teachers and library personnel. Emery (2008) concurred that thriving library programs depended upon effective professional partnerships, while Blankenship and Hollingsworth (2007) determined librarians with virtual libraries required administrative and technical support to be successful.

Considering 21st Century learning, Liaw et al. (2006) established the quality of web-

based collaborative learning systems influenced student engagement; Mardis and

Dickenson (2009) agreed librarians must provide a student-centered environment and

demonstrate knowledge of Information Technology skills in order to solve technology

problems efficiently. Kuhlthau (1993) found school libraries, which address enablers and

inhibitors, are more likely to integrate ideas and information; that moving students

toward a 21st Century mindset requires a shared commitment to help students take

responsibility for their own learning, specifically:

> 1. A team approach to teaching with administrators, teachers, and library media
> specialists playing essential roles in the instructional team.
> 2. A mutually held constructivist view of learning compatible with the process
> approach that provided the foundation for actively engaging students in problem
> driven inquiry.
> 3. A shared commitment to teaching skills for lifelong learning and for motivating
> students to take responsibility for their own learning.
> 4. Competence in designing activities and strategies to improve student learning.
> (para. 43)

Contrasting these with elements of success, the researcher noted struggling

programs tended to dwell on the logistics of establishing the program as opposed to

program content. Concerning successful collaboration, Latrobe and Masters' (2006)

study found unique site-based improvement plans make a difference. Moreillon (2008)

documented intensive training of preservice teachers, a collaborative culture within the

school, as well as the availability and general overall effectiveness of the school librarian

inclined new teachers to seek out librarians for collaboration. Montiel-Overall (2008)

established that high-end collaboration is dependent upon a number of facets, which

produce a supportive school culture for collaboration. These facets include, but are not

limited to, collaborators who look beyond their differences to the common goal of student

achievement, effective communication, efficient time management, and personal motivation to facilitate a successful collaborative culture.

In conclusion, this literature review found interactive teacher librarians are more likely to experience dynamic collaboration despite scheduling and time factors when they are supported by administrators, have ready access to up-to-date equipment, are accessible to staff, motivated to collaborate, and knowledgeable about the school's site-based improvement plans as well as information technology.

CHAPTER 3

PROCEDURES

This action research study determined strategies, actions, and organizers which enabled Elementary School A's teacher librarian and classroom teachers to efficiently manage the collaborative comprehensive implementation of the AASL *Standards for the 21st Century Learner* (2009).

Methodology

Creswell (2008) states that the process of action research is not only a dynamic approach, but also flexible, in that "no blueprint exists for how to proceed" (p. 609). Action research is useful to address a problem typically found in a work situation, employing an applied form of inquiry. According to Sykes (2008), "The intent of action research is to enable the professional to 'live in a question' for a period of time and ultimately define ways to improve practice" (p. vii).

In an action research study, researchers collect and code data from field notes that contain dates, times, people involved, locations, and various details to provide researchers with "patterns or themes to construct meaning around their questions" (Sykes, 2008, p. xvi). Key patterns then allow researchers to develop conclusions that are discussed further, reflecting on findings or changes based on the data.

The purpose of this action research study was to enable Elementary School A's teacher librarian and one experienced 2nd grade classroom teacher to efficiently manage the collaborative comprehensive implementation of the AASL *21st Century Skills* (2009) in the form of a social studies unit of study whereby students used the library to research their topic. Stakeholders engaged in formal and informal interviews; created graphic

organizers, used web-based supports, as well as integrated *21ˢᵗ Century Skills* into a curriculum-aligned lesson within a unit of study.

Creswell (2008) indicated that the type of data researchers collect for action research could be either quantitative or qualitative, or both. Considering the questions in this study, which revolve around strategies, actions and graphic organizers, this study analyzed predominately qualitative data.

Collecting some data through qualitative means was appropriate for this study, as this researcher holds a dual position of part-time teacher librarian and a Title 1 Math Teacher in Elementary School A. This unique position not only afforded the researcher with substantial flexibility and collaboration opportunities across grade levels, but also allowed the teacher librarian to improve personal practices through the role of participant observer in a research project of this nature. Creswell (2008) notes, "the scope of action research provides a means for teachers or educators in the schools to improve their practices of taking *action* and to do so by participating in research" (p. 597). This research took place before, during, and after the unit study in collaboration with the 2ⁿᵈ grade classroom teacher.

The results of this study were expected to improve the culture of collaboration for teaching staff. Furthermore, Elementary School A's Comprehensive School Improvement Plan (CSIP) building goals for 2009 – 2010 stated that "Teachers will continue to learn and implement co-teaching strategies" as well as to "Improve student achievement through effective instructional and assessment practices" (p. 3).

