Flexible Scheduling: Implementing an Innovation

[Joy McGregor](), Senior Lecturer and Course Coordinator of Master of Education (Teacher Librarianship), School of Information Studies, Charles Sturt University, Wagga Wagga, NSW, Australia

Teachers, school library media specialists (SLMSs), and principals in six elementary schools were interviewed to explore the ways in which schools have successfully implemented flexible scheduling in their libraries. Overall findings and conclusions of the study are linked with Rogers' diffusion of innovation theory and compared with Shannon's 1996 study of flexible scheduling implementation in two Library Power schools. The voices of the principals, teachers, and SLMSs are heard. Patterns and themes are discussed in terms of assertions that can be made about commonalities among the approaches taken by the six schools. The individual schools' stories are provided in the appendix, "Stories of Successful Implementation of Flexible Scheduling," demonstrating what worked in each of the different situations. While generalization

The term "flexible scheduling," as it pertains to school library media centers, entered the vocabulary of school library media specialists (SLMSs) in the late '80s and early '90s. It had various interpretations then, as it does today. "Flexible scheduling" and "flexible access" have sometimes been interchangeably used. The terms have both been used to mean providing open access to the library media center throughout the day, rather than only during a scheduled "library time." The terms have also been used to mean eliminating a rigid schedule of regular library times for each class, allowing teachers to schedule their classes into the library as needed for appropriate lengths of time to suit the learning activity that was planned. For the purpose of this study, flexible scheduling was broadly considered: a scheduling arrangement that allows for variation in library use, rather than having each class scheduled into the library for a regular, fixed period. This definition does not include any programmatic features or describe how flexibility occurs.

In secondary schools, the school library and its resources are typically considered integral to the curriculum of the school. Students and classes tend to visit libraries in secondary schools on a point-of-need basis, when learning tasks dictate access to information, and the library itself is viewed as an extension of the classroom. The question of whether scheduling should be flexible or fixed tends to arise less frequently at the secondary level, especially in high schools. At the elementary school level, however, the school library is frequently viewed in a more isolated

manner--a place that houses books and materials that must be borrowed and used according to a schedule. Why this view exists is beyond the scope of this research, but the existence of rigid or fixed schedules in school libraries militates against the use of the library when needed for learning, whether on a collaboratively planned basis or in recognition of the "teachable moment."

Many SLMSs recognize the educational value of providing access to information "just in time," when learners need to investigate further, rather than "just in case," when learners are provided with lessons presumed to have a future value. SLMSs struggle with belief systems that do not realize the role of SLMSs in integrating information literacy into curriculum areas. The long established routines of weekly visits to the library for a story, a lesson, or a borrowing session are difficult to break away from, with the recognition of other possible formats not necessarily understood or valued. SLMSs deplore the lack of time and opportunity to provide appropriate support for learning at the point of need because the day is occupied with teaching "library lessons" in isolation to provide planning time for teachers. How were those who work in schools with flexible-scheduled libraries able to implement this practice?

The current study, funded in part by the AASL/Highsmith Research Grant and the IASL Takeshi Murofishi Research Award, investigated how educators in six elementary schools were able to successfully implement flexible scheduling. It explored the various ways implementation occurred, the factors that emerged as relevant in each situation, and the attitudes held by those responsible for implementation.

Review of literature

The conviction that flexible scheduling is a sound educational practice stems from the understanding gained through educational research into effective learning. Applications of brain research to the field of educational practice strongly suggest that because the brain learns by recognizing or finding patterns, it is important for learning opportunities to allow the learner to fit the new ideas into already existing knowledge (Caine and Caine 1994). Constructivism as a learning theory contends that individuals construct their own understanding, linking new knowledge and experiences with prior knowledge to expand previously developed mental models. Studies by numerous researchers on learning language, reading, spelling, and writing skills demonstrate that learning these skills in context is more effective than learning in isolation (Weaver 1996). Beeson's (1981) research of intellectual skills in isolation or in context showed that more meaningful learning occurred when the skills were taught in an anchoring context. Most teachers are aware from experience that a *teachable moment* is called that because the moment does not last--

ended, thereby allowing for choice, personal interest, and the expression of personal opinions, while encouraging thought and decision making about the world and yourself" (45). Students then participated in a project based on that definition. They "began to take ownership of their learning and expressed excitement about learning something new, about teaching themselves, about 'discovering things in the library, discovering books and stuff that we never had a chance to discover before'" (49). While this experience occurred with older students, rather than at an elementary school level, the concepts presented provide a window on effective learning and could be applied with younger age groups.

