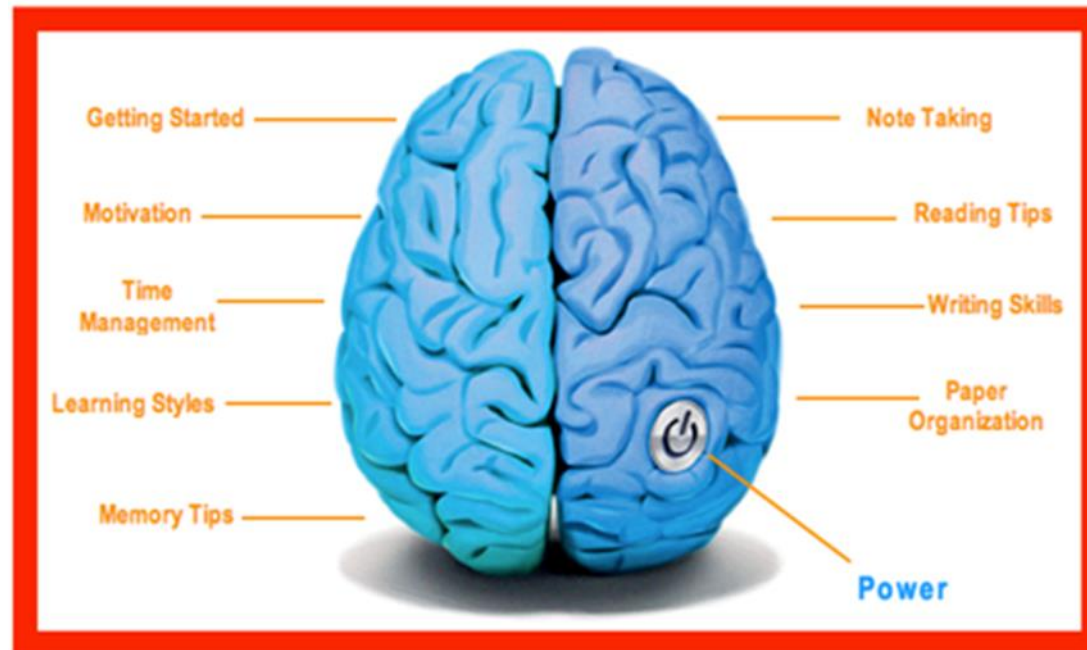


Study Smart: Study Strategically

Supporting Students' Academic Transitions to College

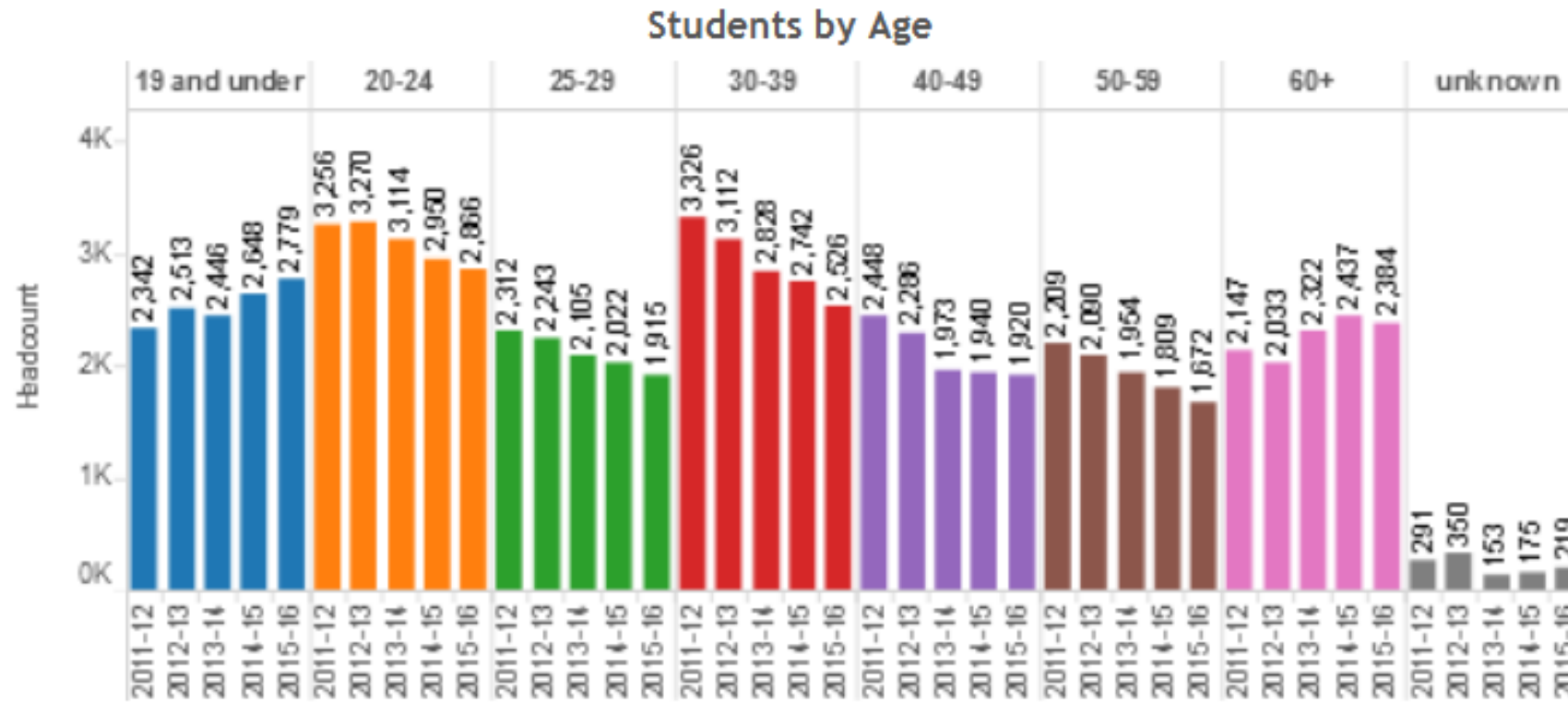
NEED HELP USING YOUR
NECKTOP COMPUTER?