Population

According to Creswell (2008), action research considers "practical issues that will have immediate benefits for education" (p. 605). This study involved collaboration of a curriculum-aligned lesson within a unit of study between the 2nd grade teacher and the teacher librarian, with input from the school principal. For the purpose of this study, participants included the researcher, who has served as Elementary School A's teacher librarian since fall, 2006; the 2nd grade teacher who has taught behavior disordered students for five years and 2nd graders for the past twenty two years; and the school principal whose teaching background focused on students with behavior disorders and who has thirty years of experience as an elementary school principal. Additionally, the principal teaches professional development courses on poverty and engages in ongoing professional development training. The teacher librarian is completing the Master's level courses in School Library Studies at the University of Northern Iowa, with ongoing training opportunities at the district level as well as the Area Education Agency trainings, along with attendance at regional and state library association conferences.

Procedures

The researcher received permission from the University of Northern Iowa Institutional Review Board. Additionally, the researcher completed the Protection of Human Subjects training; a certificate to this effect was then filed at the University of Northern Iowa. Information shared throughout the study was treated in a confidential and ethical manner so as to respect the rights and responsibilities as educational professionals of those involved. Meetings began once appropriate consent forms were completed and signed by the 2nd grade teacher and the school principal.

Interviews with the 2nd grade teacher took place before, during and after planning a guided inquiry lesson (see Appendix A, C & E). The principal simultaneously answered the same interview questions before and after the lesson (see Appendix B & D). The researcher took ongoing field notes over the course of two weeks which included records of all meetings with the 2nd grade teacher and principal, conversations with the teacher after he or she evaluated students' work and descriptions of work samples, and documentation on the level of collaboration (see Appendix F).

Data Collection

The researcher collected qualitative data from initial interviews with the 2nd grade teacher and school principal. Creswell (2008) states open-ended questions provide opportunities for unrestrained responses on the part of the person(s) interviewed. For that reason, this study presented open-ended questions to the 2nd grade teacher and the school principal regarding collaboration. In addition to the interviews, this researcher kept ongoing field notes about daily experiences and perceptions.

Following initial interviews with the teacher (see Appendix A) and principal (see Appendix B), the researcher compared findings from both interviews. Interviews with the principal took place to gain insight, determine appropriateness, collect feedback, and insure support. The researcher then met with the 2nd grade teacher to discuss the principal's views and completed the 2nd interview together (see Appendix C). Ongoing field notes recorded interactions with the 2nd grade teacher in planning the lesson along with interactions with other staff regarding collaborative opportunities (see Appendix F).

The 2nd grade teacher and researcher planned a lesson about Mount Rushmore within a unit of study on biographies and national monuments. Together they discussed

the content, essential knowledge, skills and dispositions, goals and objectives in addition to appropriate ideas and helps, pertaining to the lesson. As planning continued, the teacher and researcher noted additional curriculum connections. Simultaneously, the researcher updated the librarian lesson plans and began tracking all library lessons after October 4, 2010, on the basis of the level of collaboration and *Standards for the 21st Century Learner in Action* (2009) using the form in Appendix F.

Following the completion of the lesson, the students shared their work samples with their peers and the researcher. The teacher evaluated the students' individual work, informing the development of a model for collaboration in Elementary School A. The teacher was not required to keep written documentation of each lesson outside of what the district requires in planning lessons of this nature, however email exchanges and conversations between the researcher and the teacher related to the lesson became part of the ongoing field notes.

Data Analysis

The researcher coded data from interview questionnaires, emails as well as field notes and identified emerging themes about collaboration, planning and implementation throughout the weeks of the study. The "spiral of looking, thinking, and action" (Creswell, 2008, p. 604) was used in this action research study by "reflecting, collecting data, trying a solution, and spiraling back to reflection" (p. 609). The researcher utilized findings to identify different solutions then reflected on those solutions to collect more data, but did not track student performance.

Plan of Action

Teachers across all grade levels, as well as teachers in specialized fields, could expect to utilize supports developed by the teacher in cooperation with the teacher librarian and input from the school principal that enable a time efficient and effective collaboration model following the completion of this action research study. Creswell (2008) suggests a formal written plan, resulting from an action research study of this type, may "engage a few individuals...or involve an entire community" (p. 609).

CHAPTER 4

RESULTS

This action research study examined the collaborative culture in Elementary

School A by interviewing two key stakeholders and developing one guided inquiry lesson

with a seasoned general education teacher to develop strategies, actions and organizers

for future collaborative experiences. This chapter overviews the existing school library

environment in which the action research was conducted and describes data relating to

each research question. The teacher librarian, identified as the researcher in this study,

conducted multiple interviews with one teacher and principal who were instrumental to

the collaborative unit. The researcher also maintained ongoing field notes for three weeks

to include the following four lists: a daily log of teacher librarian activities and

outcomes, a monthly summary of teacher librarian tasks categorized by roles of the

teacher librarian, a media associate task list, and the library schedule.

School Overview

Elementary School A serves families living in a suburban metropolitan area.

Students walk, ride, or take the bus to school daily. There is one principal in this school

with three sections per grade: Kindergarten through 6th grade, along with a Pre-School

Classroom. Additional staff includes English as a Second Language (ESL), Extended

Learning Program (ELP), choral music, band, orchestra, art, physical education, special

education, library, remedial reading and math. The teacher librarian works half time in

the library and half time as a Title 1 Math teacher, both positions are in the same school.

Various classes, programs, celebrations, clubs, meetings take place in the library

throughout the school year at all times of the day and evening.

