24® GAME PROGRAMS CASE STUDY

2000-2001 San Diego County, California

Excerpts from A Report by WestEd Educational Laboratory

uring the 2000-2001 school year, more than 640 elementary and middle school classrooms throughout San Diego County received 24[®] game materials to be used with second- through eighth-grade students for a recommended average of five minutes per day.

A U.S. Department of Education grant provided for Jumping Levels[®] kits and/or 24 Game Mathematics Club kits to be sent to participating classrooms. Contents of the kits include age/ability appropriate editions of the 24 game, award stickers, timers, and either posters or Success Charts for documenting student progress.

After using the kits in their classrooms for seven months, teachers were surveyed about their experience.

Survey Highlights

• Most teachers were very enthusiastic about the 24 game program.

• Almost everyone who used the program plans to do so again the following year.

• Most respondents believe that the major value of the program is the reinforcement of basic skills.

• One reason teachers like the program is because *students* enjoy the program.



• Many feel that student enthusiasm for mathematics is the strongest positive effect educators see the 24 game as an effective motivator.

Value of the Program

As part of the survey, all respondents were provided with a list of specific mathematics skills/concepts and were asked to rate the program's value in helping their students develop proficiency in each one. (See figures 1 and 2.)

The top-rated item was "computational skills," with

80.1% of elementary respondents and 77.5% of middle school respondents marking "great value."

Next highest was "number and operation sense," rated of "great value" by 71.5% of the elementary teachers and 60% of middle school teachers.

Students Like It, Teachers Love It.

The most commonly cited reason that teachers want to use the 24 game in their classroom is that "students like it." More *continued* than 90% of elementary and middle school educators stated that this is what makes the programs so effective.

Other frequently mentioned advantages included "sound educational value" and "comparable with state and/or district standards."

As expected, more than 65% of elementary school teachers and 92% of middle school teachers surveyed reported that *every* student participated. These statistics point to the fact that within the framework of the *Jumping Levels/Mathematics Club* programs, every student is able to share in the learning experience—regardless

of his or her ability level.

Overwhelmingly, teachers (96% elementary, 97% middle school) believe that the 24 game materials supported their core mathematics program. The most frequently-cited reasons include:

• Gives students practice with basic mathematics facts and computational skills

• Promotes mental math skills and computational speed

• Fosters problem-solving abilities

• Assists in development of critical-thinking skills

All of the above skills are mentioned as very important Content or Process Standards



by the National Council of Teachers of Mathematics.

Additional Highlights

A majority of teachers indicated they felt the program was of "great value" or "some value" in helping students to "view themselves capable of doing mathematics."

In two other categories,— "helping students to work in small groups to generate problem-solving ideas," and "helping students to communicate,"—a large percentage of respondents felt that the program did have "some" or "great" value. Both of these skills are part of the National Council of Teachers of Math Standards for grades K-12.

In addition, 89% of all respondents indicated that the program has "some" or "significant" positive effect on student self-esteem. A large percentage of the respondents also saw positive effects on the "level of enthusiasm about mathematics and class participation."

For more information about the 24 Game, the Jumping Levels Mathematics Program or 24 Game Mathematics Club Classroom Kits, contact Barbara Asteak or Staci Klemmer at Suntex International Inc. You can also visit Jumping Levels online and sample several 24 game editions at www.jumpinglevels.com

The research cited throughout this article was compiled by WestEd. WestEd is a non-profit educational research lab. (www.wested.org)

