

# Marzano's Homework and Practice Research

What you need to know about  
homework and practice  
in high school

# Categories of Instructional Strategies That Affect Student Achievement

Category	Average Effect Size	Percentile Gain
Identifying similarities and differences	1.61	45
Summarizing and note taking	1.00	34
Reinforcing effort and providing recognition	.80	29
Homework and practice	.77	28
Nonlinguistic representation	.75	27
Cooperative learning	.73	27
Setting objectives and providing feedback	.61	23
Generating and testing hypotheses	.61	23
Questions, cues, and advance organizers	.59	22

# # 4 Homework and Practice

- The amount of homework assigned to students should be different from elementary to middle to high school
  - Homework in high school produces 24 pt gain
  - Homework in middle school produces 12 pt gain
  - Homework in elementary school produces a 6 pt gain

# Homework in High School

- The more homework that high school students do the better their achievement (Keith 1982)
- For every 30 minutes of additional homework, overall grade point average increases
- Example: If student with 2.00 GPA increases homework by 30 minutes, GPA will rise to 2.50
- Recommended total minutes per day for high school homework: 60—180 minutes

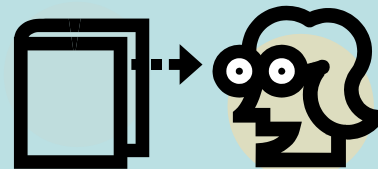


How does this compare to your current practice?

# Homework

- Parent involvement in homework should be kept to a minimum
  - Parents can be informed of the assignment
  - Parents shouldn't help with homework, such as solving content problems etc.
  - Parents can facilitate homework by encouragement, and providing suggestions for speed and accuracy with a timer etc.

Take a look at the parent handout



# Homework

- The purpose of homework should be identified and articulated
  - Is it for Practice?
    - Material should be very familiar to students
    - Practicing with unfamiliar material can create misconceptions
  - Is it for Preparation or Elaboration?
    - Then students don't need in-depth understanding
    - Prepares students for new concepts

# Homework

If homework is assigned, it should have some type of comments

Research Results for Graded Homework	
Use of Homework	Percentile Gains
Homework with teacher comments	30
Graded homework	28
Assigned homework but not graded or commented on	11

Walburg (1999)

# Research on “Practice”

- **Mastering a skill requires a fair amount of focused practice**
  - Generally after 24 practice times a student reaches 80% competency
  - Learning new content does not happen quickly; it requires practice over time
- **While practicing, students should adapt and shape what they have learned**
  - Learners attend to their conceptual understanding during new learning
  - Shaping phase is not the time to press for skill performance with speed over lots of material



# “Practice Tips”

- Design practice assignments that focus on specific elements of a complex skill or process
- Plan time for students to increase their conceptual understanding of skills or processes

Check your notes on HW and practice

