

A spiral-bound notebook with a light brown, textured cover and a dark brown border. The spiral binding is on the left side. The text is centered on the cover.

SBS Math Department Town Meeting

8/08



Welcome

- Mr. Brent MacConnell, Superintendent
- Mrs. Pearl Charatz, Assistant Superintendent
- Mrs. Sallyann Jauch, (Curriculum Coordinator)
- Mr. Todd Havard (Teacher)
- Mrs. Pat McGinley (Teacher)
- Mrs. Jean Scully (Teacher)
- Mr. Jim Stefankiewicz (RBR Principal)



Mrs. Charatz's Comments

- Students' schedule
- Double periods of math
- Fluidity to move in and out of honors program
- Inquiry-based learning requires more time
- Heterogeneously grouped with an accelerated math component

Math Takes Time (August 2006)

A Position of the National Council of Teachers of Mathematics

Question: How much time should schools allocate for teaching mathematics?

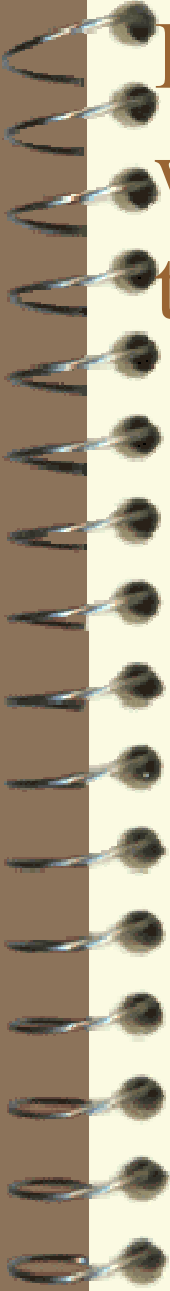
NCTM Position

To learn the mathematics required for today's world, students need adequate time to study and learn mathematics in school. Every student should study mathematics every year through high school, progressing to a more advanced level each year. All students need to be engaged in learning challenging mathematics **for at least one hour a day at the elementary, middle school, and high school levels.**

Student Schedule

- Increased number of Math classes

- Experience a rigorous, progressive core curriculum of meaningful mathematics, making appropriate use of technology in the process
- Actively develop mathematical ideas, make connections, and explore extensions
- Integrate mathematical topics with those in other disciplines
- Discover the connections between mathematics and their lives via contextual learning
- Experience differentiated instruction and appropriate interventions, such as additional time or group work
- Discuss and refine ideas with one another and their teachers



Research shows that students learn best when mathematical pedagogy focuses on teaching for understanding.

We understand that some students struggle with mathematics concepts or need an aggressive curriculum; those students should be supported with more mathematics instruction to prepare them for their future in a technological world.

- Recommended average amount of math instructional time should be no less than approximately 80mins – according to the Wisconsin Math Council



Updated Curriculum

- Our Math curriculum is standards based, driven by the New Jersey Core Curriculum Content Standards.
- For every grade, each Strand and Cumulative Progress Indicator is included.
- Within our Math curriculum guides, Sample Activities are provided for each skill.



Academic & Professional Standards

[Curriculum and Instruction](#) » [CCCS](#)

[Search Standards](#)

4. Mathematics

4.1 Number and numerical operations	4.2 Geometry and Measurement	4.3 Patterns and Algebra	4.4 Data Analysis, Probability, and Discrete Mathematics	4.5 Mathematical Processes
Grade Six	Grade Six	Grade Six	Grade Six	Grade Six
Grade Seven	Grade Seven	Grade Seven	Grade Seven	Grade Seven
Grade Eight	Grade Eight	Grade Eight	Grade Eight	Grade Eight
Grades 9-12	Grades 9-12	Grades 9-12	Grades 9-12	Grades 9-12



STATE OF NEW JERSEY
DEPARTMENT OF EDUCATION
Academic & Professional Standards

4. Mathematics

STANDARD 4.1 (Number and numerical operations) All students will develop number sense and will perform standard numerical operations and estimations on all types of numbers in a variety of ways.

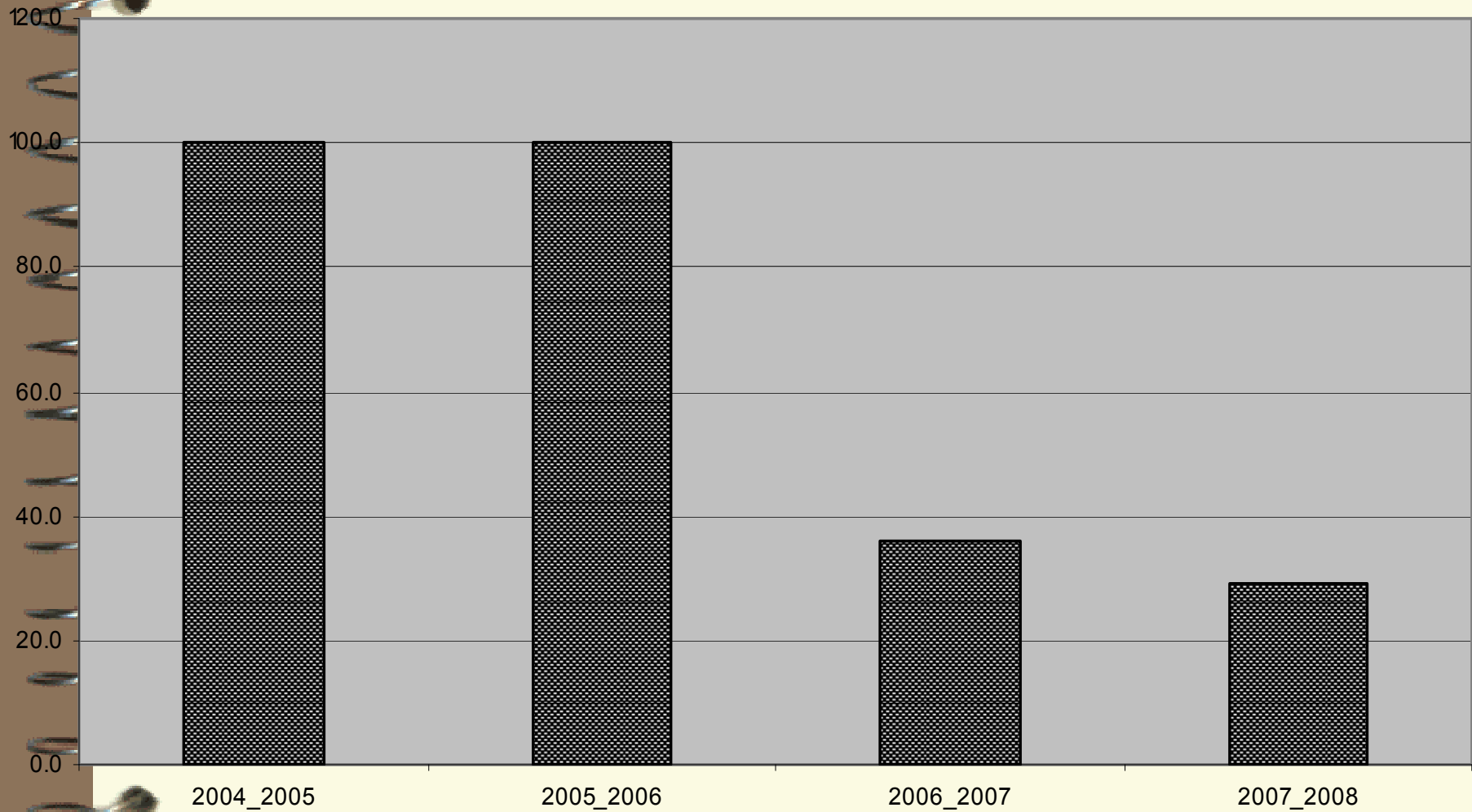
Strand and Cumulative Progress Indicator

Building upon knowledge and skills gained in preceding grades, by the end of Grade 8, students will:

A. Number Sense

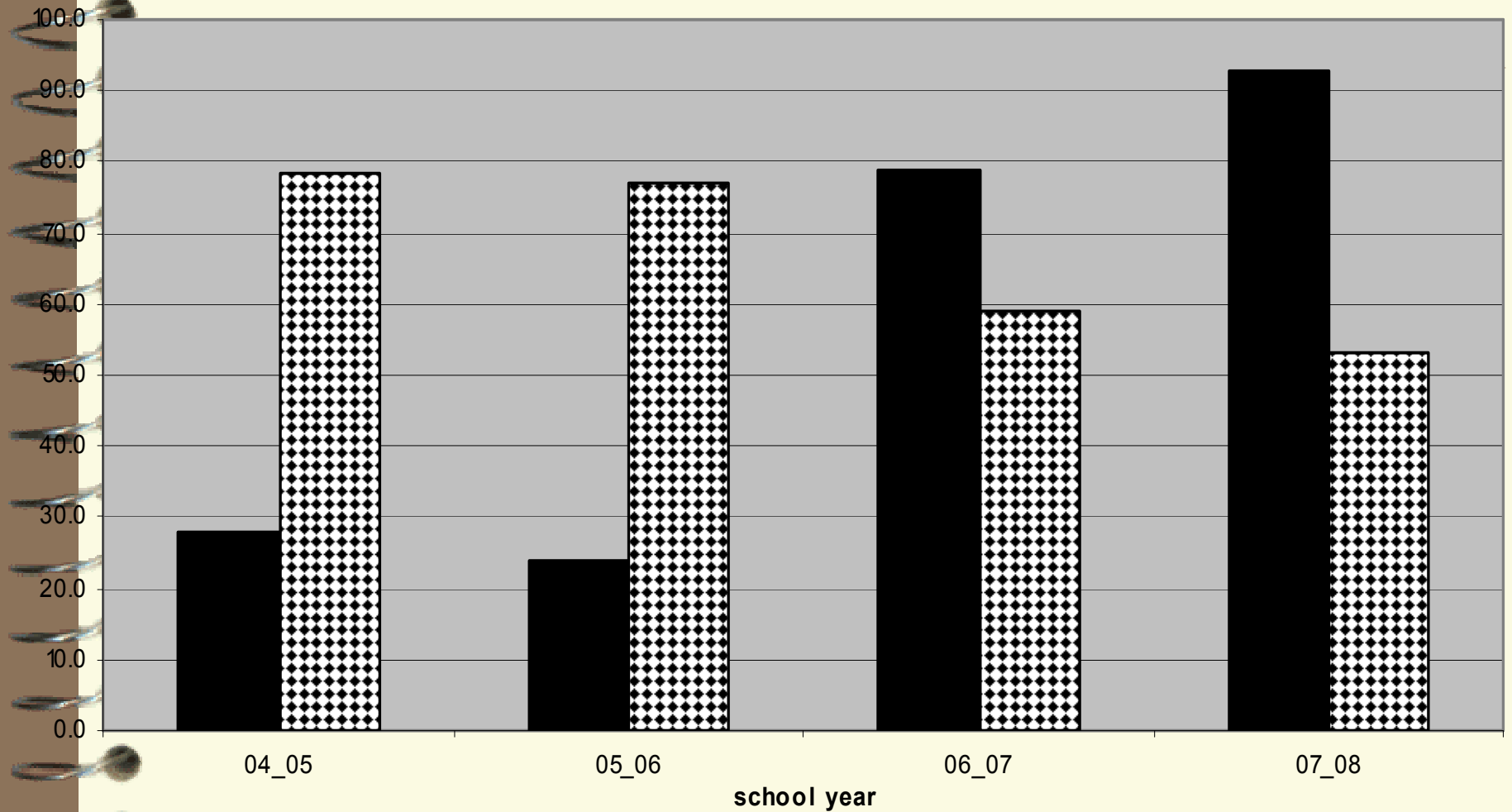
1. Extend understanding of the number system by constructing meanings for the following (unless otherwise noted, all indicators for grade 8 pertain to these sets of numbers as well):
 - Rational numbers
 - Percents
 - Exponents
 - Roots
 - Absolute values
 - Numbers represented in scientific notation

% of Students With Passing Exam Average (RBR Midterm and Final Exams)



■ %>65

% of Students in Alg I vs. Avg Exam Score (RBR Midterm and Final Exams)

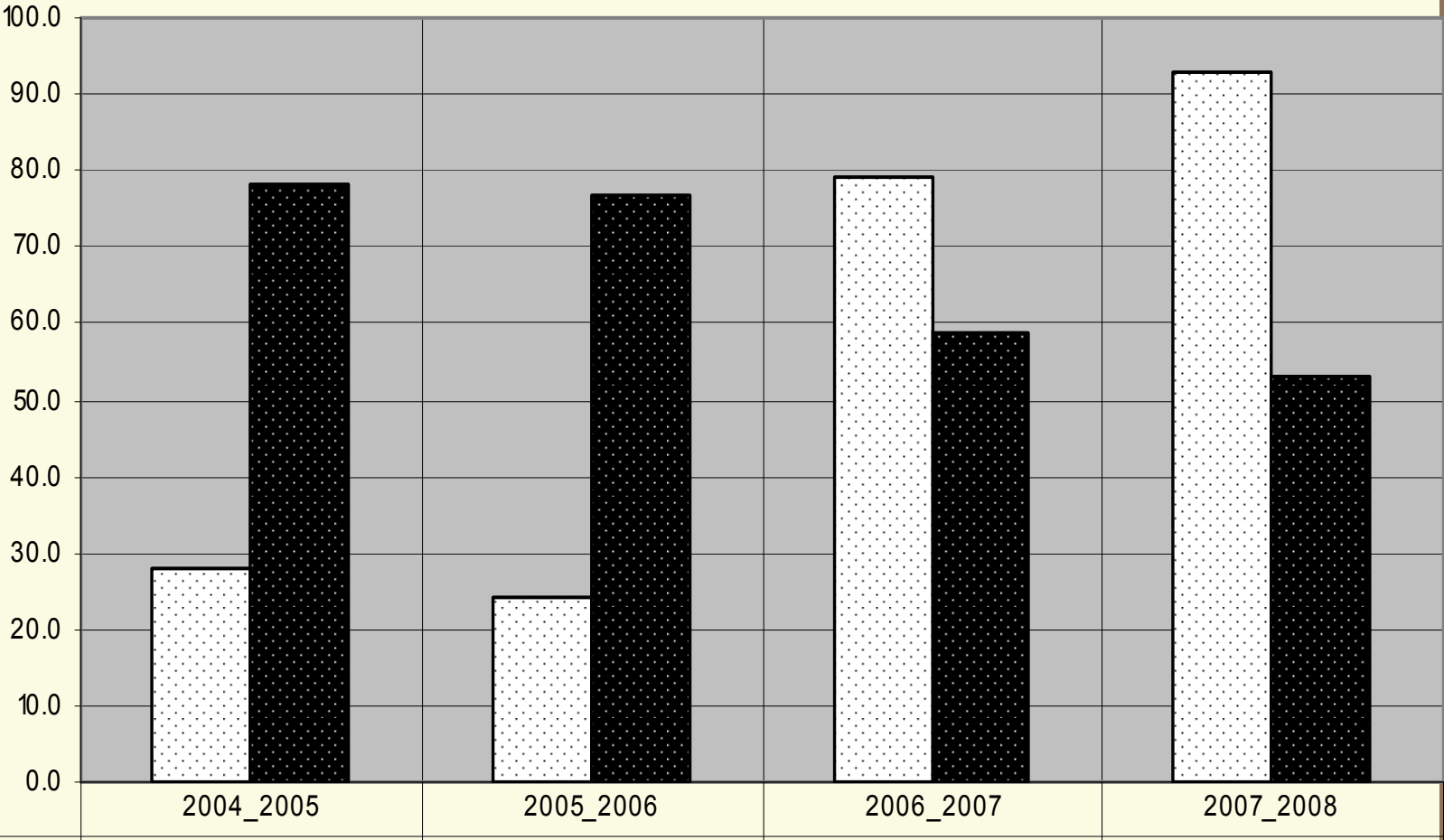


■ % of students in Alg I

▣ avg Alg exam grade

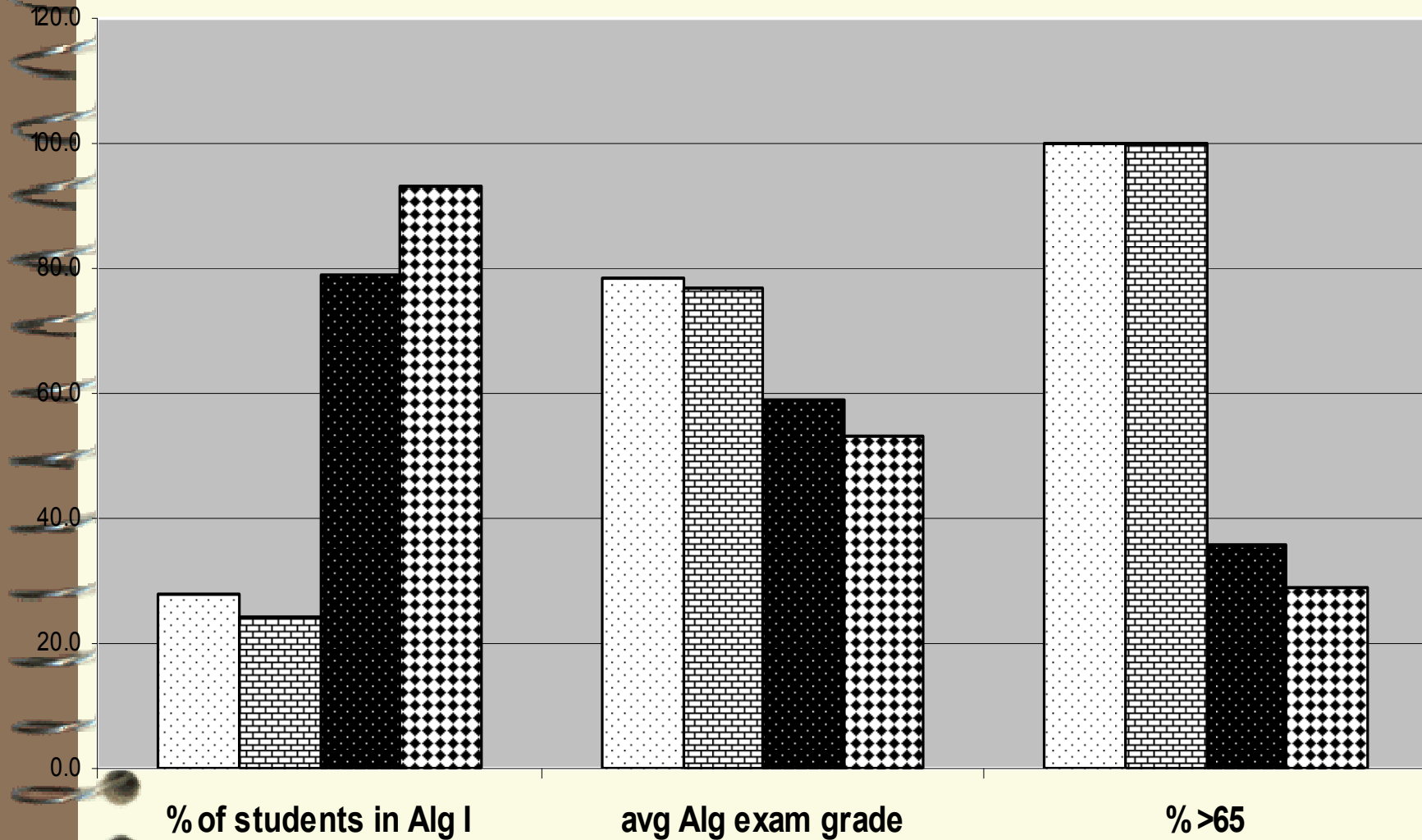
SBS Algebra Overview 2004-2008

% of students in Alg I
 avg Alg exam grade



 % of students in Alg I	28.0	24.0	79.0	93.0
 avg Alg exam grade	78.2	76.9	59.0	53.3

SBS Algebra Comparison



2004_2005

2005_2006

2006_2007

2007_2008

Profile - Middle School Accelerated Math

- Ability to think abstractly & mathematically
- Strong communication skills
- Strong study skills
- Independent thinker
- Self-motivated
- Responds enthusiastically to challenges
- Perseverant
- Inductive & deductive reasoning ability
- Zest for mathematical problem solving
- High interest in technology

A spiral-bound notebook with a light brown, textured cover and a dark brown border. The spiral binding is on the left side. The text is centered on the page.

Thank you for coming tonight!

SBS Math Department
Town Meeting