Jefferson County School System

The Jefferson County School System (JCSC) educates about 10,000 students in 14 elementary schools, two middle schools, and two high schools. It serves a diverse community consisting of a county seat of 80,000, with a substantial industrial base and a major state university, and the surrounding rural area.

Central High School and Roosevelt High School (located on the eastern edge of town) are spirited athletic rivals whose attendance districts split the county into approximately equal areas, with each district including about 4,150 city and rural patrons. The two middle schools each have about 750 pupils in the seventh and eighth grades, and also serve diversified areas. The elementary schools are located throughout the county and range in size from rural schools with about 250 students up to almost 700 students for the largest city school.

History of Administrative Computing in JCSS

Administrative computing at JCSS began in the late 1960s when computing resources at a local university were leased to do scheduling and grade reporting and to keep student enrollment data. In 1986 the school corporation purchased an IBM System 38 computer, and the student management applications were converted from the university computer. Over the next few years, financial applications were added and more student management application were developed. In 1994 another System 38, somewhat larger, was acquired and located in the JCSS Administration Building next to Central High. The first System 38 was removed to Roosevelt High, where it was used for student management applications at Roosevelt and a nearby middle school. The payroll processing was farmed out to the data processing subsidiary of a local bank.

All of these applications, both financial and student management were custom developed by long-time director of data processing, David Meyer, and the two programmers on his staff. The users of these systems were satisfied with them; and when they wanted changes and improvements, Meyer and his programmers would make them. All of the systems were written in RPG (Report Program Generator); and there was no end-user capability – if anyone needed a special report, a program to produce it was written in RPG by one of the programmers.

In late 1995, however, the JCSS director of finance, Harvey Greene, became concerned with problems he saw developing in the information systems area. First, it was apparent that the JCSS computers were becoming over loaded, and the old machine at Roosevelt High had become difficult to maintain – it seemed like it was down as much as it was up. Additional capacity was going to be needed soon, but IBM had discontinued the System 38 line of computers, so any added equipment or replacement of the System 38 would involve incompatible hardware and software. Mr. Greene was very concerned because he felt that converting the custom systems to a new hardware/software environment would be exceedingly time-consuming and costly.

Therefore, early in 1996 the JCSC administration set up a small task force of administrators to evaluate the JCSS information systems and to recommend directions for the future. This task force recommended that:

- 1. The IBM 38 hardware should be replaced.
- 2. Since JCSS could not afford the time or money to convert their current systems, the JCSS systems should be replaced with purchased software packages.
- 3. The new system should utilize an integrated database and report-generated software so that people could share data from various applications.
- 4. JCSS should contract with a vendor who would accept total responsibility for both the hardware and software.
- 5. Since JCSS would no longer be doing custom development, the programming staff of the data processing department could be reduced.

Soon after the recommendations were accepted by the JCSS administration, Meyer resigned as the data-processing director. In July 1996, he was replaced by Carol Andrews, who had 13 years experience as an applications programmer, systems programmer, and systems analyst with a nearby federal government installation.

Purchasing the New System

After spending several months getting acclimated to the JCSS and her new job, Andrews set about the task of selecting a vendor to provide the hardware and software to replace the current administrative computing applications at JCSS. In late November 1996, a computer selection committee was appointed to evaluate available systems and recommend a vendor to the JCSS school board. This 14-member committee included representatives of most of the major users of the system – assistant principals who did scheduling and were responsible for attendance records; deans who were responsible for attendance and student discipline; counselors; teaches, the personnel director; and the chief accountant. It also included representative of the different levels of schools in the system and from each of the larger locations.

By late March 1997 Andrews and the committee had prepared a 71-page request for proposal (RFP) that was sent to 23 possible vendors, asking that proposals be submitted by May 4, 1997. The RFP stated that: "The proposals will be evaluated on functional requirements, support services, and a three-year life cycle cost." The table of contents_of the RFP is included in Exhibit 1. Appendices A through E listed in the contents were in the form of fill-in-the-blank questionnaire that defined information that JCSS desired from the vendors.

The RFP was sent to vendors that would contract to accept responsibility for all the hardware, software, and training services required to install and maintaining the new system. The RFP specified the number of locations of the terminals and printers that were to be connected to the system in Part III-D and Appendix C. The desired requirements for the applications software were described in Appendix D in the form of characteristics that could be checked off as included or not. The applications specifications for the attendance accounting and student scheduling systems from Appendix D are included as Exhibit 2.