Overview



What Transitions?



Entering College Student Trends, 1968/71 vs. 2002

Guesses?

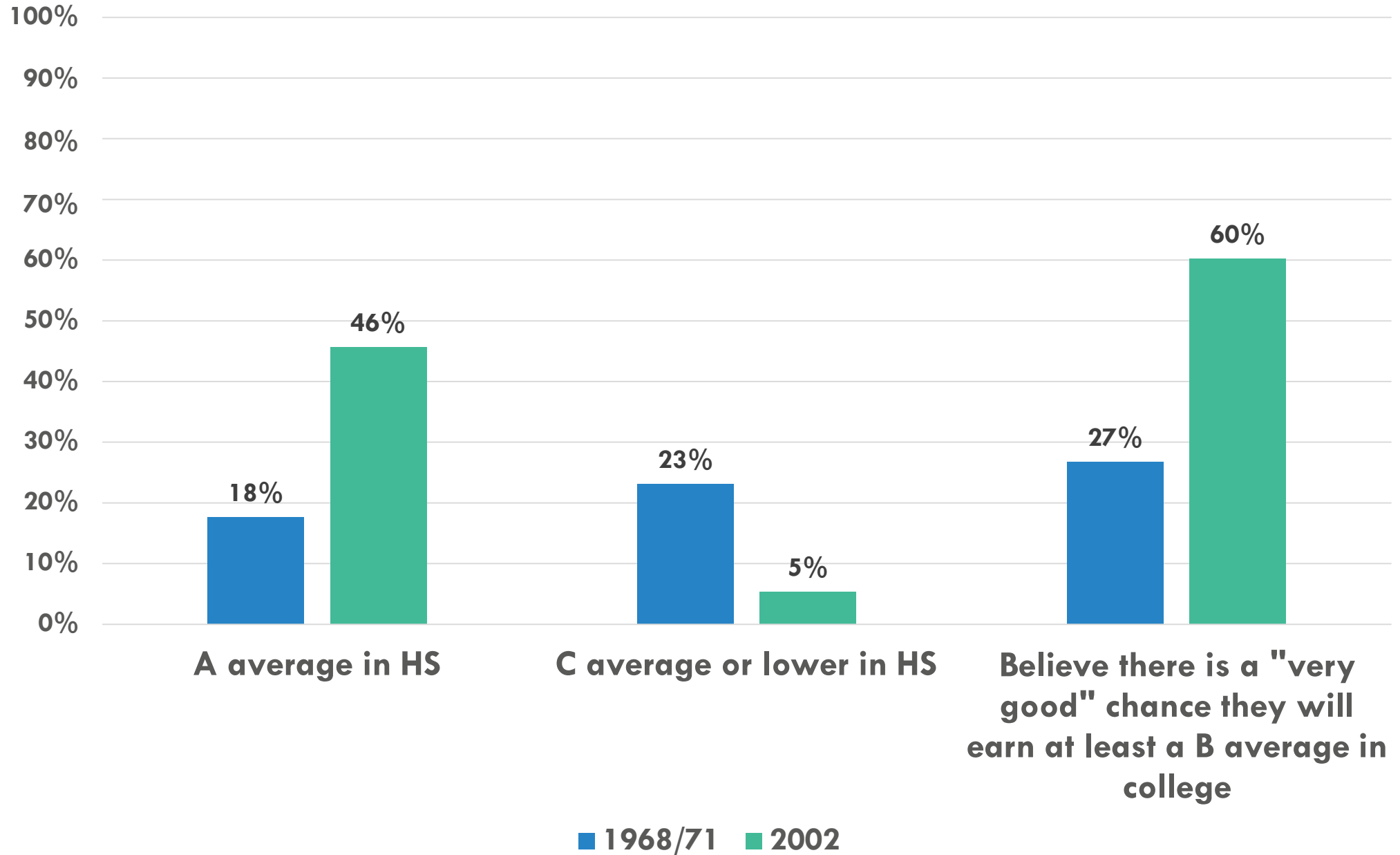


N = 350k entering college students

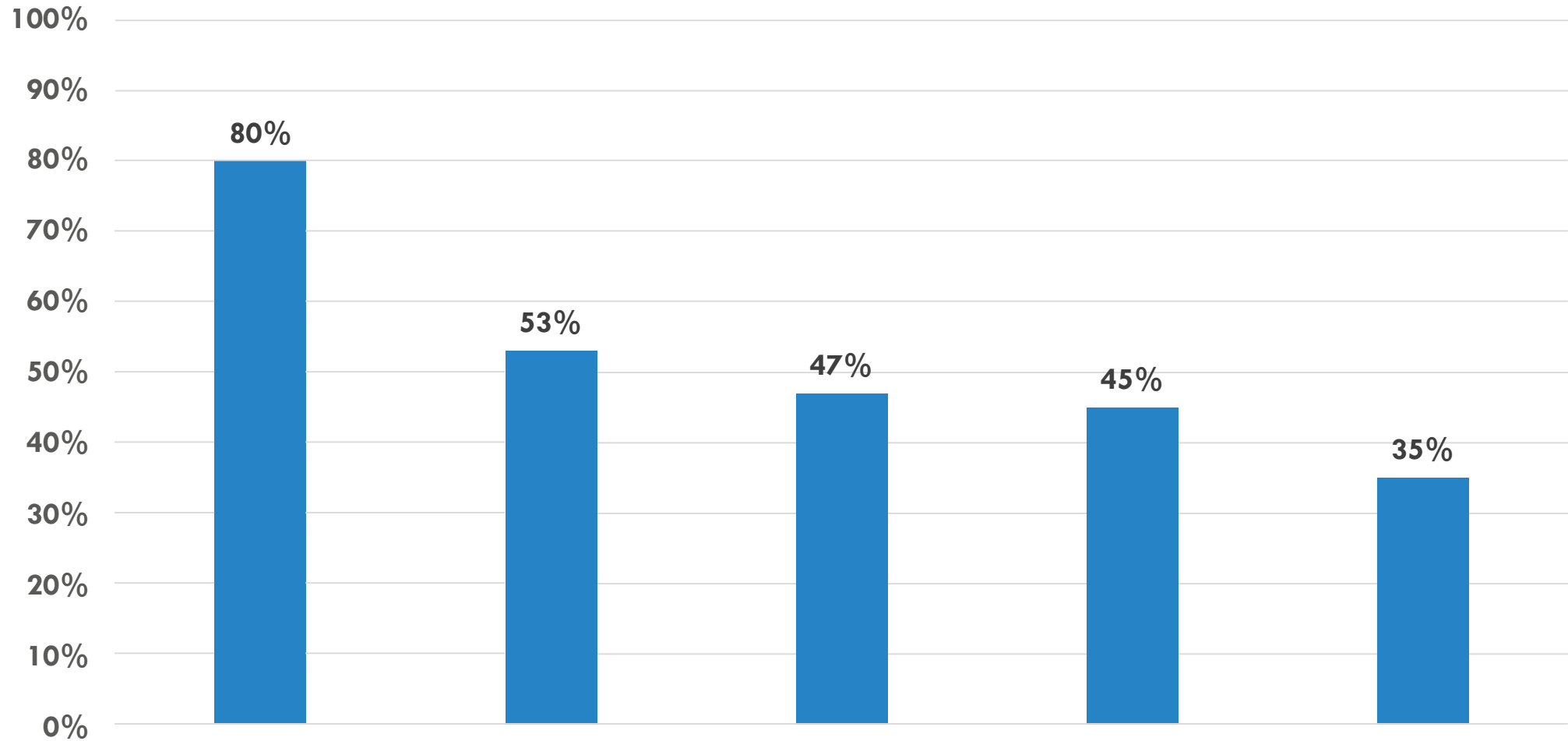
Source: Cooperative Institutional Research Program (CIRP)