At the start of the school year teachers scheduled their weekly library time. Since the librarian also teaches math half time each day, not all classes may schedule their library time when the librarian is scheduled in the library. As it is, most K-4th grade classes chose to meet weekly with librarian present, with the exception of one 3rd grade class. Additionally, one 6th grade class scheduled to visit with the librarian present. Teachers may also schedule alternative times, send students with a library pass, schedule a presentation or visit the library for group instruction and research as needed. An online schedule on the district staff page and a written schedule in the library, provide reference points for teachers to use when considering its use of space and resources.

Figure 1: Library Schedule 2010 – 2011

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8:55	5A	5B (Alternative time)	2A – (Alternative time)		8:55 - Preschool
9:25	5B	5A (Alternative time/collab)			
9:55				5C	
10:25	6C	3C 10:45 – 11:25		6A	3B 10:45 – 11:25
10:55	3A				
11:25				6B (Alternative time)	6B
12:35	KC		2B	KA	
1:05	1C		4B	1B	1:05 - Preschool
1:35	2C		1A		
2:05	KB	2C (Alternative time)	Early Out	4A	
2:35	2A			4C	

LIBRARIAN IS TEACHING MATH

The Media Associate worked full time in the library; this staff member was responsible for checking out and shelving books. The librarian did not directly supervise

the associate (the principal does). Through this study, the librarian began providing the

daily task list to the associate along with ongoing training on skills and duties as required.

When classes visited the library, the teacher stayed with his or her class; library time is

not considered a "special."

Figure 2: Media Center Associate Task List

Media Center Associate Task List

Tuesday Sept 14, 2010

    AM:
- Check in and shelve books before the first class arrives (10:45)
- Check in/out to teachers and students
- Set aside dirty books and those in need of repair, please do not return them to the shelves if they need attention first
- Please keep a list of things that need my attention
- Download photos for the classes that you've taken photos of the students after books are put away

    PM:
- When you books away – please note the sections (Magic School Bus, Caldecott, Biography, Mother Goose vs. Fairy Tales, authors with same last name, different first names, Mc & Mac…
- Repair and clean books (spine labels, clear labels…)
- Please double check 597's – 599's as well as Mac and Mc in F, E, B, etc…
- Check authors with same three letters on the spine – alphabetize them according to the author's first name, there is no need to ABC order books by title, but the same books or books in the same series should go together

Thank you

Some form of brief collaboration occurred daily in the library. At the start of the

year K – 3rd grade shared their literacy, science, and social studies curriculum

information with the librarian. Several times per week the librarian coordinated an activity with classroom teachers. Kindergarten and first grade library times included a short read aloud story (based on weekly classroom literature or social study themes), followed by book talks of suggested books for student check out on the theme of the read aloud, book check out, and an individual reading time. Second grade lessons included read alouds; book talks; information and research activities centered around literacy, science or social study themes; and later exploring the on line catalog. Third grade lessons included collaborative research, book talks, searching skills, monthly literacy themes, and using/creating movies for the interactive Library Map. Fourth grade lessons focused on book talks, searching, technology tips, unit studies, and the interactive map. Sixth grade lessons included information centered on teacher suggestions, unit studies, technology tips, book talks and 1-minute book passes.

All classes visited the library for 30 minutes, with the exception of the two 3rd grade classes who stay 45 minutes each. Given that time frame, large group instruction lasted 5 to 10 minutes. Ideally, short instruction, followed by an interactive lesson with half the class held students' attention best. The library has a data projector, computer, document camera and speakers to enhance lessons requiring an AV presentation.

Elementary School A became a School in Need of Assistance (SINA) for math in the fall of 2010. The librarian supported this initiative, working with several older students weekly in addition to normal duties, as requested of all staff by the principal in an effort to support struggling students. Also as part of this initiative, the library hosted 40+ students in an after school program, meeting three times per week in the library for 40 minutes to review math skills. Additionally, new math books were ordered in support

of Everyday Math (the new school-wide math curriculum). The librarian served on the SINA team to assist as needed.

Initial Interviews

The first interviews with the teacher and school principal focused on the collaborative culture and expectations in Elementary School A. Prior to planning a lesson, the researcher independently interviewed the teacher and principal. Following the interviews, the researcher took ongoing field notes on collaborative opportunities (Appendix F).

For the purpose of this action research, the lesson was only one piece of this research about how the researcher and teacher collaborated. This decision was reinforced by the principal's answer to the fifth question, that teachers rarely ask, "How did my collaboration go?" The planning for and carrying out of a collaborative lesson began as soon as permission was granted to move ahead with the study. The teacher had collaborated with the researcher before, so it was natural to begin immediately.

Second Teacher Interview

The second interview with the teacher and subsequent discussions, phone calls, and emails addressed the needs of the diverse learners in this classroom, which helped finalize details of the lesson. Second grade teachers annually provide a list of literacy themes, along with science and social studies units to the researcher, but weekly collaboration does not take place on a regular basis. Inquiry lessons are welcomed by the teachers, but require additional planning and coordination ahead of time.