Exhibit 1

Jefferson County School System Request for Proposal

Table of Contents

Ι.	Introduction2								
П.	General Conditions2								
	Non-collusion Affidavit and Bid Security								
	Acceptance or Rejection of Bids								
	Explanation to Vendors								
	Quality of the Proposal								
	Prime Point of Contact								
	Basis of Selection								
	Test Demonstrations								
	Method of Payment								
	Award of Contract								
III.	Vendor Response Format4								
	A. Management Summary								
	B. Vendor Profile								
	C. Vendor Services Summary								
	D. Hardware and Communications Configuration								
	E. Application Software Specifications								
	F. Cost Summary								
	G. Project Plan and Management								
	H. Application Software Support								
N /	I. Contact Exhibits								
IV.	Appendices								
	A. Vendor Profile								
	B. Vendor Services Summary								
	C. Hardware and Communication Configuration								
	D. Application Specifications								
	E. Cost Summary								
	F. JCSS Enrollment Table								
	G. Present JCSS Terminals and Printers								

Exhibit 2 Student Administration System Student Scheduling

Included				Included			
Yes	No			Yes	No		
		1.	Provide for interactive CRT entry and correction of student course request and master schedule data.			14.	Provide for "prioritizing" scheduling runs by grade level and/or student number.
		2.	Automatically process student course request against the master schedule to produce class schedules for each student.			15.	Provide master schedule by teacher listing.
		3.	Provide for Arena Scheduling			16.	Pre-registration "by student" course request report.
		4.	Provide for interactive CRT drop/add of student from classes after initial schedules are established, at any time.			17.	Pre-registration "by course" request listing.
		5.	Scheduling data must interface with student records.			18.	Provide course request tally report.
		6.	Provide for course restrictions by grade level and/or sex.			19.	Provide potential conflict matrix.
		7.	Allow for addition of new courses and sections at any time.			20.	Provide student conflict report.
		8.	Provide current enrollment summary of each course and section via CRT and report.			21.	Provide student schedules.
		9.	Provide for mass adds, deletes or changes based on grade, sex, etc.			22.	Provide course and section status summary.
		10.	On-line editing of valid course number requests during CRT entry is required.			23.	Provide course rosters by teacher.
		11.	Provide for scheduling retries without erasing previous scheduling runs.			24.	Provide room utilization report with conflict alert.
		12.	Provide for override of maximum enrollment			25.	Provide teacher utilization report with conflict alert.
		13.	Provide for each student a year-long schedule, with up to 20 different courses (excluding lunch and study hall).			26.	Provide schedule exception listing showing student and open periods (by either closed or conflict status), also show all filled periods.
						27.	Provide scheduling by quarter, semester, year long, or trimester options.

The requirements for terminals and printers in the various buildings were determined by Andrews in consultation with someone on the selection committee who was familiar with each school. Although members of the selection committee made suggestions, Andrews determined most of the requirements for the application systems by examining what the existing systems did and talking with people throughout the JCSS.

Seven proposals were submitted in response to the RFP. Andrews was able to easily winnow down to three serious contenders that were evaluated in detail. A brief summary of these three proposals is included as Exhibit 3.

Vendor Characteristics	Data Systems	Scholastic Systems	Orian Computer Systems
Age of business	1986	1977	1972
Age of public school business	1994	1987	1980
No. of employees	77	65	500
No. of supporting schools	30	60	96
No. of installed sites	16	50	70
Total assets	\$4,877,000	\$1,747,063	\$20,225,640
Yearly revenues		\$3,455,101	\$28,342,304
Hardware proposed	Hewlett-Packard	IBM	DEC
3-Year Cost Summary			
Hardware and maintenance	\$443,505	\$538,885	\$407,655
System software	54,256	24,640	106,915
Application software	193,712	152,304	178,210
Training	11,020	39,200	34,560
Other purchased (PCs and communications)	70,299	66,554	34,560
TOTAL 3-YEAR COST	\$772,792	\$821,583	\$799,294

EXHIBIT 3

Summary of Bids

Each of the three finalists was invited to demonstrate its system to the selection committee. The vendors were not told in detail what to show, but they were asked to demonstrate the operation of several of the major systems. Two of the vendors brought in their own small minicomputers for the demonstration, but Data Systems, Inc. (DSI) arranged to demonstrate its software on the large H-P computer at the local university campus. The DSI system's performance was very impressive.