■ 1968/71 ■ 2002

Entering College Students Trends, 1968/71 vs. 2002



High School Seniors' Self-Reported Behaviors & Attitudes



**Spend < or =
3 hrs/wk
reading
assigned
materials**

**Put forth a great
deal of effort
on schoolwork**

**Schoolwork
makes them
curious to learn
about other
things**

**Are challenged
to do their best
work at school**

**Are excited
about their
classes**

*N = 170k HS seniors
Source: High School
Survey of Student
Engagement (HSSSE)*

COMMON TRANSITION ISSUES

No expectations

Unrealistic expectations

Overconfidence

Different types of challenges

Faster pace,
deeper
understanding

Time less
structured

Lack of
Confidence

Choices/Balance

Wellness

Self-direction of
learning

What struggles do *your* students face?

Schlossberg's Transitions Theory

- A transition is an event (or non-event) that results in change
- 4 things that determine the severity of a transition
 - Situation
 - Self
 - Supports
 - Strategy

Self-Regulated Learning: thinking, motivation & behavior during learning



(Schloemer & Brenan, 2006)



Self Reflection:
"Am I reaching my goals through the strategies I created?" (Chen, 2011)

Non self-regulating students say things like....

I just do
what my
teacher
tells me

Will Power

If I'm having trouble
motivating myself
to complete my
homework, I just
work harder

Self-Reflective Questions

- Is the amount of time you are spending on learning strategies enough?
- What learning strategies are working well?
- What learning strategies are not working well?
- What additional learning strategies, if any, are needed to stay on track toward your goal?
- Would seeking help assist you in achieving your goal? Who can help?



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STUDY

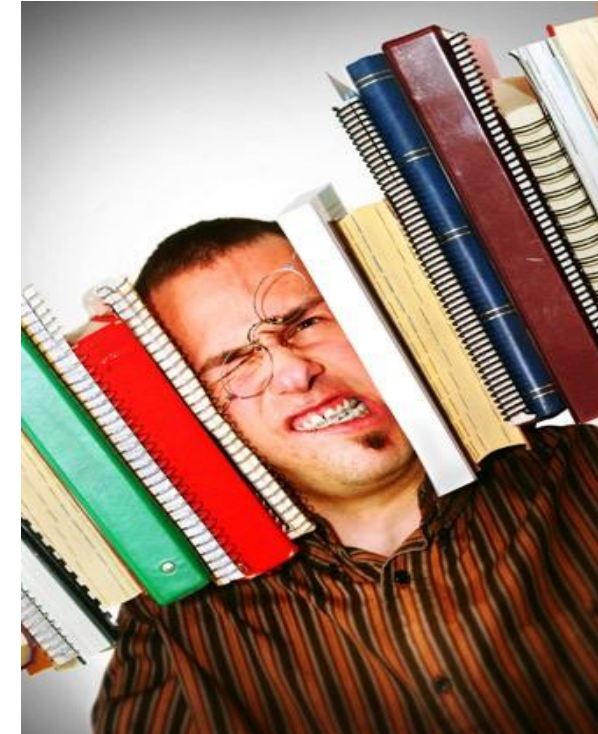
The act of texting, eating
and watching TV with an
open textbook nearby

What ineffective study methods
have your students used?

What effective study methods
have your students used?