During the second interview, the teacher and researcher collaboratively created a unique Mount Rushmore activity using an 8x10 copy of Mount Rushmore on which students glued or drew faces of famous people. They used biography books to gather

facts about famous people. The researcher located and presented a grade appropriate biography book list to the teacher for her to select which books best suited each student. Both the teacher and researcher planned to bring artifacts related to these books.

Collaborative Lesson

On the library day, the researcher prepared to talk about biographies and introduce how to write a fun fact about a famous person. The planned lesson included time for students to choose an artifact from the display that matched the person in their biography. The researcher and teacher planned ahead, while accounting for flexibility in the day-to-day implementation of the lesson.

As it turned out, the teacher was unable to preview the book list or bring artifacts from home, so the researcher pulled grade level appropriate biographies; featuring names of famous people the teacher suggested (Pocahontas, Louis Braille, Helen Keller, etc...). The available artifacts were put on a back section in the library when the students arrived. With the help of the researcher, students selected a book off the table, taking it to their teacher who recorded the names of the famous people for each student. As the teacher did this, those students who were able, located a fun fact and wrote it down before checking other books out. Those students needing additional assistance finished the written assignment in the classroom. The teacher took the available artifacts back to the classroom. The teacher and researcher then decided the lesson would extend through the next week, with students sharing their finished product in the library. For the purpose of this study, the field notes had been collected.

Concluding Interviews

Analysis of the answers from both initial interviews yielded the following

common themes:

1. Collaborative support improves differentiated instruction and enhances student achievement
2. Teaching staffs' personal differences in the building affect effective collaboration
3. Time to plan, reflect and assess progress is limited
4. School-wide curriculum themes and day-to-day lesson plans are not readily available for all teachers' use

Follow up questions in the concluding interviews of the 2nd grade teacher (see

Appendix D) and principal (See Appendix E) probed responses related to the above

themes allowing for further exploration and insight into the collaborative culture in

Elementary School A.

Research Question 1

Research question 1 asked what strategies for effective collaborative practices

would be useful at Elementary School A? One method the researcher used to seek input

about effective collaborative practices was to ask the 2nd grade teacher and principal

about collaboration in their interviews. Following the initial interviews this researcher

noted common themes that were pursued further in the concluding interviews and in the

field notes analysis.

The first initial interview theme this researcher identified was that collaborative

support improves differentiated instruction and enhances student achievement. Their

respective comments are shown in Table 1 and 2.

Table 1

What Does Collaboration Mean to You?

Interview Question	October 4, 2010 Teacher's Response (see Appendix A)	October 7, 2010 Principal's response (see Appendix C)
What does collaboration mean to you?	Collaboration means **two people working together** – two brains, two hearts, sharing resources, talking through the assignments and seeing it all from different perspectives.	Collaborative planning and accountability. Powerful/positive collaboration happens when teachers **go outside their role and work with others**. Successful collaborative teachers don't say, "It's not my job…"

The principal noted successful collaboration involved teachers willing to step outside their role to help students; to review what the students know ahead of time in order to differentiate appropriately; and to evaluate how the collaboration actually went. The researcher noted this quote from the 2nd grade teacher in the ongoing field notes, "This is exactly what we were talking about in the classroom, then we come down here and hear it again a different way. It's a great extension of what we've learned in the classroom."

The teacher suggested successful collaboration means sharing resources, talking through the assignments and seeing it from different perspectives, pointing out that professional support from the researcher and help with available tools is collaboration as well. Specifically, the teacher stated, "Collaboration means two people working together – two brains, two hearts, sharing resources, talking through the assignments and seeing it from different perspectives." The teacher felt it is important to make changes as needed, keeping in tune with how the students are responding to the activity. The actual lesson pointed to the need for flexibility since change occurs for various reasons. Following the collaboration lesson, the 2nd grade teacher shared how valuable it was to have another person's perspective in teaching the lesson and believes what is done together is enriched.

The second theme this researcher identified from the initial interviews was that

teaching staff's personal differences in the building affect effective collaboration. This

initial theme was pursued further in later interviews and analysis of field notes. Both the

2nd grade teacher and principal independently offered that personal differences affect

opportunities for collaboration at Elementary School A, as shown in Table 2.

Table 2

Are There Barriers to Effective Collaboration in Our School?

Interview Question	October 4, 2010 Teacher's Response (see Appendix A)	October 7, 2010 Principal's response (see Appendix C)
Are there barriers to effective collaboration in our school? If so, please describe.	**Negative feelings** some staff have, some are **leery to share**; if specials teachers try to collaborate more informally – **they will get nailed if the other teacher is not receptive to collaboration** – personality differences are a problem in our school, but once it gets set up and both people are ready for it, collaboration can happen.	Outside of time, the main barrier is that **some teachers don't want to work with other people**. When we decide to collaborate on a lesson – its planning is **based on who we are comfortable working with** – not necessarily what the students need. There are students in our school who do not receive collaborative instruction based on a people's personal preference as opposed to student need.

The teacher expressed staff have negative feelings and some are "leery to share"

because others are "not receptive to collaboration" citing personality differences. The

principal independently stated, "some teachers don't want to work with other people"

noting that their decision to collaborate is not based on student need, but on "people's

personal preference."