Stripling (2003) points out that "inquiry is not a collection of process skills and strategies; it is a relationship between thinking skills and content. Learners are, therefore, engaged in scientific inquiry, historical inquiry, social inquiry, literary inquiry, aesthetic inquiry, and other types of inquiry" (6). If students are conducting all these kinds of inquiry throughout their day, it can be assumed that at any level, students learning through inquiry need ready access to information-- waiting a week until the class's regularly scheduled library period is inappropriate and counterproductive.

Flexible scheduling

Inquiry learning cannot happen in a vacuum. Access to information is essential, and the school library media center is a logical source for information, access to information, and guidance. Elementary SLMSs who see the media center as an extension of the classroom have recognized the worth of providing access to library materials when needed. The traditional model provided *library time* on a fixed basis, often weekly, and in this model teachers often saw the library as a drop-off spot, where children can be sent to be read to or to be taught library skills while the teacher spends his or her time on something of greater value--curriculum planning. The potential of the SLMS and the media center is not realized when teachers and administrators view them merely as a solution to the problem of providing planning time to teachers. As the drive to promote inquiry learning increases, SLMSs advocate for recognition of their role in effecting this type of learning. *Information Power* provides learning and teaching principles in chapter 4, one of which states "The library media program fosters individual and collaborative inquiry" (AASL and AECT 1998, 58, 69). Goals to support this principle lead SLMSs to provide intellectual access, model appropriate inquiry behavior, collaborate with teachers, promote the use of information and technology, and use information literacy standards to guide student learning (69-

much collaborative planning occurred in schools with mixed or flexibly scheduled libraries than in schools with fixed schedules. One must be careful, though, not to attribute causality to the scheduling plan, as no indication of the reason for the relationship was discovered in either Haycock's or Donham van Deusen and Tallman's work. Haycock (1998) suggested that flexible scheduling might be "more indicative of leadership practices and collaborative activities than having a causal relationship with consultative tasks" (23). Perhaps flexible scheduling happens as a result of collaboration, not the other way around. In a survey by McCracken (2001), however, elementary SLMSs identified the lack of a flexible schedule as the fourth most common barrier to being able to implement the roles advocated by *Information Power* (AASL and AECT 1998).

Because a relationship between flexible scheduling and collaborative planning and teaching has been identified, these findings may provide support for those who wish to implement flexible scheduling, believing that it will provide a greater opportunity for collaborative planning and effective support of inquiry learning. Little is known, however, about how to effectively implement flexible scheduling. Donham van Deusen (1995) suggested the following conditions are necessary for successful implementation:

- An information skills curriculum matched with the content area curriculum
- Flexible access to the library media center
- Team planning
- Principal expectations for collaboration with teachers
- A commitment to resource-based learning (17-18)

Two other factors that might enhance flexible scheduling implementation, but that were not studied in any depth by Donham van Deusen (1995) were adequate support staff and an assessment plan for the school library media center (18). Schools in nineteen communities across the United States participated in the Library Power project, funded by the DeWitt-Wallace Reader's Digest Fund and designed to improve learning and teaching in schools through improvement of school libraries and school library programs (Wheelock 1999). The evaluation of the project, which required flexible scheduling in school library media centers, showed higher levels of support staff in schools with completely flexible schedules. This higher level was "necessary for a library to be responsive to multiple and spontaneous demands for service" (Zweizig 1999, 20).

The evaluation of the Library Power program used case studies, questionnaires, and extensive documentation of practice. It showed that flexible scheduling was not necessarily embraced or understood by teachers. "For many . . . teachers, experience with the flexible schedule was required for them to have some sense of the benefits it could bring their teaching" (Zweizig 1999, 20). The evaluators noted, though, that "the majority of teachers report that their students are using the library more (65 percent), are using it more on their own initiative (60 percent), and have a more positive attitude toward using the library (72 percent)" (Wheelock 1999, 11). The assumption is that flexible scheduling supported that change, but again, the cause is likely to be multiple factors that were part of the Library Power project, not simply a scheduling change.

