

PALM SPRINGS MIDDLE SCHOOL

Hialeah, Florida

School Setting and Student Population

Palm Springs Middle School (PSM) is located in Hialeah, Florida, which is an urban suburb of Miami and located in Dade County. The city's population is nearly two million people (1,191,702 in 1992; Bureau of the Census, 1994). Many of its residents are economically disadvantaged. In 1989, 18.2% of individuals living in Hialeah had incomes below the poverty level, and nearly one-quarter (24.3%) of children under 18 years old lived in homes with incomes below the poverty level (Bureau of the Census, 1994). Hialeah has a large minority population, the largest group being Hispanic (in 1990, 87.6% of the population; Bureau of the Census, 1994).

The students in Palm Springs Middle School tend to be from low-income families. Few students have computers at home. For a number of students attending the school, their first language is one other than English and they have poor English language skills.

The school is located in a facility built in the 1970s. Due to its age, the building needs renovation, and several construction projects will be occurring within the next year. Air conditioning and new seats will be installed in the auditorium. Following the auditorium renovation, the cafeteria will be modernized and have air conditioning installed. Lastly, the school building's wood walls, which are a fire hazard, will be replaced with concrete ones.

Currently serving grades six through nine, Palm Springs Middle School will house only sixth through eighth graders next year. There are approximately 2400 students attending the school, which is 190% of its capacity. 19 portables are being used to accommodate the student surplus. The overcrowding will not be alleviated when the ninth grade is moved to the high school level because the number of sixth graders will increase. Recognizing that this high level of enrollment will be constant, a two-story building is going to be erected where some of the portables currently are located. This building will provide eight additional classrooms and is scheduled to be completed in time for the 1997-98 school year to begin.

Special Education

Special education programs at Palm Springs Middle School include programs for students with hearing impairments, learning disabilities, and emotional disorders. This case study report will focus on the program for hearing impaired students. Students who live outside the zone to attend PSM can elect to attend it in order to participate in one of these programs.

There are 400 students in the special education program, including at-risk and exceptional students. At risk is defined as those who have five or six indicators of being at risk. These indicators include: being over age; failing one or more grades; having attended many schools; having limited proficiency in English, and taking Exceptional Student Education (ESE) classes. The exceptional student population is comprised of 44 hearing impaired students, 43 students with emotional disorders, and 132 students with learning disabilities.

Staff Organization

Administrators and Teachers

Palm Springs Middle School has one principal and three assistant principals. Each assistant principal has distinct responsibilities. For instance, one assistant principal, who is a former special educator, is responsible for all special education students.

Departments are structured by subject area. Typically there is a department chair, a team leader, teachers, and for some areas teacher aides. A total of 88 staff fill these positions.

Special Education

As was mentioned previously, special education is divided into programs for students with emotional disorders, learning disabilities, and hearing impairments. The EH (emotionally handicapped) program is comprised of three EH teachers, three EH paraprofessionals, and one full-time counselor. The learning disabilities (LD) program consists of six LD teachers and one paraprofessional. The hearing impaired program is staffed full time by two teachers of the hearing impaired, two paraprofessionals, and five interpreters. A speech pathologist is in the school three days per week.

Library and Media Services

Library and media services are provided by a full-time media specialist. There also is a technology coordinator who serves all of the middle schools in the district.

Block Scheduling

The school day is divided into three classes, and each class lasts for two hours. Students have different courses every day. The class that a student has on a particular day varies from week to week. Staff see both benefits and disadvantages to block scheduling. It offers teachers more time to conduct a lesson. As one teacher said, "It takes time to discuss, have hands-on lessons, and then bring closure to it, so two hours is a nice chunk of time." For the academic areas, having two hours to teach is considered an advantage. However, for subjects like dance, the allotted time period is too long. Also, since the schedule rotates, students miss time from a variety of academic classes when they are pulled out to work with the speech therapist or for other reasons.

School Philosophies

Mainstreaming

Palm Springs Middle School's approach to special education includes mainstreaming to the fullest extent possible. For example, students are not accepted into the hearing impaired program if they do not have the potential to be mainstreamed for at least part of the day. It is expected that students with disabilities interact with other students as much as possible. One step taken to accomplish this goal was arranging for buses to bring students living outside the zone home from

after-school activities. Having a way to get home, all students with disabilities can participate in extracurricular activities along with other students. Both administrators and teachers voiced that it was important for all students to be part of the “total school program.”