The committee originally intended to visit a school that used each vendor's system, but because time and money constraints they were only able to visit two sites – one with DSI's system and one Scholastic Systems Corporation installation. Andrews and Dr. Paul Faris, Assistant Principal at Roosevelt High, spent one day at each of these locations observing their systems in action and talking with users. In addition, members of the committee made telephone calls to their counterparts at other schools that used each vendors' systems without unearthing any major problems or concerns. Everyone seemed quite positive about all three vendors and their products.

The committee had a difficult time deciding between the three finalists. Each of the vendors proposed software packages in all the areas that JCSS had asked for, but none of these systems did exactly what they wanted in exactly the way the current system did things. The committee finally chose DSI because the members felt they could work well with the DSI people, they were impressed with DSI's demonstration, and DSI was the lowest bidder. The JCSS School Board awarded the contact to DSI in June 1997, which included the following systems: financial, payroll/personnel, fixed assets, warehouse, registration, scheduling, grade/transcripts, attendance, book bills, office assistant, electronic mail, and special education. These systems utilize a standard relational database management system that includes a query language called INFORM that generates ad hoc reports.

DSI agreed to make specific changes in the software packages where the committee had indicated that the packages did not meet the JCSS specifications. The contract also provided that DSI would devote up to 100 hours of programming time to making other modifications (not yet specified) in its software. Any additional changes requested by JCSS would be billed at \$60.00 per programmer hour. JCSS also purchased DSI's standard software maintenance contract.

Implementation of the Systems

The hardware arrived and was installed in October 1997. One of the H-P minicomputers was installed at the Administration Building to handle the financial systems and the other at Roosevelt High to handle student systems. These computers are connected by telephone lines, and the terminals and printers in each of the schools are connected to one or both of the computers directly (if they are close enough) or via telephone lines. Andrews chose to have two computers because JCSS planned to do payroll for the system, and she wanted to have a backup machine in case of problems. Since one of the large middle schools and the vocational school are close to Roosevelt High, she located the student machine there, which allowed many of the terminals used for student systems to be directly connected to the computer.

After the hardware was checked out, Andrews and her staff began to install the software and phase in some of the systems. They encountered their fair share of problems; and of February 1999, they had not been able to transfer all of the old systems from the System 38s to the H-Ps. Although they had some problems with the financial systems, they successfully installed most of them.

The Student Management Systems – In implementing the student systems, Andrews planned to follow the cycle of the academic year. First, they would transfer all the student demographic information from the present system to the new system's database. Then they would complete the students' fall class schedules by the end of the spring semester, as they had been doing with the old system, so the students' schedules would be on the new system and ready to go into the fall. During the summer they would pick up the attendance accounting on the new system so it would be ready for the fall. Then they would implement grade reporting so it would be ready for use at the end of the first six-week grading period in the fall. Finally, they would convert the student transcripts at the end of the semester.

They successfully transferred the student demographic information from the old system to the new in February 1998. Then they started to work on student scheduling. Things did not go well. The training provided by DSI for the scheduling officers was a disaster. Then, after entering the student class requests and the available faculty data, they started the first scheduling run. After it had run for three days without completing the schedules, they decided that there was something definitely wrong. Andrews still has not completely resolved this problem with DSI's experts. DSI claims that it was caused by how the scheduling officer set up the scheduling system – the various parameters that the system uses. Andrews is still convinced that there are some sort of bugs in the scheduling program.

DSI did make some minor modifications to the program and they sent some people out to consult with Andrews and her staff on how to set up the schedule, but they were unable to get the schedule done by the end of the spring semester as planned. This caused severe problems because the assistant principals who are in charge of scheduling are not on the payroll during the summer. Fortunately, Paul Faris, the scheduling officer at Roosevelt, was working summer school, and with his assistance they were just able to set all the schedules done two weeks before school started.

Preparation for the fall was also hindered by the fact that neither the school secretaries, who entered much of the data for attendance module, nor the counselors, who had to work with the scheduling of new students in the system and changes to schedules of continuing students, were on the payroll during the summer. The administration would not spend the money to pay these people to come in during the summer for training on the system, so all training was delayed until the week before school started, when everyone reported back to work. The training was rushed, and again DSI did a poor job with it.

When school started in the fall, it was a total disaster. The people who were working with the system did not understand it or know what they were doing with it. When the counselors tried to schedule a new student into his classes, the system might take 20 minutes to produce his new schedule. Needless to say, there were long lines of students waiting in the halls, and the students, their parents, the counselors, teachers, and administrators were upset and terribly frustrated.