Research Question 2

Research question 2 asked what specific actions (e.g. scheduling and meetings) are necessary to implement effective collaborative guided inquiry lessons for 21st century learning at Elementary School A?   The third theme this researcher identified from the initial interviews was that time to plan, reflect, and assess progress is limited. Table 3 showed the response to a question related to a positive collaborative experience when asked what actions could have been done differently to improve the collaborative lesson.

Table 3

What Actions Could Have Been Done Differently?

Interview Question	October 4, 2010 Teacher's Response (see Appendix A)	October 7, 2010 Principal's response (see Appendix C)
What actions could have been done differently?	The collaboration I've been involved with have been good situations - the hardest part is the **time needed** – we need to wing it more than we should.	The lesson was done well; **more time is needed** for teachers to work together before and to reflect on how things went afterward.

Both answers show a concern for time needed before, during and after a collaborative lesson. The 2nd grade teacher in the first interview commented, "I appreciate chatting after a lesson in the MC, the few moments we have to chat about how things went and/or what we can do next time is helpful." However, ongoing field notes included one comment by another teacher after a library lesson that had gone well, regarding what she might want to do the following week, the teacher said, "I have no idea what I'm doing next week yet!"

The teacher interview and ongoing field notes specified informal planning meetings to collaborate work best. Other suggestions included, attending conferences together, sharing information and eating lunch together, meeting to plan, having a set

time for the lesson to take place, and taking time after to review how the collaboration went. Ongoing field notes show emailing and calling each other outside of school are options as well. Scheduling for this lesson took place during the regularly scheduled library time, however some students did not have enough time to check out and it became necessary for those children to return with a library pass to locate books. This works when students cannot complete check out for one reason or another.

The principal suggested in the concluding interview that everyone should ask, "How do I spend my time?" A professional development course on time management skills is an option in the district. In addition to evaluating how time is used, a method to gather pertinent information is also necessary, which leads to the last research question.

Research Question 3

Research question 3 asked what organizers may be put in place to facilitate effective collaborative practices at Elementary School A. The fourth theme this researcher identified through the initial interviews was that school-wide curriculum themes and daily lesson plans are not available for all teachers' use. Following the initial interviews this researcher noted that both the principal and teacher saw the need to develop a common curriculum plan, as shown in Table 4.

Table 4

What Ideas for Efficient Organizers Would You Suggest We Try?

Interview Question	October 4, 2010 Teacher's Response	October 7, 2010 Principal's response
What ideas for efficient organizers would you suggest we try? (graphic organizers and/or web based)	I've made a **curriculum plan** of what each grade does for science, social studies, reading and writing for second grade, but this could be updated and would be helpful to have for all the grade levels. It would be great to have you (the librarian) add ideas, links and resources for each subject and theme throughout the school year.	At a previous school I served, all the teachers used the same **lesson plan template** and placed their lessons for the week in a common place for specials teachers to review and plan with. The teachers themselves developed this form together. The Art teacher knew what each grade was studying and adjusted instruction based on the lesson plans the teachers provided. It worked great and actually grew out of a problem we were having at the time.

Currently the only daily lesson plan organizer in place for teachers to access is for the subject of math through the on line E Planner (Everyday Math On Line). Any staff person may access the information to know where a teacher is in his or her lesson plan on a given day. Through assessing the information needed for the library, several organizers were developed during the course of this study to increase effectiveness of collaborative practices in the library: a daily task sheet for the media associate, a weekly library plan, a monthly K-6 curriculum map, and a monthly librarian report.

The researcher adapted the library's weekly lesson plan to include the level of instructional support and 21st century information skills curriculum standards along with changing units of study for literature, science and social studies (grades K-3 is complete). An excerpt from this weekly lesson plan is Figure 3. The form served as the librarian's lesson plan, an ongoing plan that contained the year's literacy, social studies and science themes as provided on an annual basis.

The librarian used the key representing the Level of Support and 21st Century Information Skills Curriculum Standards in each lesson's box to document how well collaboration went in regard instructional support and curriculum standards. Each week the librarian noted the lesson and highlighted the corresponding code for the lesson (A – E codes the Instructional Support and 1 – 4 codes the Curriculum Standard). By coding each lesson, the librarian addressed the principal's concern mentioned in the initial interview that, "Teachers in our building do a pretty good job of deciding what to do next, the piece we miss is evaluating the collaboration, by asking, 'How did my collaboration go?' We assess what the kids learned, but not how they [the teachers] did in the actual collaboration." This tool began the process of evaluating each lesson in those terms.

Figure 3

Sample Library Lesson Plans

Level of Instructional Support:	21st Century Information Skills Curriculum Standards
A) Gathering information in response to a teacher request	**Standard 1:** Inquire, think critically, and gain knowledge
B) Working with students on a small-group or individual basis	**Standard 2:** Draw conclusions, make informed decisions, apply knowledge to new situations, and create new knowledge
C) Sharing a story/book(s) primarily for literary enjoyment	**Standard 3:** Share knowledge and participate ethically and productively as members of our democratic society
D) Sharing a story/book(s) related to content curriculum with input from classroom teacher(s)	**Standard 4:** Pursue personal and aesthetic growth
E) Sharing equal responsibility with the teacher for planning and instruction	

Week of	Breakthrough to Literacy Theme	2C –Monday @ 1:35	2A – Mondays @ 2:35	2B – Thursdays 1:05	Social Studies/Science
Oct 4	Lady Liberty	Liberty info LIS: A B C D E ISCS: 1 2 3 4	Liberty info LIS: A B C D E ISCS: 1 2 3 4	Liberty info LIS: A B C D E ISCS: 1 2 3 4	Landforms & Oceans
Oct 11	Mt. Rushmore	No school	No School	Making your own Mt Rushmore – intro Bio Books LIS: A B C D E ISCS: 1 2 3 4	Landforms & Oceans
Oct 18	A Wetland Home	Pull books on wetlands, put books in categories, talk about what are similar/different in wetlands, prairies, deserts – add to a poster about it LIS: A B C D E ISCS: 1 2 3 4	Pull books on wetlands, put books in categories, talk about what are similar/different in wetlands, prairies, deserts – add to a poster about it LIS: A B C D E ISCS: 1 2 3 4	Share Mt Rushmore famous people with the group LIS: A B C D E ISCS: 1 2 3 4	Landforms & Oceans

Figure 4 mapped the K – 6th grade curriculum monthly through the year. A similar version, as referred to by the 2nd grade teacher in Table 3, gathered similar information, but through information provided in the concluding interview with the

gathering information to Figure 4. Review of this information shows kindergarten

through 3rd grade clearly identifies topics of study each month, while the upper grades are

flexible due to staggered schedules.

Figure 4

K-6 Curriculum Map

Grade: Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May/ June
K: This is School	All About Me	My 5 Senses	Finding the Moon	Dinosaurs to Mammals	Fish/ Oceans	Seeds to Plants/ Iowa and Farms	Water	Mexico
1st gr: Insects	Pebbles, Sand & Silt	Pebbles, Sand & Silt Deserts	Deserts Africa	Africa Red, White & Blue	Red, White & Blue	Health	Solids, Liquids, Gas	Solids, Liquids, Gas
2nd gr: Changes	Germs & Continents	Landforms & Oceans	Native Americans	Native Americans	Balance & Motion	Japan	Japan & Plants	Air & Weather
3rd gr: Aug – Sept 12 Communities Sept/Oct 10 Cartography	Oct – Nov 14 Moon-Our Neighbors in Space	Nov – Dec 5 Titanic	Dec What's for Lunch	Jan Magnetism & Electricity	Feb King Tut	Feb 16 - Mar 12 Food Chains & Webs	March- May 9 Australia & Rainforests	May Tornadoes June My Role in Democracy

4th grade	Units vary from year to year. Start with the Prairie in September; Russia in October; Then some science units. We start the U.S. regions in December and weave them throughout the year with science units.							
5th grade	Science Our Changing Earth, Microscopes, Electrical Circuits, Models & Designs, Woodlands, Movement & Control			Social Studies Geography, Native Americans, Explorers, Colonial Life, Revolution, Building Citizenship, Westward Movement, Civil War, Politics & Democracy			Reading Biography, Jerry Spinelli, Mystery, Fantasy, Expository, Historical Fiction, National Geographic, Comprehension	
6th grade Each year varies with time constraints	Social Studies Maps and globes-6 weeks Diversity-2-3 weeks Canada-6 weeks Economics/biztown-12 wks Government-8 weeks Ancient civilizations (if time)		Science *Fall and Winter:* • Wetlands • Optics • DNA/ Human Growth *After Winter break:* • Chemistry • Food and Nutrition • Weather *End of the year:* • Astronomy			Reading World War II Fantasy Justice & Diversity Classics Immigration		Writing Personal Narratives Expository Persuasive Descriptive

Figure 5 shows a monthly report for September, 2010 identifying the tasks

performed by the librarian which goes to the principal, noting where tasks fall in relation

to the role of a teacher librarian: Information Technology, Teaching, Collaboration and

Leadership and Administration.

Figure 5

Monthly Librarian Report

September, 2010

Information Technology
- Created the MC Map for students (S Drive/CV/MC)
- Obtained 8 Playaways, will make available to 6th grade
- Added interactive movies to the MC map
- Attended September 15th *Be the Change* - Shannon Miller (Urbandale Library)

Teaching
- Weekly Information Technology, Reading with classes, book talks and orientation to the new Library with all classes K-4 and 6B
- Collaborate with teachers regarding curriculum connections with Breakthrough to Literacy, Social Studies, Science & COZY reading...