Technology

Another philosophy of Palm Springs Middle School’s special education program is to use technology as much as possible. This approach is supported by administrators and teachers. The Team Leader of the hearing impaired program said, “We use anything and everything that will help these kids get along, function appropriately, and become acclimated to anything in every program.” She emphasized that hearing impaired students tend to learn best through visual modes.

Technology’s being a way to enhance education is a view held not only for the special education program, but also for the school as a whole. The school’s principal believes that technology is important because it offers the students a mode of learning that is more suited to their individual needs. The principal stated:

Technology is another avenue for the teacher to use. It’s another strategy, another technique. It helps teachers be better teachers; it’s another tool for them to reach the kids... Some kids respond better to that type of learning than they do to the old lecture method of learning that so many teachers relied on—a textbook, a blackboard, your voice, and that was it; now you have so much more.

The goal is for all students to have access to computers, including CD-ROM and the Internet.

In order to promote staff’s use of technology, technology training is ongoing. One day per month, substitutes enter the classroom so that teachers can leave early and attend a mandatory technology training session. The school’s two business education teachers, both of whom have a masters degree in computer education, conduct the training sessions. Depending on their technology knowledge and ability, the teachers are divided into small groups. These training sessions include basic computer literacy as well as information about the software that is available and the best ways to use it. In order to answer questions and provide one-on-one assistance, a technology specialist will go to a teacher’s classroom if requested. These training sessions and the available technical assistance have resulted in teachers increasing their use of computers in the classroom.

Palm Springs Middle School continually is seeking to improve the technology and equipment available to students. Staff are encouraged to apply for grants to secure technology and better equipment. Using a grant from the state of Florida, the science labs recently were updated. The school also has received various software, such as a program on frog dissection. This grant allotted for staff training in using the new technology and equipment.

Another grant from the state of Florida resulted in the Technology Lab. Florida offered a grant for middle schools interested in renovating their existing labs into state-of-the-art facilities. A teacher at Palm Springs Middle School wrote a grant proposal that his school’s lab would be

“used to increase technology awareness among at-risk students.” The faculty recognized that creating this lab would require sacrifices, for they knew that they would need to give up two science classrooms in order to create the additional space needed to expand the lab. However, the faculty and administration agreed that the sacrifices were worth the potential gains. PSM won an \$865,000 grant to update the classroom and secure state-of-the-art equipment. The lab has 11 stations, each of which focuses on a different topic. For example, there are stations for applied physics, biology, audio broadcasting, graphics, computer graphics and animation, and desktop publishing. When a student masters a station, s/he moves to the next one, and eventually students gain experience in all of the stations.

The equipment in the Technology Lab continually is updated so that it remains state-of-the-art. Every station has a television with a built-in VCR and other equipment needed for that particular station. There is a flight simulator, audio editing equipment, a computer-assisted design (CAD) machine, and many other impressive pieces of equipment not usually found in a middle school.

Since the lab’s primary purpose is to educate at-risk students about technology, the Technology Lab instructor teaches four classes of at-risk students and two classes of regular technology education. In this technology education course, the teacher integrates science, math, and technology.

The Technology Lab has been highly successful. It has introduced several students to computers, and many have acquired skills that resulted in summer jobs and permanent employment. Students learn to work with fiber glass, program traffic lights, build cars, and acquire numerous other skills that can be useful to an employer. Commenting on the lab’s impact on ESE students, the principal said:

Many of those kids have had learning difficulties because they don't learn well auditorally. However, when they are given an opportunity to do hands-on work, they can excel in this area. Maybe manually they are quite good, though their reading and auditory skills may be poor. They might not have the attention span to listen in a classroom, but when they are exposed to this technology and can get involved, these students get excited about what they are learning. They ask questions. They become more interested and involved in what they are doing. That has been the big plus. They love getting on the computers; they love the independence of figuring out things and building things.... Some of the ESE kids surprise all of us with what they can do with some of that equipment. It is another avenue for them, something completely different from the standard classroom.