Also, the attendance officers did not know what they were doing and could not make the system work for the first few weeks of the semester. Things were so bad that at the end of the first grading period Andrews decided that, although the grade reporting system was working all right, it was not feasible to have the teachers enter their grades directly into the system as had been planned. Instead, she hired several outside clerical people to enter the grades from forms to the teachers filled out. After some well-executed training, the teachers successfully entered their grades at the end of the semester.

By the end of the fall semester most of those working with the student systems had learned enough to make them work adequately, and a few of them were beginning to recognize that the new systems had some significant advantages over the old ones. They did get the second semester under way without major problems, and in early February 1999, they were getting ready to bring up the transcript system and start the scheduling process for the fall.

Perspective of the Participants

Given everything that has transpired in acquiring and implementing the new system to this stage, it is not surprising that there are many different opinions on the problems that have been encountered, whether or not the new system is satisfactory, and what the future holds. The following presents the perspectives of a number of those who have been involved with the new system. **Dr. Harold Whitney, Assistant Principal, Central High School** – Dr. Whitney believes that the previous system was an excellent system that really did the job for them. "It was fast, efficient, and effective. And when we needed something, rather than having to call DSI in Virginia to get it done, our own people would do it for us in a matter of two or three days. However, the study committee (that probably didn't have enough good school people on it) decided on the new system, and we were told that we would start with the new scheduling software package early in 1998."

The first acquaintance that Whitney had with the new system was in early February when DSI sent someone to train four or five other of the scheduling people on how to use the new system to construct a master schedule. Whitney recalls:

Over a three-day period we took fifty students and tried to construct a master schedule. And at the end of the three days, we still hadn't been able to do it. It was apparent that the lady that they sent out to train us, while she may have known the software, had no idea of what we wanted in a master schedule, and had never experienced the master schedule building process in a large high school.

The master schedule is the class schedule of all of the courses that we offer – when and where they will be taught, and by whom. In the past, I would take the course request from our students and summarize them to determine the demand for each curse, and then I would develop a master schedule that assigned our available teachers to the courses that they could best teach while meeting the student demand as well as possible. I had to take into account the fact that, among all the teachers that are certified to teach mathematics, some are more effective teaching algebra and geometry than they are in calculus, and similarly for other subject areas. Also, we have 15 or so teachers that are part time in our school and therefore can only teach here during the morning (or the afternoon). Furthermore, we need to lock our two-semester courses so that a student will have the same teacher for both semesters.

With the new system we were supposed to input our teachers and their certifications and student requests for courses, and the DSI software would generate the ideal master schedule to satisfy that demand. But we had to place quite a number of restrictions on what and when the teachers could teach and into what sections a student could be scheduled. When we tried to run the software, it just ran and ran, but it never produced a satisfactory schedule.

DSI sent one of its top executives out to talk with Whitney about these problems. The executive told Whitney that "the reason that you're unhappy is that you're placing too many restrictions on the schedule." Whitney replied, "All well and good. But are you telling me that your software package should dictate curriculum? That it should dictate who teaches calculus, who teaches general math, who teaches advanced and who teaches beginning grammar? That hardly sounds educationally!"

Whitney ended up doing the schedule by hand, as he had done before; and the students were scheduled by the end of the spring semester. Some of the other schools continued to try to use the full system, and they had a hard time getting the schedules out by the start of school.

Whitney had a very bad impression of the system until the end of 1998, but he now thinks that things are improving some. DSI people are beginning to listen to him, and so he is more receptive. "I've always been able to see that somewhere down the road the new system will have capabilities that improve on our old system."

Dr. Paul Faris, Assistant Principal, Roosevelt High School – Dr. Faris, an active member of the computer study committee that chose the new system, is responsible for class scheduling at Roosevelt High; and, unlike Harold Whitney at Central High, he used the system as it was intended to be used both to develop the master schedule and to schedule the students into their classes. He had a struggle with the system at first and had not completed the master schedule by the end of spring. However, he was on the payroll during the summer, and was able to complete the master schedule a few weeks before the beginning of school in fall 1998. In doing so he learned a great deal about how the scheduling system worked.

The way your master schedule is set up and the search patterns you establish determine how the system performs. The individual principals have control over many aspects of the process, and there is a lot of leeway – whether you set up for one semester or two, whether or not you have alternatives to search for with specific courses, and so on. We set it up for double semester, which is a hard one, but I had generous limits on my class size and we had limited search for alternatives, which kicked the difficult ones out of the system to handle on a manual basis. And I limited certain courses to senior, or sophomores, et cetra, and that restricted the search pattern somewhat.