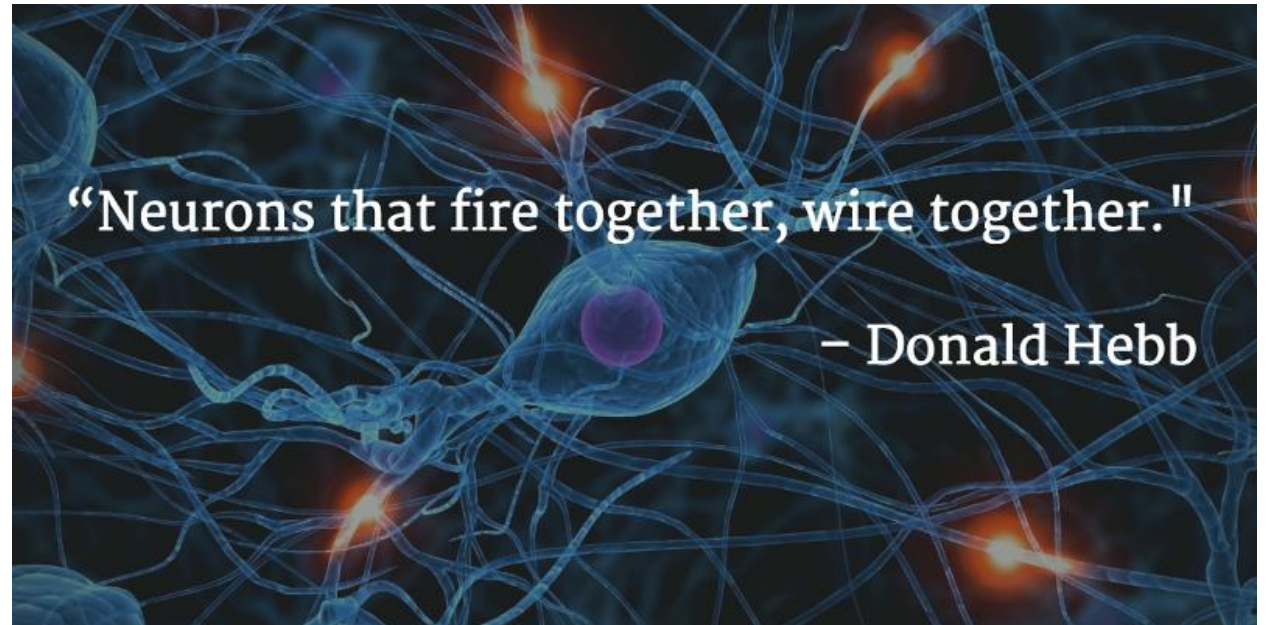
What we KNOW isn't effective.....

- Massed Learning (cramming)
- Highlighting
- Re-reading
- Direct repetition

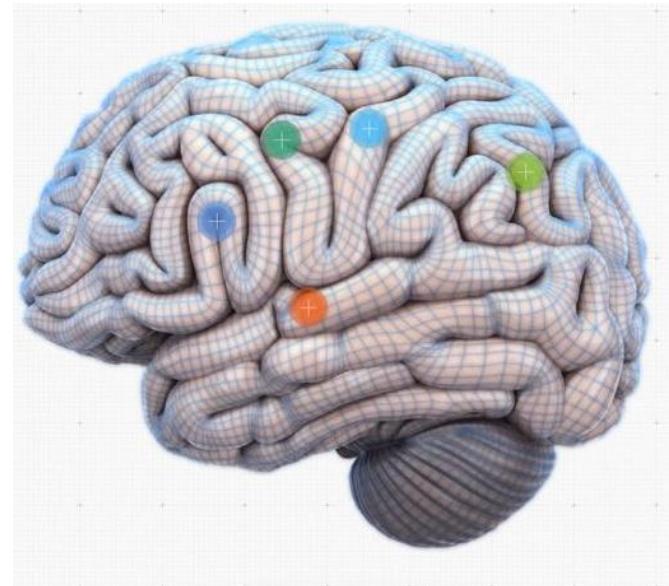


Strategies

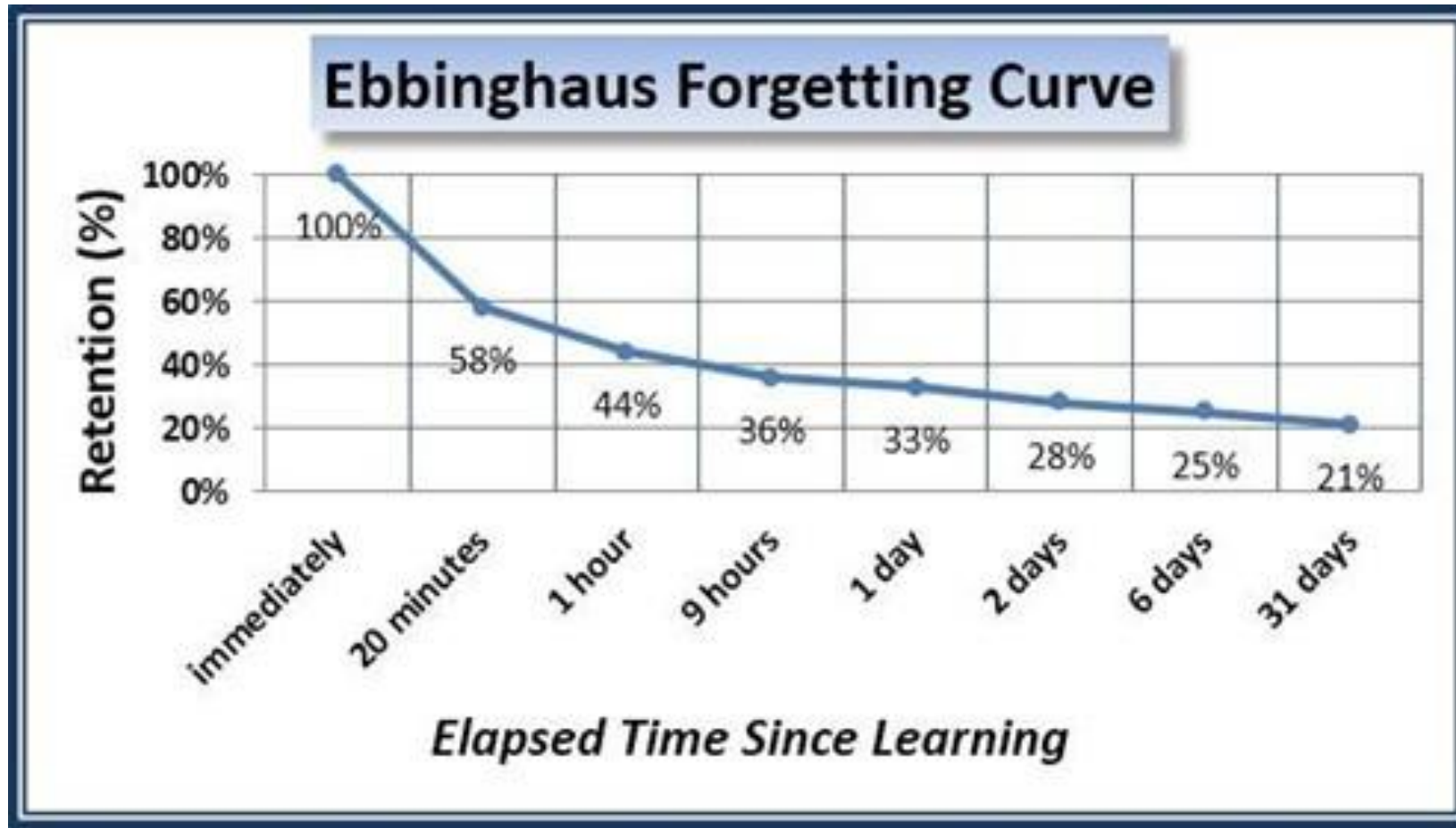
- Intelligent Practice