Shannon (1996) investigated in depth the development of flexible scheduling in two Library Power schools in Kentucky. After their first year of flexible scheduling, she identified challenges that had to be met by these schools in terms of communication, public relations, support,

resources, professional development, school climate, and new roles. One school had moved to a fully flexible schedule and the second had partially implemented flexible scheduling by the end of the first year. Because of the Library Power studies something is known about implementation of flexible scheduling in situations where significant monies are provided to create positive educational change. Most schools, however, do not receive extra funding contingent on implementing flexible scheduling. Is implementation different in schools where no mandate related to funding exists? How and why does implementation of flexible scheduling occur? What makes this innovation acceptable to those involved?

Innovation and change

Everett Rogers developed a diffusion of innovation model in the 1960s that explains variable rates of acceptance of technology innovation. His description of five characteristics of innovation (2003), however, do not apply solely to technological innovation and are of interest when considering what leads people to accept any innovation.

1. *"Relative advantage* is the degree to which an innovation is perceived as better than the idea it supersedes" (15). When applying this concept to introducing flexible scheduling, one must wonder to what extent flexible scheduling works better than fixed scheduling. What does "better" mean in this situation?
2. "*Compatibility* is the degree to which an innovation is perceived as being consistent with the existing values, past experiences, and needs of potential adopters" (15). Do teachers and principals consider flexible scheduling compatible with other programs in the school? Does it promote the values and mission of the school and the educators?
3. "*Complexity* is the degree to which an innovation is perceived as difficult to understand and use" (16). If teachers find it difficult to use or for their students to use the library in a flexibly scheduled situation, they will be less likely to accept the innovation.
4. "*Trialability* is the degree to which an innovation may be experimented with on a limited basis" (16). Can the new policy of flexible scheduling be accepted gradually or tried out on a limited basis?
5. *"Observability* is the degree to which the results of an innovation are visible to others" (16). Do the teachers and SLMSs share the positive outcomes of flexible scheduling with administrators and other teachers and beyond the school to others who might be curious?

The extent to which these characteristics enrich the understanding of implementation at the study sites will be explored along with other aspects of the implementation.

The change process is identified by three commonly accepted phases, described by Fullan (1991) as initiation, implementation, and continuation. Initiation is the period when "someone or some group, for whatever reasons, initiates or promotes a certain program or direction of change" (48).

In spite of the potential positive outcomes of flexible scheduling, many elementary SLMSs struggle with how to put it in place in their schools. Some school library media centers, however, do operate effectively on a flexible basis. The purpose of this study was to explore the ways in which schools have successfully implemented flexible scheduling in their libraries. What are the factors that impact that success? The study is based on two assumptions, drawn from the literature and from experience: (1) flexible scheduling is desirable, and (2) the outcomes of flexible scheduling are worthwhile.

Selection of schools

School library leaders--educators, district coordinators, and AASL leaders--were asked to identify elementary schools where flexible scheduling was in place and appeared to be effectively operating. SLMSs were also invited to nominate themselves as research participants if they believed that implementation had been successful in their schools. Several criteria were applied to selection: schools must not have received external funding that was dependent on flexible scheduling being in place (such as in Library Power schools [Zwiezig 1999]), flexible scheduling must have been in place for at least two years, and the current SLMS must have been

School B Public	K-6	Mixed; over half low to middle	n/a	22	1.0	0
School C Private	PreK-8 (data collected regarding PreK-5 only)	Gifted students	310	17	1.0	0
School D Public	K-5	Low to middle	220	10	0.5	5
School E Public	K-4	Middle to upper; middle	600	26	1.0	5
School F Public	K-6	Mixed	700	29	1.0	0

instrumental in promoting flexible scheduling within their school districts and were familiar with a wide range of circumstances. The Delphi study identified the following themes:

- Support for flexible scheduling
- Necessity and effect of preexisting factors
- Importance of teachers' and SLMSs' understandings of the concept and the advantages gained from those understandings
- Ongoing needs during implementation
- Barriers to implementation
- Importance of variables such as school size, clerical help, and teaching philosophies (McGregor 2002, 76)

These themes provided the framework for exploratory questions in the semistructured interviews of SLMSs, principals, and teachers.