Paul knew that the beginning of the fall semester would be crunch time, when lots of work would have to be done with the new system in a limited amount of time. So he prepared his people for the transition ahead of time. Paul's secretary was skilled on old system. Early in spring Paul told her: "We are going to change over the entire system in four months. And week by week I want you to tell me what files have to be changed over, and you and I are going to do it." Again, it was a matter of making sure things were done in a nonpressure situation where they could learn what they had to know.

Paul and his counselors still had many problems during the first few weeks of school in the fall, but nothing that they couldn't cope with. Things are going well in Paul's area now. They recently started the second semester, which is a crunch time again. The counselors got along fine with schedule changes, and they completed the new schedules faster than they had with the old system. Paul believes that the new system is a substantial improvement over the old one.

I can follow through and find the kids' attendance, current program, grades, past history and transcripts, and probably have everything I need in two or three minutes. Before the new system I could barely walk to the filing cabinet and find his folder in that time. And then I'd still have to go to the counseling office and get the current schedule, and then go to the attendance office and get the attendance record.

I'm really pleased with the new structures. And Carol's programmer is starting to add back some of the custom things that we had in the old system. I'm looking forward to being trained on the INFORM system's report generator so that I can produce my own special reports without getting a programmer involved. **Dr. Ruth Gosser, Assistant Principal, Central High School** – Dr. Gosser is the attendance and disciplinary officer at Central High and was a member of the computer selection committee. Gosser recalls:

We looked at about four different companies. Several had very good packages; although I will admit that by the time you sit through four or five different presentations, they all tend to run into one another.

My participation in specifying the requirements and evaluating the proposed systems was minimal. It was a big committee; and I was busy with other things, so I didn't even read the materials very carefully. I disliked spending the time that I did; and I was really turned off by the details, especially the technical details. I remember thinking: Ugh! I'm sick of this. Just go ahead and buy something!

She and her people had only two days of training on the system before the start of school, and Gosser thought the training provided was pretty useless. "They weren't very well organized, and they spent too much time on the technical aspects of the system. I just wanted to know how to use the system, but they tried to give me a lot more and it really confused me and made me angry." When school started in the fall, it was a disaster. Gosser remembers it vividly:

It was awful! Awful! I didn't get home till after 6:30 for weeks. Just getting the information in and out was a nightmare. We had a terrible time trying to change the unexcused to excuse, and doing all the little things that go with that. It was so bad that we seriously considered abandoning the system and trying to do it by hand. It was horrible!

But we've just gone through second semester class changes, and I haven't heard anyone weeping and wailing about what a crummy system this is. We're beginning to recognize that we've got the new system, and we're going to have it for a long time. They're not going to junk a system that we have paid all that money for, so we'd better work to make the very best out of it that we can. And I can see that there are some really good things about the new system that the old system didn't have, and never could have.

Looking back, I don't think that the Computer Selection Committee did a very good job. If I had known that what I know now I'd have put a lot more effort into it than I did. Since most of us don't put in the effort to get down to the details of exactly what we needed, Carol pretty much had to do it herself. Unfortunately, we only gave her enough information to get her off our backs. Like "I need something that will chart attendance for me." That wasn't much help. Every system we considered would chart attendance, so we had no basis for deciding which system would have been best for us.

Dr. Helen Davis, Assistant Principal, Roosevelt High – Dr. David is the attendance and disciplinary officer at Roosevelt High School. She was not a member of the computer selection committee, and she doesn't think it did a very good job.

The committee looked at a lot of different kings of things, but they didn't communicate. Even though we all were supposed to have representatives on the committee, we didn't know what they were doing, nor did we have the opportunity to discuss any of the systems that they were looking at and whether those systems would help us or satisfy our needs.

When the new system was put in last fall, a lot of us had no training, no information, and didn't know what was going on. My secretary had a day and a half training in August, but I had no training at all. Some training was offered to me in August, but I had already made arrangements to be out of town, and no flexibility was provided as to when the training would be available. Furthermore, there are no user-friendly manuals for the system – the manual they gave me is written in computerese. So I've had to learn the system by bitter experience, and I still don't know what it offers me. I could go through hundreds of menus and not find what I want because I don't know what they are for.

Last fall when school opened my blood pressure probably went to 300 about every day! We couldn't do attendance -- it wouldn't work. We couldn't print an absence list for the teachers. We couldn't put out an unexcused list. We couldn't get an excessive absence report, so it was mid-semester before I would start sending letters to parents whose kids weren't attending regularly. That really impedes the work of trying to keep kids in school.

The thing that frustrates Helen the most is that she resents being controlled by the software system.

The system is dictating what we can do with kids and their records. It needs to be the opposite way. We ought to be driving that machine to service what we need to do as easily as possible. But the machine is driving us, and I'm really displeased with that.

We're stuck with DSI and their software because we've got so much money invested in it. In time Carol will be able to make this system as compatible with our needs as it can be, but in will never be as suitable as it should be. And it will take a long, long time before we get all the things that we need.

Catherine Smith, Counselor at Central High School – Catherine Smith has been a counselor at Central High School for 20 years, but she had no experience with the computer before the training session that was held the Thursday and Friday before school started. According to Catherine:

The first day of school was just unbelievable! It took six hours to schedule one student. Everyone was running up and down the halls asking each other questions. No one knew what was going on.

The first two days I absolutely no control over that computer! It would bleep, and you didn't know why. But by Wednesday morning I began to get control. I knew that if I pushed this button, this would happen. And I knew how to make it do some of the things I wanted it to do.

Now that I've worked with it for a semester, I'm happy with it. The system contains a tremendous amount of information that I need to help the students. The thing I like most about the system is that when I want to put a kid in a class and it's full, I can find out instantly how many kids are in each section; and I can usually find a place for the kid. I can even override it if the section is closed. Despite the fact that we almost died during that first week, now that I have control over it, I think it's tremendous!

Murphey Ford, English Teacher at Roosevelt High School – Murphey has taught English at Roosevelt for 12 years, and he has had no experience with a computer beyond entering his grades into the old system.

This new computer has been a disaster from the word go. Last fall they didn't produce a class schedule until two weeks before classes were to start, so I had no time to prepare to teach a class I hadn't taught for five years! And I wasn't even asked if I would be willing to teach it – the computer just assigned me to it.

Then they relaxed the limits on class size. We ended up having some classes with thirty students and others with forty. That's not fair to either the students or the teachers. And it was a zoo around here at the beginning of the fall. It was three weeks before they got all the new students into their classes and things settled-down a little.

In this community we have very high expectations for the education system, but never have enough money to provide special programs we want, or get adequate supplies, or pay decent salaries. It really burns me up that we spend almost a million dollars on this new computer that doesn't work anything like as well as the old one.

Carol Andrews, Director of Data Processing – The 15 months since the computers arrived have been very difficult and stressful for Andrews.

I often wonder what it was that caused things to have gotten so difficult and to have raised so much negative reaction to the new system. One explanation is that we have a history of custom-developed systems, so anything that users wanted got done exactly the way they wanted it. Now we have a set of generic software that is meant to serve many school systems and it doesn't do exactly what they want in exactly the way they want it.

It was hard to get effective participation from the members of the computer selection committee. Coming from the government, our RFP wasn't very big to me; but when I passed it around to the committee, they couldn't believe it. I couldn't even get the people to really read the RFP, let alone the responses. Actually, it should have been more detailed. It was the lack of detail that really caused us most of our problems, because it has been the details that have determined whether or not the systems were suitable to our people.

We should have paid a lot more attention to training. DSI hasn't had much experience with training, and they just didn't do a good job with it. They left me, a new user, with too much responsibility for setting up the training and making sure that everything in the system was ready for it. And they didn't provide me with the training that I needed.

Money is big constraint to the JCSS. I needed a lot more programming help inhouse, and someone from DSI – a week here and a week there – to fill in for our lack of knowledge in being able to support our users.

Looking back at it, 15 months seems like an extremely long time to implement a new system. But it might have been better to take even more time to do it. Maybe we should have piloted the system at one school for a year and worked the bugs out of it before installing it systemwide.

Where do we go from here? How do we handle the negative reaction that has been generated from all the stumbles and falls? How do we get things turned around to take advantage of some of the tings that are really positive for the school system now that we have access to all this information? I'm beginning to see little pockets here and there where people are starting to use the capabilities of the new system and are developing positive attitudes. I hope that we're getting over the hump!

If we had to do it over again, would we make the decision to go with DSI? That's a question I ask myself every day! Could we have done better? Would we have had fewer problems? I don't know.