The success experienced by students with disabilities in the technology lab has led to a great increase in self esteem and has transferred to gains in other areas. For some individuals, there have been fewer behavioral problems, and their performance in other academic areas has improved.

Hearing Impaired Program

Staff and Students

As previously stated, the staff of the hearing impaired program consists of two teachers, two paraprofessionals, and five interpreters. A speech pathologist is present in the school three days per week. There are 44 students in the program, and they are mainstreamed to varying degrees. In the past, there have been students enrolled in the hearing impaired program who had a hearing impairment as well as other disabilities. Currently there are no individuals diagnosed with more than one disability. When the students are tested, deafness/hearing impairment overrides any other disability, and generally they are classified as deaf/hearing impaired.

The students' abilities to communicate vary greatly. In part, it depends on the level of residual hearing an individual possesses and on the hearing impairment's age of onset (i.e., prelingual or postlingual). Another factor is that some students speak Spanish at home, but are taught English in school. The communication skills of students in this situation often are limited. That many program participants rely on American Sign Language (ASL) at school, but their family members do not know ASL, also limits their ability to communicate.

Philosophy

To the fullest extent possible, the hearing impaired program aims to normalize the school experience and the expectations of deaf and hearing impaired students. The hearing impaired program strives to integrate its participants into regular education as much as possible. Additionally, the program emphasizes any successful deaf person who is in the media, such as athletes, actors, and Miss America. The Team Leader of the hearing impaired program stated, "We make a big deal of it, emphasizing that this is possible for anyone. That is important. It boosts their ego. Anything is possible."

The hearing impaired program's philosophy is to promote oral communication and use of American Sign Language. It aims to accommodate the preferred learning style of all of its students. In order to enhance their ability to communicate with one another, all students in the hearing impaired program are taught ASL.

Mainstreaming

The hearing impaired program was modified substantially five years ago. Previously, hearing impaired students were completely segregated, even for physical education. Now, the focus is on integrating the students as much as possible. For instance, only students who can be mainstreamed are accepted into the hearing impaired program. The goal is to provide students with the skills needed to obtain a regular high school diploma. After the students graduate from Palm Springs Middle School, they no longer will have a teacher of the deaf available to them, and staff feels that students should have the option of attending a mainstream high school. It is hoped that more of the hearing impaired students will go to college and get a good job.

When first mainstreaming a student, usually s/he will attend a regular education math class. This class typically is the first mainstream subject because math is more visual. A student never would first be mainstreamed in a language class due to its aural emphasis. The vast majority of students in the hearing impaired program are mainstreamed in math (38 out of 44, 86%), while very few of the program participants are mainstreamed for language (3 out of 44, 7%).

All students in the hearing impaired program eventually attend at least one mainstream class, but few eventually attend only mainstream classes. Three students in the hearing impaired program are 100% mainstreamed (7% of program participants). Two of these students have interpreters, and one uses only an FM system, which allows the student to hear the teacher's voice clearly and reduces background noise.

Palm Springs Middle School implements steps to make mainstreaming work. During the first faculty meeting each year, an orientation to the hearing impaired program is conducted. Included are explanations of the roles of the interpreter, student, mainstream teacher, and the teacher of the hearing impaired. They discuss what the mainstream teacher can do to make the student's experience more successful. Among other information, tips are given, such as speaking only when facing the class rather than talking while writing on the blackboard.

While the mainstreaming effort has been highly successful, hearing impaired students still are somewhat segregated from mainstream students. The Team Leader of the hearing impaired program said that she would like to see the hearing impaired students interact more with their hearing peers. According to her, the majority of the students in the hearing impaired program "cling to their deaf peers. The deaf stay together, and the hearing stay together."

Hearing Impaired Classroom

When participants in the hearing impaired program are not in mainstream classes, they are in the hearing impaired classroom. It is a self-contained class that functions like a resource room. Sixth through eighth graders are in the classroom together. All program participants come to this room for homeroom, which is a time for receiving help with homework or asking questions. All hearing impaired program staff—two teachers, two aides, and five interpreters—are in the classroom during homeroom. When instructing, the teachers often divide the room in half and simultaneously teach two lessons. It does not distract the students to have two lessons occurring at once because there are separate ASL interpreters and the students using an FM system program it to the channel that their teacher is using (the FM system is explained fully in the next section on *Technology Use*).

Technology Use

Implementing the school's philosophy of using technology to enhance a student's learning, the hearing impaired program uses technology extensively. It is considered vital to the students' education.

Numerous hearing impaired students use an FM system to permit them to hear spoken language. An FM system is a device that is worn by a hearing impaired person and by another individual,

such as a teacher. When a student tunes into one of the 30 channels, s/he can hear more clearly what the teacher says into a microphone. The FM system has three settings: FM/No Hearing Aid, FM/Hearing Aid, and No FM/Hearing Aid. In this way, the student can elect solely to focus on the teacher's voice (FM/No Hearing Aid), to hear the teacher's voice and the background, such as comments by classmates (FM/Hearing Aid), or only to hear the background (No FM/Hearing Aid). Students who use an FM system use it in both mainstream and hearing impaired classrooms. They pick up an FM unit in the morning when they go to homeroom and return it at the end of the school day. The FM systems are recharged overnight.

Several of the hearing impaired students are participating in a research project evaluating the effectiveness of the tactile device. A tactile device is a tactual decoder of speech. Depending on its tone and volume, speech produces different vibrations, which the user can distinguish. This technology aims for a hearing impaired person to learn speech by feeling sounds. The tactile device often is used in conjunction with an FM system so that the individual can learn speech both through auditory and tactual information. The tactile device is worn around the waist because this area's sensitivity allows the user to distinguish the different vibrations. The Team Leader of the hearing impaired program said that the tactile device greatly improves students' speech ability. However, it also has disadvantages. It is cumbersome to wear this device around one's waist, and self-conscious adolescents often do not want to wear it. Also, middle school students, who can be prone to forgetfulness, sometimes forget to wear the tactile device.

While many of the students in the hearing impaired program use hearing aids away from school, they are little used during the school day. They are worn only during lunch time, between classes, and during other leisure time. Since students who use a hearing aid away from school use an FM system in the classroom, the FM system meets the need that the hearing aid fulfills elsewhere.

Television and video also are used extensively in the hearing impaired program. A television is mounted on the wall of all classrooms in Palm Springs Middle School. Captioned morning announcements are broadcast to all classrooms from the television studio in the library. The hearing impaired program staff frequently use television and video because their students like to focus on visual learning. CNN is used for current events, and video tapes are shown after school two days per week.

The Team Leader of the hearing impaired program believes that captioning is very effective with her students. It helps them acquire language skills. Some hearing impaired students prefer to see the written word, while others favor ASL interpreters. Individuals who have strong written language skills tend to prefer captioning.

The hearing impaired program staff try not to show any television programs or videos that are not captioned. Captioned videos are acquired from several sources. St. Augustine captions a lot of videos for the school. Captioned videos also are obtained through a lending library. Through this service, the program gets videos free of charge except for paying the postage to return them. The Lions Club and other organizations also provide captioned materials.

Computers are used both in the classroom and in the library. Since the hearing impaired program's classroom is in a portable and the school is concerned with theft from these less-secure areas, the

hearing impaired classroom has two older computers. There is no Internet connection in this classroom, so the Internet is accessed in the library. The hearing impaired students use computers for typing, seeking information, and improving math skills. Students work on the computers individually and in groups. Math programs tend to be used in groups of two or three students.

Hearing impaired program staff continue to use older technologies that they find helpful. Film strips are used often because they are visual, simple, and meet the needs of lower-level students. The hearing impaired students enjoy watching a film strip, gathering information, and then compiling it. Furthermore, students enjoy the responsibility of being in charge of running the film strip equipment.

In the mainstream setting, hearing impaired program participants have access to the same technologies that all students in the school can use. If they take one of the business classes, they learn about keyboarding, word processors, databases, and spreadsheets. The business courses use Microsoft Works. If a hearing impaired student takes the graphics class, s/he learns about graphics, layout, and pictures. Students in this class use computers, an engraving machine, silk screen printing, and drafting tools. The equipment in the Technology Lab, discussed previously, is used by hearing impaired students enrolled in this course. An Integrated Learning System (ILS) for language is available in the school, but it is not used in the hearing impaired program. The ILS starts at a sixth grade level, and many of the hearing impaired students are not yet at that level. Because students not functioning at a sixth grade level found the ILS software very frustrating, the hearing impaired program staff discontinued using it. Some higher-functioning hearing impaired students use the ILS software in their mainstream classes.

Hearing Impaired Program's Effectiveness

Palm Springs Middle School's hearing impaired program is highly successful. It accomplishes its goal of helping students obtain a regular high school diploma by supporting them in a mainstream setting. Since no high schools in this district offer a hearing impaired program, the only way for students to attain a regular high school diploma is to become 100% mainstreamed. Mainstreaming also helps the hearing impaired students feel that they are part of the school. Students enjoy participating in the program, as is reflected by their excellent attendance rates. It is rare that any of the students miss school. The hearing impaired students love coming to school because the hearing impaired program offers them supports that they often do not receive at home.

Barriers to Using Technology More Effectively

While Palm Springs Middle School is using technology in extraordinary ways, the staff perceive some barriers preventing them from taking even further advantage of technology's capabilities. These barriers stem from inadequate funding, insufficient equipment, and theft of and damage to technology.

The science labs updated with the Florida grant were not operational in February 1997 (when the site visit occurred) because the grant was supposed to cover training, but the grant money was insufficient. After staff participates in a one-day training session, the labs will be operational. The

school will pay \$800 for this training. In February, faculty hoped that the students would be using the modernized labs by the end of March.

Palm Springs Middle School is working toward improving students' access to computers. It is increasing the number of computers in classrooms and students' access to CD-ROMs and the Internet. Currently, all classrooms have at least one computer, and some have as many as four. Few classrooms now have computers connected to the Internet or equipped with a CD-ROM. 60 high-end computers have been ordered for classrooms. They are Pentium 100s with CD-ROMs and multimedia capabilities, and they use the Windows 95 operating system. By the beginning of the 1997-98 school year, all classes will be wired for the Internet and will have access to it via a T1. The county wide area network also will be available. With these upgrades and additions, students will have access to a great deal of information from their classrooms.

The number of computers currently in the library also is limiting. The library has five computers and one printer. If a student wants to print, the file must be saved on disk and then s/he must wait for the computer connected to the printer. At this point, faculty also have access only to this one printer. However, soon each department will have a printer, and both teachers and students will send documents to the department printer. Waiting time for a printout will be alleviated greatly.

The library has a collection of videos that teachers borrow for lessons. While some of the videos are captioned, many of them are not. The cost of captioning prevents the school from having more of its videos captioned.

The technology in the television studio is very simple. The media specialist indicated that the television studio is rarely used for more than morning announcements, although perhaps it would be used more frequently if more sophisticated equipment was available.

Theft of equipment and damage to it limits the technology available for student use. On average, two computers per year are stolen from the library, and as of February four televisions had been stolen during the 1996-97 academic year. Fear of theft has limited the amount of technology allowed in portables. In addition to theft, damage to equipment also occasionally limits students' access to technology. Sometimes students delete files critical to operating the computer.

Conclusion

Palm Springs Middle School contends with several difficult issues. Its physical plant is badly overcrowded and in need of renovation. PSM also services many students who are from low-income families and have numerous needs. Additionally, a large percentage of the school's students are not proficient in English. Despite these obstacles, staff are promoting development of literacy skills by students with disabilities. The school has a philosophy of using technology to match students' different learning styles, and both basic and advanced technologies are used for this purpose. Staff are encouraged to write grants to acquire state-of-the-art technology, and much equipment has been acquired in this way. As Palm Springs Middle School's hearing impaired program illustrates, special education teachers, mainstream teachers, and building administrators work together to meet their students' needs.

Acknowledgments

Special thanks go to Melissa Wolin, assistant principal at Palm Springs Middle School, for her participation in the survey and interview phases of this study as well as for welcoming Macro International staff into the school to conduct this site visit. Deep-felt thanks also are extended to Allan Bonilla, principal; Dawn Jenkins, Team Leader for the hearing impaired program; John Harrison, Technology Lab instructor, and the other staff who took the time to talk with us and let us observe their classes. Additionally, thank you to the students who allowed us to photograph them and who talked with us about their experiences.

References Cited

U.S. Department of Commerce, Economics and Statistics Administration, Bureau of the Census.
1994. *County and City Data Book*. Washington, DC: U.S. Government Printing Office.