Collaboration and Leadership
- Iowa Children's Choice – total 54 students enrolled; 208 books read and reported on
- Working with PTC volunteer on display cases
- Display cases this month: Africa, India, Monarch Butterflies
- Working with PTC volunteers

Administration
- Submitted book orders, camera, hub & on line radio requests
- Ordered and worked with a volunteer to put in the shelf holders in the Yellow Tag section
- Held our first Library Advisory Meeting Sept. 27th
- Worked on emailing teachers their reports on what is checked out & trained MC Associate on how to email reports to teachers
- Daily instructions/feedback with MC Associate
- Began printing weekly overdue reports for teachers on their library day
- Top Home Room with most books circulated: 3C

Findings of this action research study centered on the three questions, which

address collaborative strategies, actions, and organizers, which lead to conclusions in

Chapter 5.

CHAPTER 5

SUMMARY

The purpose of this action research was to determine what strategies, actions, and organizers for effective 21st century collaborative guided inquiry lessons engaged learners at Elementary School A. This study found three themes. Table 5 shows the conclusions derived from the three themes of this action research study.

- Effective strategies require collaborative support that differentiates instruction for students and allows teachers to appreciate differences in teaching styles.

- Effective actions must include time to plan and time to reflect not just on how the lesson went and where to go next, but on what students actually learned.

- Effective organizers allow teachers to share their plans with each other.

Table 5

Themes, Reflections, and Conclusions

	Themes	Examples from Data	Conclusions
Strategies	Effective strategies require collaborative support that differentiates instruction for students	Collaborating teachers differentiate instruction when they work with teachers who approach instruction differently. Strategies include sharing resources, going outside one's role, and recognizing the library as an extension of the classroom.	Recognizing differences in teaching enhances the learning experience through expansion of ideas, convergence, and continuity of the curriculum
	The need for collaborative support allows teachers to appreciate differences in teaching styles		Being different means we learn from each other, thus setting an example for students.
Actions	Time is needed to plan as well as reflect on not only how the lesson went and where to go next, but particularly on what students learned.	When a lesson is complete, some sort of time efficient formative assessment is important to determine the true effectiveness of the lesson and enhance student achievement.	Evaluating what students learned is of equal importance with how well the collaboration went.
Organizers	The need to plan effectively and share those plans with each other (curricular scope and sequence for the year and daily lesson plans)	The scope and sequence for the year needs to be updated annually. There is a vehicle for sharing daily lesson plans in the Everyday Math electronic calendar, but teachers are reluctant to make their calendars public. Students move from classroom to special, to remedial rooms without coordination that could them make sense of the pieces.	Time efficient methods of collaborating, taking advantage of the time available, as well as utilizing technology to share curriculum themes will help staff coordinate lesson plans which should enhance student engagement.

The principal and teacher involved in this study supported the sharing of changing

curriculum themes to enrich the academic experience for all students in Elementary

School A across all disciplines, including the library, as well as Spanish, physical education, art, music, special education, English as a Second Language, Extended Learning Program (gifted learners), remedial reading, and math. This researcher found that some teachers working with these students presented information isolated to his or her particular discipline, as opposed to making curriculum connections. This isolation demonstrated a missed opportunity to engage students in common knowledge, vocabulary, and essential skills for learning. Working together to collaborate on curriculum themes helped school staff address the needs of students more cohesively.

In anticipation of the study, the researcher tabulated daily tasks and where these tasks fell in relation to the role of a teacher librarian in Figure 5 and the media associate in Figure 2. Looking at the four roles of a librarian in this way helped the researcher stay focused on the respective roles and what tasks could be delegated to others or eventually eliminated. As a part time librarian (part time math teacher) time is at a premium. Before asking others to consider how they spend their time, the librarian should improve his or her service by evaluating how time is spent and work to concentrate his or her efforts on the four roles of a librarian, and then delegate the rest. Once the librarian has his or her priorities in order, the librarian should become more effective in supporting or influencing student improvement. For example, Figure 2 clearly sets out expectations for the media associate regarding routines and procedures. Doing so allows the librarian to focus on information literacy, teaching, collaboration & leadership, and administration.

Knowing that "learning increases significantly when students are engaged in academic study through authentic, real-world experiences," (Metiri Group, 2003b) lessons that connect to something the student knows validates the experience. Ideally, as material is presented in the various classrooms and communicated to others in the

building, teachers reinforce what was introduced from various perspectives. This helps students make sense of what they may have partially heard in their classroom and visa versa. The Curriculum map of the K-6 curriculum (Figure 4) is an organizer developed through this study as a collaborative tool in an effort to engage learners.

In Elementary School A, the principal cited personal differences as one barrier to collaboration and believes teachers are most successful when they behave professionally despite their differences in an effort to diversify instruction and improve student achievement. The 2nd grade teacher independently stated that instruction is stronger and students benefit and instruction is strengthened when collaborating teachers in Elementary School A accept each other's differences.

Celebrating the differences helps professionals set an example for the students served. For example, the teacher noted the librarian's Information Technology (IT) skills helped this teacher improve his or her IT skills. In previous years the teacher had students draw one famous person of their choice on the side of Mount Rushmore. Through this collaborative process the idea of reproducing an actual photo off the Internet for students to glue a small drawing of their famous person came about. In so doing, students had more time to read, write, and share about each famous person. Conversely, the knowledge the teacher has regarding developmental learning with his or her 2nd graders helped the librarian diversify the instruction. For example, knowing the attention span and individual learning differences allowed the teacher to adjust the lesson to meet the individual needs by approving book choices and helping students write short summaries. However, in addition to looking beyond differences, other factors also inhibit collaboration as well.

Effective collaborative guided inquiry lessons are affected by the availability of the librarian. In preparation for this study, the librarian observed that the media associate frequently asked for help, advice, and assistance to complete tasks. Thus, the librarian began the year with a new time management system for the media associate, which provided needed time for collaboration on the part of the librarian. The Media Center Associate Task Sheet (Figure 2), along with a written reference guide on the circulation desk gives the librarian more time with teachers.

Another way to address the barrier of differences is a concept the principal mentioned in the Initial Interview, that effective collaboration takes place when teachers "go outside their role and work with others" (Table 1). This means taking someone else's duty, helping students before and after school, attending after school functions, not in an effort to be noticed, but to be a part of the learning community in a diverse way that helps people see the librarian from a different perspective.

Time management on the part of the librarian was evaluated and found beneficial on multiple levels: Daily Media Center Associate needs; daily lesson plans with standards and collaboration levels; monthly K-6 curriculum map; and monthly librarian reports to the principal. Addressing time management issues effectively allowed for more flexibility in the schedule, more time to build relationships while becoming a more active participant in the learning community.

Conclusions

Working within the time constraints available, the teacher and librarian found time to meet briefly and discuss the lesson after school, over lunch and by phone and email. These discussions took place both before and after presenting the lesson. Brief meetings and communications appear to be best practice in Elementary School A, as opposed to long forms, extensive meetings, and formal assessments. Interviews, ongoing field notes, online lesson plans, conversations, emails, observations, formative assessments, and reflections make collaboration time efficient and meaningful in Elementary School A.

In conclusion, it appears that developing ongoing, meaningful, professional relationships, working to eliminate unnecessary tasks, while making the most of available time and resources could improve the collaborative climate in Elementary School A. Findings from this study relate solely to collaboration between the general education teachers and the librarian. However, the principal has expressed interest in sharing these findings with the staff at large in an effort to move toward curriculum collaboration in an attempt to create common experiences, vocabulary, and knowledge for students in Elementary School A.

In the same manner, future studies could investigate strategies, actions and organizers useful for all teachers, in an effort to develop a more cohesive approach to improve student engagement.

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APPENDIX A

TEACHER INTERVIEW #1

Date: _____

Describe a positive collaborative activity you have observed or experienced

_____

_____

What pre-planning strategies were involved or could have helped?

_____

_____

What follow-up took place?

_____

_____

What actions could have been done differently?

_____

_____

Describe barriers to collaboration present in our school:

_____

What ideas for efficient organizers would you suggest we try (graphic organizers and/or web based):

_____

What topics and/or units of study are you most interested in collaborating together on:

_____

Additional thoughts/comments:

_____

APPENDIX B

PRINCIPAL INTERVIEW #1

Date: _____

Describe a positive collaborative activity that you've observed or experienced in any school you've served:

_____

_____

What actions could be done differently to improve the lesson described?

_____

_____

What preplanning strategies would you like to see teachers consider ahead of time?

_____

_____

What follow-up would you expect teachers to do?

_____

_____

Are there barriers to effective collaboration in our school, if so, please describe

_____

_____

What ideas for efficient organizers would you suggest (paper and/or web based):

_____

Additional thoughts/comments:

_____

_____

APPENDIX C

TEACHER INTERVIEW #2

Date: _____

Discuss potential collaborative units of study to present in the fall with the teacher librarian

_____

_____

What units might involve shared responsibility with the teacher and teacher librarian

_____

_____

Prioritize suggested units in order of importance

_____

_____

Describe your ideas for time efficient organizers, actions and strategies related to this lesson

_____

_____

Compare

Benefits of collaboration with teacher librarian	Barriers of collaboration with teacher librarian

APPENDIX D

PRINCIPAL INTERVIEW #2

Date: _____

Since we last talked, what new thoughts have you had regarding collaboration in our school?

_____

_____

What strategies should teachers employ to encourage collaboration, student engagement and learning?

_____

_____

How could staff address the barrier to effective collaboration on account of personal differences?

_____

_____

Specifically, in what ways could staff improve their time management skills?

_____

_____

What additional thoughts and ideas do you have regarding how to share daily lesson plans and annual curriculum themes to maximize student engagement?

_____

_____

Additional thoughts/comments:

_____

_____

APPENDIX E

TEACHER INTERVIEW #3

Date: _____

Since we began working on this lesson, what new thoughts have you had regarding collaboration in our school?

_____

_____

What strategies should teachers employ to encourage collaboration, student engagement and learning?

_____

_____

How could staff address the barrier to effective collaboration on account of personal differences?

_____

_____

Specifically, in what ways could staff improve their time management skills?

_____

_____

What additional thoughts and ideas do you have regarding how to share daily lesson plans and annual curriculum themes to maximize student engagement?

_____

_____

Additional thoughts/comments:

_____

_____

APPENDIX F

Researcher Field Notes

DATE	Meeting or Event Description	Reflection