

This "toy"
is actually a dynamic
learning tool.

BY
KIM MARSHALL

SPEAK & SPELL: A CLASSROOM HIT

Speak & Spell is a marvel of modern technology. A battery-operated computer about the size of a cassette tape recorder, it sells for \$40 to \$60. I first discovered this machine, which is designed to teach kids spelling and word pronunciation, while staying with friends whose four children, ages 7 to 13, played with it nonstop for an entire weekend—when the adults weren't using it.

The two substantive learning activities in Speak & Spell are Mystery Word (a form of Hangman) and Say It (a ten-word spelling test). The machine has a 200-word vocabulary (a booklet with the complete list is included); so it can be used for quite a while before players encounter a word or a test for the second time. To organize the material, players select one of four levels of difficulty (A, B, C or D) at the beginning of each game.

The Speak & Spell keyboard is arranged alphabetically (not like a typewriter). Letters and words are instantly displayed on the screen, and the electronic voice (male and a little tinny) pronounces them.

In Mystery Word, players try to piece together a word represented by blank spaces on the screen. Every correct guess brings a symphony of beeps as the letter appears in its place. If players can't guess the word before trying seven wrong letters, the voice announces, "I win," and the machine displays the mystery word.

In the Say It test, Speak & Spell goes through a list of ten words, giving players a few seconds to look at each word on the screen and pronounce it before the electronic voice does. Then the last word disappears, and the voice says the first word. The player spells the word without time pressure (erasures can be made) and then pushes the "enter" key. The voice may say, "That is wrong. Try again. The word

was. . . ." If the player's spelling is correct, the voice says, "That is correct. Now try . . ." and moves on to the next word. If the player doesn't hear the word (the voice is shaky on some sounds, especially *z* and *th*), the player can press a "repeat" button and hear the word any number of times. At the end of the test, the machine announces the player's score.

Other games (including a way of putting a word into code and then decoding it) can be played on the keyboard, but none is as interesting or absorbing as the two just described.

A Classroom-Tested Success

I asked Rhonda Knox and her 32 sixth grade students at the Martin Luther King, Jr., Middle School in Boston to test Speak & Spell under actual classroom conditions. The machine caught on quickly, and for three months the kids enthusiastically worked with Speak & Spell in their spare time. The games seemed especially rewarding for kids having writing problems, but the D level of difficulty also challenged faster kids. Some students liked to play alone; others preferred working in pairs.

The machine's voice and beeps were audible throughout the classroom and sometimes bothered kids who were writing or reading. But once Knox established a policy of keeping the game in a corner by her desk, Speak & Spell was less of a distraction and became an accepted part of the classroom—and a valued reward. When the machine was stolen, the class quickly raised money to buy a replacement.

Although the machine's key-pushing format can be a disadvantage if kids substitute working at the console for writing, Knox observed one student writing down the word *licorice* after getting it wrong on the machine,

and she believes that progress made during the hours her students spent working with Speak & Spell was carried over to their written work. However, Speak & Spell was offered strictly as a free-time reward-enrichment item in her classroom.

Any teacher thinking about buying Speak & Spell for a classroom tool should take at least two precautions:

1. Check the quality of the machine's voice. I had to test four machines before I found one I was satisfied with. As with many products in their introductory stages, there may be imperfect copies. Go to the store with four C-cell batteries and be prepared to run Speak & Spell through the D-level Say It routine while you listen for speech impediments.

2. Be on the lookout for sticky keys. Some keys jam, but a blunt knife usually frees them.

Texas Instruments has recently produced an improved model of Speak & Spell (selling for about \$100) geared to classroom use. It has a headphone jack for private listening and an AC plug that will bypass the batteries and possibly improve voice quality. This year Texas Instruments is also offering three plug-in modules that give both machines additional words and activities.

Because this machine actively involves three senses (touching, hearing and seeing), provides instant feedback, offers a nonthreatening approach to spelling, gently corrects errors, individualizes learning and comes in a jazzy portable electronic package, Speak & Spell is a dynamic learning tool for kids aged six and up. It is also a marvelous addition to any classroom. ■

Kim Marshall, a contributing editor for Learning, teaches at the Martin Luther King, Jr., Middle School in Boston.

Busing: Is it curing or poisoning public school system?

By KIM MARSHALL

Before Boston plunged into desegregation, I taught in an all-black, all-poor middle school in Dorchester, one of many such ghetto schools in the inner city. It was segregated, violent, debilitating, neglected and scorned. Our school improved dramatically as a result of desegregation: The court order brought in significant numbers of non-poor students, black and white, energized the staff and got us involved in improving our program and recruiting students. So when I hear people propounding the myth that Boston schools were marvelous until busing ruined them, I reach for my typewriter.

That myth wasn't true of most of the quieter non-ghetto schools either. In the years before desegregation, the Boston public schools were widely regarded as archaic and inferior, insulated from the creative energy of the New Boston by layers of bureaucracy, patronage and mediocrity. Despite pockets of innovation and quality, the schools were rejected by large numbers of middle-class families in favor of parochial, private and suburban schools.

What has been the effect of desegregation on the Boston school? Let's imagine for a moment that citywide busing had never happened. How would things be different than they are today?

— There would be less white flight from the system.

— There would be less racial polarization in the city.

— There would have been less trauma and disruption for many kids.

On the other hand:

— The system would still be segregated, with most black kids going to inferior schools.

— Tens of thousands of kids would have gone through school with very little contact with people of other racial groups.

— There would be less parent involvement in the schools, which, along with less state and federal scrutiny, would have made the school system a good deal less accountable.

— There would be less involvement by local universities, businesses and cultural institutions.

— The schools would not have received millions of dollars of desegrega-

tion money to improve programs.

— There would probably be no magnet schools, which have added a new ingredient of choice for parents and students.

— The system would probably not have hired and promoted a new breed of professionals with fresh energy and ideas.

— The electorate might not have turned to more education-oriented and less politically opportunistic School Committee members.

On balance, the schools are probably better off than they would have been without desegregation. What's more, the last five years have been a learning experience for kids. They have been exposed to tension, hatred and violence, but they have also seen grace, courage, growth and reconciliation. And, at this point, desegregation is not the issue in most classrooms — teaching and learning are.

But the changes catalyzed by desegregation have not been enough to convince thousands of disgusted parents not to pull their kids out of the public schools. There is the real danger that a continuing erosion of white enrollment over the next few years will make a mockery of the desegregation plan, and also touch off a series of debilitating squabbles over school closings, teacher tenure and layoffs and racial hiring quotas.

The problem may be that the improvements of the last five years have only scratched the surface of the deeper malaise of the schools. According to re-

cent research, certain factors at the level of the individual school make all the difference in how well that school does with its students, and many Boston schools have been neglecting these key factors for years:

— A strong, dynamic, omnipresent educational leader as principal.

— A businesslike approach to starting classes on time, collecting homework, etc.

— High teacher enthusiasm for the curriculum.

— Clear, shared academic goals for each grade level.

— A testing program linked to those goals and used to further them.

— High expectations of kids from the entire staff.

— A clean, safe environment.

These are the basics in education today. Schools that contain these ingredients can have an enormous impact on the lives of all their students. The best way for the Boston schools to reverse the flight of the middle class and turn around decades of decline is to find ways of fostering these key factors in every school, making each building into a magnet school. Long after the battle over forced busing is forgotten, the ability of administrators, teachers and parents to work together on these issues will make or break the Boston schools.

Kim Marshall is a 6th grade teacher at the Martin Luther King Middle School, where he has worked for 11 years.