- Spaced Repetition/Distributed Practice
- Self-Testing/
Practice testing
- Recall
- Elaborate Rehearsal



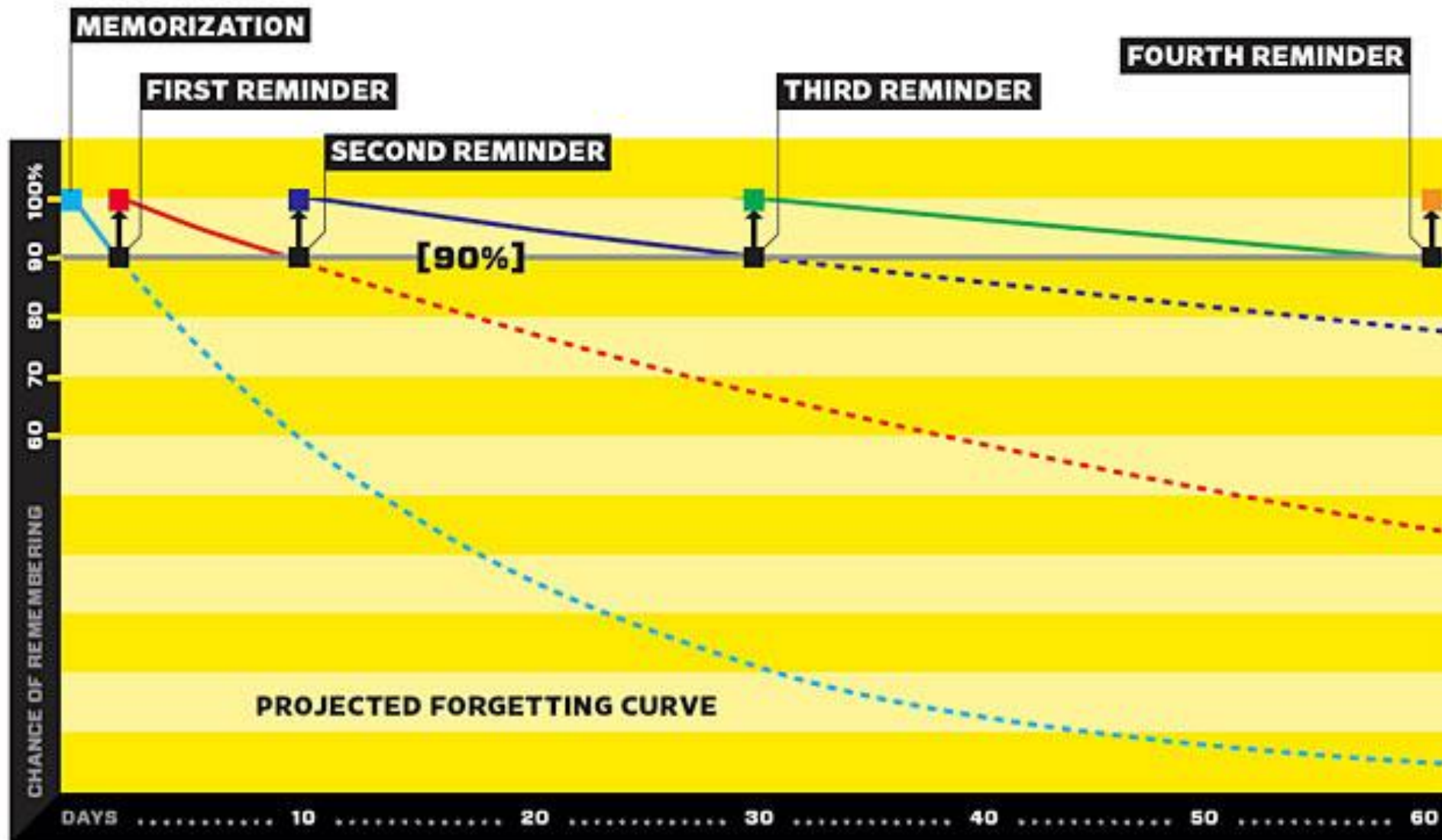
The Brain that does the work is the Brain that learns



Spaced Repetition: Ebbinghaus's Forgetting Curve



Spaced Repetition/Distributed Practice



Optimal Interval Ranges

Time to Test	First Study Interval
1 Week	1-2 Days
1 Month	1 Week
3 Months	2 Weeks
6 Months	3 Weeks
1 Year	1 Month

Cepeda, Vul, Rohrer, Wixled & Pashler (2008)

Pomodoro



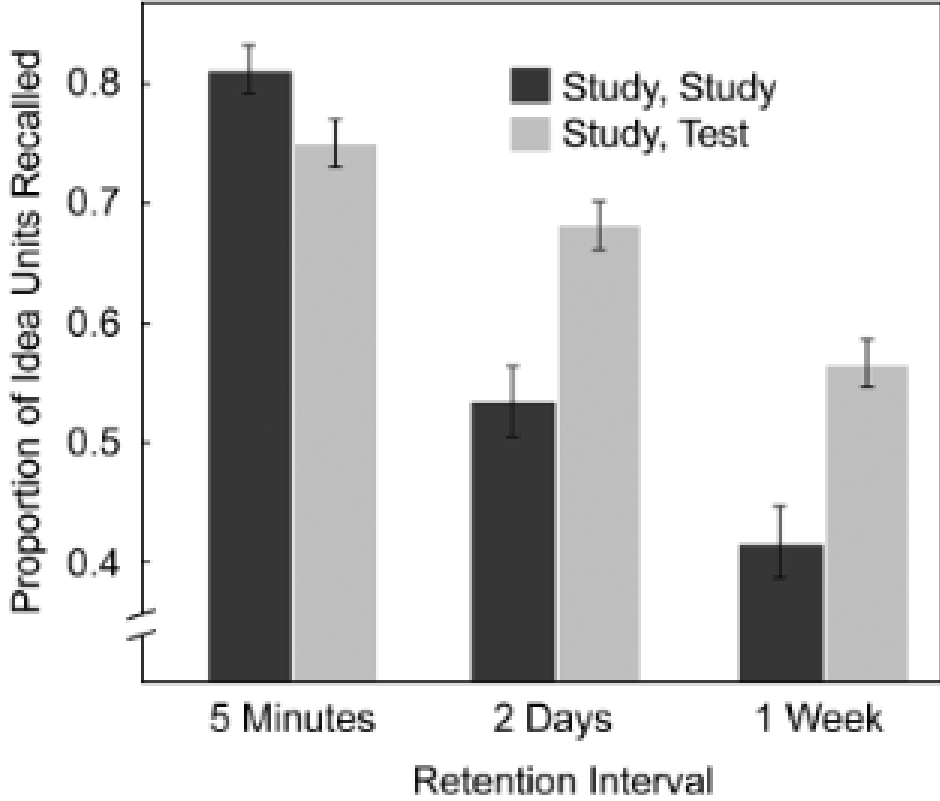
- ✓ 25 minutes
- ✓ no interruptions
- ✓ focus
- ✓ reward!

Application



- Space out your reading studying
- Review notes and study materials multiple times at different study sessions
- Study regularly instead of waiting till the exam
- Before class, review notes and materials from last class; after class (or at home) review notes from that day
- Try apps such as Anki (or ankiweb), Quizlet, Tiny Cards

Testing Effect



Research on Testing Effect

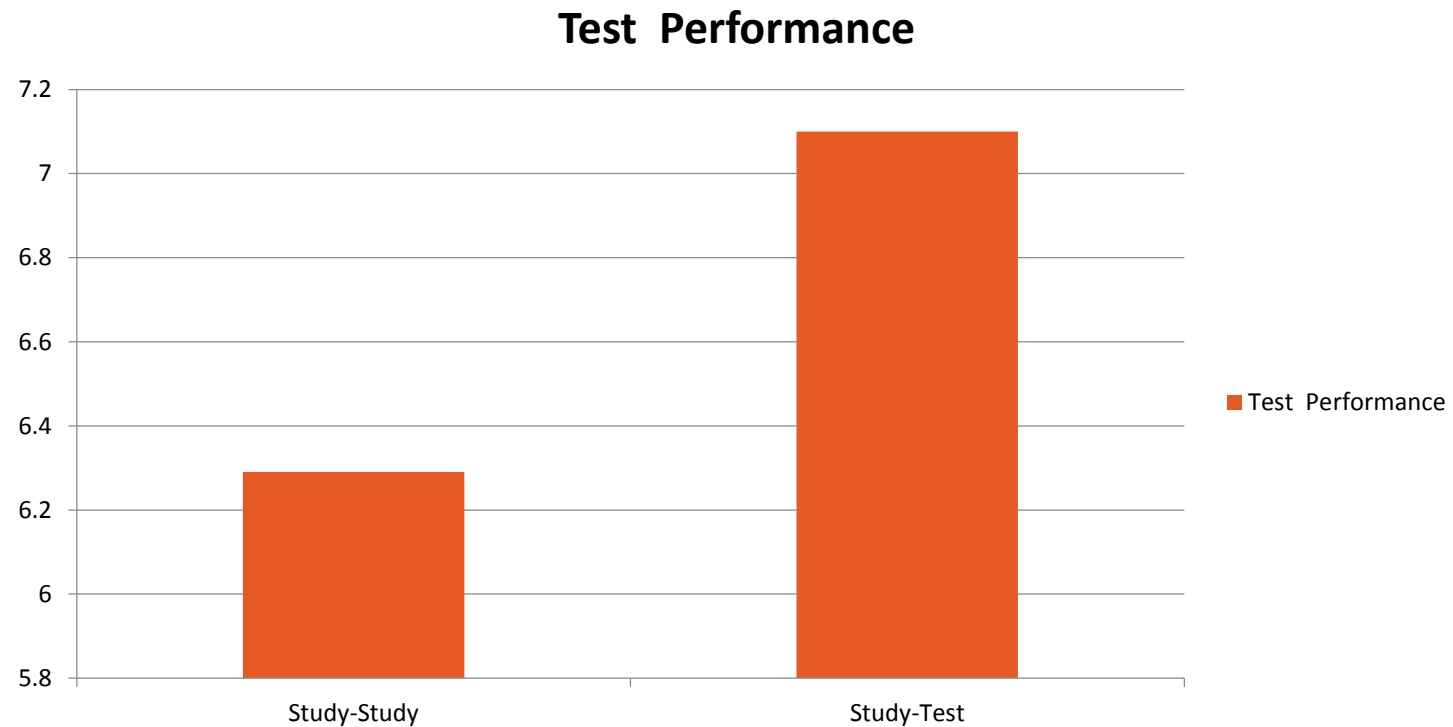
Einstein, Mullet, & Harrison, (2012)

Who? 52 college students taking an upper level course on Memory

Study-Study	Study-Test	Self-Assessment	Presentation
<ul style="list-style-type: none">• Read and Study passage 4 minutes• Read and Study passage 4 minutes	<ul style="list-style-type: none">• Read and Study passage 4 minutes• Recall as much as possible for 4 minutes	<ul style="list-style-type: none">• How well did you remember the content?	<ul style="list-style-type: none">• 20 Minutes on Testing Effect

The Results

Einstein, Mullet, & Harrison, (2012)



But... Students thought they did equally well

The Results

Einstein, Mullet, & Harrison, (2012)

Students were
MORE likely to
USE TESTING

as a study tool after this
demonstration!

67% used testing during
reading

82% used testing strategy
when studying

Application



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- Testing **improves memory**
- Learning about research-based strategies **increases likelihood you will use effective study techniques**
- