



Case Study: Sherman Middle School

I. Community and School Data

Sherman Middle School is located in a rural community of 10,000 about 75 miles northwest of a major metropolitan city. The community's economy depends largely on textile manufacturing. The school is relatively new, having been built five years ago. Sherman is a Title I 6-8 middle school serving 600 students.

II. Student Data

Sixty percent of the student population is white, 37% is African American and 3% is from other minority groups. The free and reduced lunch rate is 55%. Reading and math scores for the school are above the average for "like" schools, but below the district average, which falls below the state average.

Serving the 6 - 8 grade special education population for the district, seventeen percent of Sherman's students have special learning needs. Fifteen students have a hearing or visual impairment and 64 students are learning disabled or physically handicapped. The school uses a Co-Teaching Consultant model, in which about 45 of the learning disabled students receive 20% of their instruction in a non-inclusive environment. Additionally, 19 students are severely and profoundly educationally disabled and receive minimal instruction in the general education environment.

III. Administrative and Staff Data

Sherman's staff of 46 consists of 35 teachers, a principal and assistant principal, and nine support staff. The principal, Mr. Mitchell, has been with the school for five years. The average tenure of the teaching staff at Sherman is 14 years. The school has experienced a very low turn-over rate of less than 15% for the last three years. In addition to the twenty-seven general education teachers, the school has:

- 8 Special Education Teachers
- 4 Special Education Assistants
- 2 Reading Resource Specialists
- 1 Library Media Specialist
- 1 School Counselor
- 1 Title I Administrator

IV. Instructional Information

Sherman has initiated a new literature-based reading program, added a second Reading Resource Specialist, and has a plan for helping content teachers to support best practices in reading instruction and written composition. Additionally, the school is developing a plan for integrating technology into its reading and writing curriculum.

The general education teachers at Sherman typically have used traditional models of instruction. However, some teams of content teachers and special education teachers have been experimenting with various student-centered and project-based learning approaches, and have increased the use of simulation software and the Internet.

V. Technology

All the hardware at Sherman is less than three years old. The school has 59 computers in the school – one in each of 35 classrooms (a multimedia station with dial-up Internet access at 56K, and a printer) and a 24-station lab in the school with Internet access. Teachers have access to a scanner, four digital cameras and a data projector. Every classroom is equipped with a closed-circuit TV. The technology team has identified the need to purchase and integrate assistive technology, but the school currently has very little hardware or software to support students with special needs.

The school's six-year technology plan has been in place for two years and was written primarily as a hardware plan. The plan calls for professional development but does not outline how much professional development will be provided, or in what format. Interviews with the school improvement committee revealed that they were thinking, "perhaps one- or two-day workshops before the start of the school year" would be sufficient.

VI. Additional Contextual Information

The district technology coordinator, Sara, began working with Sherman Middle School two years ago. She was aware of an undefined professional development section in the technology plan and the ambivalence toward technology on the part of both the administration and the teaching staff. Initially, Sara began a 12-week schedule of after-school workshops on basic-skills training, which was optional. Teachers consistently missed training sessions and administrators rarely attended. There was no discernable change in the attitude toward technology.

Sara conducted informal interviews with teachers to determine staff concerns and found that while nearly half of the teachers had computers in their homes, many of the staff still felt apprehensive about using technology, and faulted the lack of time to learn something new or the lack of administrative support for their inability to incorporate technology into their curriculum. Some teachers admitted that they could not see how technology would impact student learning. Sara found that two teachers, Ms. Clark, a LD Specialist and Ms. Trevor, a 7th grade Social Studies teacher, were particularly enthusiastic about the possibilities that technology offers, and solicited their support to facilitate change.

Based on interviews, Sarah created a school technology competency profile based on state technology standards. She presented the results to the administration and the school improvement committee with the help of Ms. Clark and Ms. Trevor.

Sara's next step is to develop a professional development plan for the upcoming year that connects the school's reading and writing curriculum with appropriate technology uses. This professional development plan would leverage the peer-coaching leadership program already in place at the school. As teachers increase their technology skills, each grade level and the special education staff would have one or two technology mentor-teachers who would facilitate regularly scheduled sessions. These sessions are structured around obtaining the knowledge/skills required for the compilation of a portfolio that showcases appropriate technology uses that enhance the reading and writing curriculum. A major component will be the planning/implementation of a technology-enriched thematic unit.

Additionally, Sara has arranged to have a specialist in the use of assistive devices meet with administrators and teachers to review current available technologies to help reduce students' pull-out time and increase their inclusion into general instruction.

VII. The Data Table

The table below represents the results of the self-assessment given to the staff.

Table 1: Teacher Self-Assessment Results

Level 1: Insufficient knowledge and skill.		
Level 2: Developing basic knowledge and skill, but requires more exposure for demonstration of competency.		
Level 3: Has acquired the basic knowledge and skill required.		
Level 4: Can demonstrate competency in more than one context and is able to assist others.		
	Level	Sept. '99 Proficiency (%)
Foundation Skills	1	43
	2	37
	3	15
	4	6
Usage	1	43
	2	28
	3	27
	4	2
Application	1	59
	2	30
	3	8
	4	3
Productivity	1	50
	2	31
	3	11
	4	8
Research, Problem Solving & Product Development	1	69
	2	24
	3	5
	4	2
Teaching Methodology	1	64
	2	31
	3	4
	4	1

Additionally they identified the competencies they considered to be of the most importance in planning future professional development activities. The top four areas identified as important under the main competencies were:

- Foundations: **Implement basic trouble-shooting techniques;**
- Usage: **Demonstrate awareness of resources for adaptive assistive devices for students with special needs;**
- Application: **Design, deliver, and assess student-learning activities that integrate technology; and**
- Research, Problem Solving, and Product Development: **Develop multimedia products that apply basic instructional design.**