Findings

Findings will be discussed first as they relate to the three types of interviewees, providing the opportunity for each group's voice to be heard. Then similarities among the sites will be identified in the form of assertions that can be made through interpretation of the data, based on overall patterns and themes. Third, differences and variations will be discussed and compared to the Library Power schools in the Shannon study (1996). Finally, Rogers's diffusion of innovation model will be applied to the innovation of flexible scheduling in these schools.

The principals' voices

Detailed findings related to principals were published in an early article (McGregor 2002). These findings were categorized into findings related to what principals said and what was said about the role principals play in implementing flexible scheduling. Briefly, principals perceived flexible scheduling as a mechanism for providing "

They're really using the library for what it's for, it gives the real-life type of skills, 'cause that's how libraries are in general, you go in and use it yourself whenever you want to and need to. It gives them reason to learn to use the library when they want to, and that's what libraries are for.--fourth-grade teacher

And I think it also encourages the children to use the library more. At other schools I've been at, the library just isn't on anyone's mind. But I think in ours the library is very central. Not only is it physically central in the building, but I think it's central in kids' minds.--first- and second-grade teacher

I said, "Go on! Some of you can go up and come back then in fifteen minutes," and they did. And the librarian said, "They were so excited!" But I don't think I would have been able to capitalize on their excitement if I had to say, "Just hold on to that idea for a few days, and then we'll talk about it."--first- and second-grade teacher

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This SLMS also stated that the teachers were at different stages in their learning, meaning that collaboration with different teachers developed in different ways depending on the experience they had. Another described how she modeled teaching of research skills by teaching the students in a particular area of research with one class, then sharing the teaching the next year, and turning over much of the teaching the third year. Another one explained that as a school gets larger, it is virtually impossible to do all the information literacy and research teaching and that one spends more time working with the new teachers.

SLMSs provided advice to those hoping to implement flexible scheduling in their schools. This advice stemmed from their individual experiences and included:

- *Start with someone you deeply trust, who likes you, who is willing to try an experiment. Don't try the whole school.*

already happening or that someone wanted to make happen, rather than an end in itself. Flexible scheduling did not cause the programmatic feature, although the introduction or expansion of that feature and flexible scheduling might have concurrently occurred. This supports Haycock's (1998) suggestion that the existence of flexible scheduling may say more about leadership practices and collaborative ideas than it does about why consultation occurs. In all cases in the current study, flexible scheduling provided a means for consultation between teachers and SLMSs. It did not make that consultation happen. The fact that flexible scheduling existed could be attributed to the leadership of various people in the schools and to the acceptance of the idea of collaboration by many stakeholders.

Acceptance of flexible scheduling might be easier in a school in which the educational initiative that drives it is already occurring. This was the case in at least one school in which project-based learning was already happening and another in which strong reading initiatives were in place. The existing culture of the school is likely to have an impact on acceptance and implementation.

Assertion 2. The principal's support was critical

SLMSs invariably identified principals' support as a vital element in their success. The support was often the result of trust that principals held for their SLMSs and the education provided to them by district coordinators and SLMSs. Some principals visited other schools to view flexible scheduling in practice and others read articles or attended meetings where the concept was introduced. Most of them were unfamiliar with flexible scheduling prior to the suggestion by the SLMS, but when they understood the potential for educational value, they were easily convinced to try it. Support took the form of cheerleading, endorsing, mandating, enabling, and advocating.

Assertion 3. When the schools devised acceptable alternatives to providing teacher planning time,the stress of implementation was less

All types of participants identified loss of teacher planning time, formerly provided by SLMSs, as an obstacle to teacher satisfaction in the beginning. Typically, some teacher planning time had been provided through the existence of a fixed schedule where teachers dropped their classes off in the library. In some cases, alternatives were created to provide the same amount of planning time in a different way. Where this happened, teachers were less reluctant to try the new initiative. Some principals realized at the beginning that the hurdle of planning time needed to be addressed before attempting to introduce flexible scheduling. They saw this problem as theirs to solve. Teachers who had been in the school when implementation occurred identified the planning time issue as a concern at the beginning, but teachers who arrived at the school after flexible scheduling was in place accepted the status quo as they found it. All interviewed teachers had adapted to the situation over time and were no longer concerned about the issue. Details of the different ways in which planning time was provided can be found in the appendix.

Assertion 4. Personal qualities of the SLMS appeared to be very important to successful implementation

In all cases, the principals praised their SLMSs highly and suggested many characteristics that made their efforts successful. The implication was that the following qualities applied to far more than implementing flexible scheduling, but that question was not asked. Flexibility, energy,

In most cases, teachers did not welcome the new initiative with open arms. Some were excited about the possibilities, especially after planning time issues were dealt with, but others were unsure of how to work with flexible scheduling. They were hesitant to change what they thought had worked well in the past. Some of the SLMSs were tempted to abandon the idea after a short time because of resistance from teachers, but all persisted. They emphasized a need to outwait the seeming indifference or resistance and look for small successes on which to build. A feeling of success often took years, not just months. While they did not name patience as a virtue, it certainly seemed to be something most of them could have mentioned.

Assertion 11. Implementation is never truly complete

Fullan's (1991) description of change stages suggests that continuation or institutionalization happens once the new initiative has become the way things are done. Fullan describes the change process, however, as being very complex, and one of those complexities appears in this instance. In each of these schools, one could argue that flexible scheduling had become the way of doing things. That does not mean, however, that the implementation phase was completed. Even though flexible scheduling had been introduced in these schools a number of years ago (one of them twenty-one years at the time of the first interview), the task of selling the initiative never ends. New teachers, new principals, and new district administrators often mean training or convincing new people. Even in schools where everyone was delighted by the way in which the library supports learning, the possibilities of additional classes, funding cuts, or less visionary leadership raised the specter of SLMSs being required to cover planning time some day in the

How much does a definition that is common across situations matter? In the schools involved in this study, the definitions expressed by teachers, SLMSs, and principals had common elements, but in each school the way in which the schedule in the library made a difference to what was happening in the school was a little different. In all schools, it was possible to discuss the impact of a schedule without necessarily having common terminology. The fact that, in one school, the SLMS and principal talked about flexible scheduling and the teachers called it *the open library concept* did not seem to matter at all. They had a common view of what happened in that library regardless of terminology. The definitions and manifestations of *flexible scheduling* across the six schools varied, but within each school the understanding was relatively common among those interviewed. That common understanding meant that the expectations within the school were generally clear and shared. This common understanding, however, had grown from experience, and did not exist in the beginning in any of the cases. The shared understanding had grown and changed over time.

Because the schools in the Shannon study (1996) were part of the Library Power program, their definition and understanding of flexible scheduling after one year was one that they had inherited as part of the program and learned through further professional development. And because the school district as a whole participated in the Library Power initiative, there was district support and professional development provided. SLMSs met regularly to discuss what was happening in their schools and develop further plans and ideas. They made joint presentations to their schools, which probably had the effect of maintaining a relatively common and shared interpretation of flexible scheduling across the district. Educators in Library Power schools began with a more unified understanding of what flexible scheduling meant than did those in the six schools in the current study, but after only a year the Library Power schools already were somewhat dissimilar in their interpretation and implementation of flexible scheduling. It would be interesting to know whether the definition and manifestation of flexible scheduling in the Library Power schools has evolved ten years later into something that is unique to each school, as occurred in the schools in the current study.

Support staff

Professional literature strongly supports the need for adequate support staff to enable SLMSs to do the collaborative planning and teaching that flexible scheduling should support (e.g., Donham van Deusen 1995; AASL and AECT 1998). The instructional supervisor from the district in the Shannon (1996) study wrote a successful grant proposal to provide full-time clerical help in the Library Power schools (161). In the current study, there was wide variation in the amount of support staff time available. These ranged from no paid support staff in Ferndale, the largest school, to two other staff members working in the Castlegate library, one of the smallest schools. Clearly, having other people working in the library made a difference, but each SLMS was able to function on a flexible schedule regardless of whether there was someone else working in the library. These SLMSs seemed to have the same shortage of time to complete their work that anecdotal evidence suggests most SLMSs deal with. Even in Castlegate School, which had the highest number of support staff hours, the SLMS did her selection of materials at home in the evenings. In some cases, teachers identified a need for further support staff or suggested that the reason flexible scheduling works well in the school is because there are other people available to manage the daily operations of the library. In Ferndale, where no support staff existed, student volunteers were used wherever possible to carry out many duties. The SLMS seemed resigned to the lack of support staff, although she did recognize that she could provide better access if she

had clerical help. While this report is not suggesting that support staff are not valuable and important, clearly, none of these SLMSs used a short

(e.g., science lab, Choices program, IDEAS program). For the two schools in the Shannon study, alternative planning times were established in one school but not the other.

The impetus for introducing flexible scheduling was different in the Library Power schools and the schools in the current study. Flexible scheduling was mandated in the two Library Power schools, as was collaboration between teachers and the SLMS. The effect must have been both positive and negative--there must have been some resentment by some teachers who did not understand how this method of using the library could be an improvement over the status quo, but the experience of seeing positive learning results from their collaborations may have convinced some of these teachers in the end. In the current study, there was no such external impetus, and in many cases, the teachers could choose the way in which they would take advantage of the innovation, if at all. In some cases, principals made it clear that teachers were expected to cooperate with this new way of scheduling, but in other cases, principals provided support merely by showing approval. In spite of the lack of an external force in most cases, flexible scheduling did come to be accepted as a preferred mode by most teachers, possibly because the curriculum initiative that flexible scheduling was designed to facilitate was typically already in place to some extent when flexible scheduling was introduced. The innovation just made sense, although usually it was not immediately appreciated.

Rogers's diffusion of innovation model applied

How does flexible scheduling as an innovation in these six schools relate to the elements of Rogers' (2003) diffusion of innovation model? The model considers the likelihood of an innovation catching on in light of the five elements previously described.

Relative advantage means that the idea must be seen as an improvement. In these schools, most interviewees believed that in terms of promoting student learning, flexible scheduling (which in most cases was mixed with fixed scheduling) was better than an entirely fixed schedule. If an SLMS introduced the initiative but the decision was reversed before the relative advantages could be demonstrated, *relative advantage* would not be realized.

The element of *compatibility* is concerned with how well the innovation fits with the "existing values, past experiences, and needs" (15). In these cases, the innovation was highly compatible with learning initiatives such as curriculum integration and literacy and reading initiatives. It was less compatible initially with accepted experience of how teacher planning time is traditionally provided, and until benefits were demonstrated, with perceived needs. Only with appropriate changes that replaced what past experience had suggested was necessary was the innovation accepted broadly.

Complexity involves the degree of difficulty inherent in an innovation. Some teachers were concerned with how difficult it was to provide adequate book exchange time for students in a very busy, flexibly scheduled library (but without completely flexible access). Others believed that it was too difficult to establish good habits or provide good literature-based experiences for small children under a completely flexible schedule, which meant that in most schools, the younger children at least had a regularly scheduled portion of time each week. Other difficulties could be a busy but understaffed library, where lack of service meant that using the library became too difficult. While this problem did not appear to exist in these schools, a few interviewees worried about the possibility.

Trialability means that some experimentation should be possible. Some schools did introduce flexible scheduling gradually, and others tried a completely flexible schedule before introducing an element of fixedness back into it, meaning that there are ways in which flexible scheduling can be tried in order to find the best solution for the particular school.

Observability allows others to see the effects of an innovation. This element was demonstrated by principals and SLMSs who visited other schools who could demonstrate successful flexible scheduling. Principals were also able to observe vicariously by reading about flexible scheduling in articles provided by SLMSs. Some SLMSs advised others to build on small successes and share them with others to make positive outcomes observable.

Conclusions and implications

Some conclusions can be drawn from this study, but it is impossible to generalize from them. Implications can be considered, however. One conclusion is that in these schools, flexible scheduling was merely a tool that facilitated other programmatic features. No one implemented flexible scheduling and then tried to figure out what to do with it. SLMSs did not separate flexible scheduling from the educational initiative it was designed to support. Therefore, it is likely to be important to answer the "why" question before the "how" question. There must be a reason to use a flexible schedule, and that reason should relate to student learning. SLMSs hoping to introduce the concept will need to sell the program, not the schedule. As one SLMS said, "Sell in terms of what they stand to gain--you've got something they need."

SLMSs interested in implementing flexible scheduling should be aware that they cannot expect to begin with a shared understanding or appreciation of what flexible scheduling can mean to their school. They should consider what the common understanding is of the place the library plays in student learning and build upon that. If there has been little or no previous connection with curriculum, then the place to start is in involvement with learning. The understanding of what flexible scheduling can offer and how it can operate will develop, mature, and change over time. Even the original conceptual understanding of the SLMS might change as the situation is adapted to the participants' needs. In one case, the SLMS's title was being changed to include "curriculum coordinator," which reflects a much broader curriculum role than she had ever envisioned when she first began to think about how the library could be most effectively scheduled and used.

Another conclusion is that constant vigilance is necessary if the implementation is to become institutionalized. This means initial education of all concerned, with special attention to teaching teachers how to take advantage of flexible scheduling. It means ongoing education of teachers, principals, and upper administration. It requires attention to whether students at any grade levels

Appendix. Stories of Successful Implementation of Flexible Scheduling

Each implementation of flexible scheduling in the current study followed a different path, had different circumstances, and ended up in a different place. Each school had unique characteristics that may have affected implementation of flexible scheduling. Each of their stories contains important truths that could be useful to someone interested in promoting the concept of flexible scheduling, and considering the differences is just as important as examining patterns of consistency. Lincoln and Guba (1985) in their work *Naturalistic Inquiry* describe the extent to which a researcher, or inquirer, is responsible for ensuring that transfer is possible:

> An inquirer cannot know all the contexts to which someone may wish to transfer working hypotheses; one cannot reasonably expect him or her to indicate the range of contexts to which there might be some transferability. But it is entirely reasonable to expect an

What is meant by "flexible scheduling" in this school?

Teacher participants from A0.00R8SN:

Brenda has. Initially this period of fixed time was forty or forty-five minutes, but has diminished over the years to fifteen minutes.

How is teacher planning time provided in the school?

Teachers plan during the times when students go to music, computer lab, science lab, art, and PE. The principal recognized the fact that when flexible scheduling was implemented, had she not been able to replace the planning time previously provided by the SLMS with time in the science lab, the transition might not have been as easy.

What programmatic feature emerged as key?

The active reading programs, including Accelerated Reader, seemed to drive the acceptance of, and need for, flexible scheduling.

School C. Castlegate (Private)

School characteristics and context

Castlegate School was a small school, with a population of 310 students in Grades PreK to 8. Data collected represent only up to grade 5 in this school, because grades 6 to 8 are considered middle school. Flexible scheduling had been introduced when Corrine, the current SLMS, became librarian, almost twenty years prior to the first interview. The principal interviewed for the study had been in the school for a year prior to the interview and was highly supportive of the concept of flexible scheduling because it supported his constructivist views. A new principal had arrived when the second interview of the SLMS took place, and this principal indicated her support by participating in the library program wherever possible, e.g., reading to children. Corrine believed that this principal's focus on curriculum mapping would enable her to involve some teachers who tended to use the library less with their classes. This school's population consisted of gifted students, primarily from upper socioeconomic levels. The school employed one full-time SLMS (who was interviewed), one full-time assistant librarian, and one part-time cataloguer. Teachers tended to call all these people "librarians." A volunteer helped in the library twice a week. The school used no formal reading incentive program but the library media center provided a great deal of support for reading through locally developed programs.

What is meant by "flexible scheduling" in this school?

Students come to the library whenever they need to. Most students pass by or through the library on their way to and from the classroom and they use it frequently at those times. Because of the close proximity to many classrooms, teachers also send students to the library whenever they need information. Pre-kindergarten and kindergarten have a fixed schedule. They are not as close to the library but as they learn their way around the building they are likely to come on their own or with an aide during other times. Each elementary grade except third and fifth (at the time of the second interview with Corrine) has a fixed time each week during which they come to the library, some just for book exchange, some for a story time and book sharing, some for research. The principal described flexible scheduling as not locking in a schedule and adjusting to need. He also described multiple uses going on at once, such as small groups, getting assistance from someone, or working with the technology. Teachers described flexible scheduling as the ability

to send or take students to the library at the point of need, in groups or alone, without having to check a schedule or determine availability. Corrine meets with teachers regularly to plan curriculum and share ideas.

What does a typical day in this library look like?

The library is open any time the school is open, because it is located in an open area of the school, with no doors closing it off. Every day is different. Students exchange books or access

School characteristics and context

Delaney School's population of 220 students from K-5 represents a low to middle socioeconomic level. Flexible scheduling was introduced within the school district almost ten years prior to the first interview, and in this particular school eight years prior, at the time this SLMS (Diana) moved to this school. The principal who was interviewed had moved to this school two years before the interview took place and was highly supportive of flexible scheduling. This principal had worked with Diana previously as a teacher and was familiar with the things that could happen in an effective school library media center. There had been several other principals throughout the years since flexible scheduling had been introduced, all of whom were supportive. The school has a Chapter 1 reading program. A new computer lab was created next to the library which demanded a lot of Diana's time. She works part-time and has a half-time aide. Three volunteers work ten hours a week. The library is kept open all week due to the staggered times that the two staff members and the volunteers work.

What is meant by "flexible scheduling" in this school?

Diana defined flexible scheduling in terms of what happens in terms of teaching and learning. She stated that "we have the schedule meet the need, not the teaching meet the schedule." Collaborative planning and teaching are important elements, with teachers describing working as a team and meeting objectives together. No classes have fixed schedules and children check out books as needed, although one teacher wistfully wished for more access to a very overworked part-time media specialist who tries her hardest to meet children's needs. This teacher believed that a fixed schedule for the younger children would be preferable but was impossible in these circumstances.

What does a typical day in this library look like?

Students check out materials as needed throughout the day, often coming individually with their teachers' permission, while at the same time Diana is teaching a class or working with a small group. Diana spends about two thirds of her day teaching and the other third planning with teachers, preparing for future classes, ordering, locating resources, developing units. Occasionally students might use the library to take a missed test. Teachers might bring whole classes or send small groups as needed.

How was flexible scheduling introduced?

The idea grew out of the 1988 *Information Power* document. The district coordinator met with teacher committees from schools to discuss how the ideas in *Information Power* could be implemented, and these teachers brought the ideas back to the schools. Diana followed up by reading further about the initiative. She had had experience with a fixed schedule and was strongly in favor of doing something different. She said, "I knew what not to do. I hated [fixed scheduling] . . . because [learning] wasn't integrated." She began to work with individual teachers, gradually training them to become collaborative by involving them more and more in the activities that were going on during projects. The various principals have trusted Diana to bring flexible scheduling in at her own pace.

What does a typical day in this library look like?

The library opens before school for teachers. Students arrive at school by bus and proceed to their classrooms, from which they can come to the library if they wish. Teachers may schedule their classes into the library for blocks of time spanning several days, during which time half the class might be with the SLMS and half with the teacher. More than one class might be scheduled into the library during that time. Sometimes teachers will schedule whole classes to work on research projects for a regular block of time or they might send part of the class down to work as a group.

How was flexible scheduling introduced?

A shared-decision-making team was exposed to the concept and set up a task force to explore it. Evelyn provided them with extensive documentation to assist their deliberations. She had read about the idea extensively, but a previous principal had been opposed to it. The new principal was not only very receptive to the idea, she actively promoted it. The change was made at the same time as the library moved to a new, larger location with more space for multiple groups of students at the same time. The time was right for the change. As the principal said, "You just have to see the right moment and seize it." Evelyn discussed the initiativ

What is meant by "flexible scheduling" in this school?

Interviewees described flexible scheduling as a variable schedule to allow the library to be used for doing research. Planning and carrying out integrated library projects is an important element. No classes have fixed schedules. 4

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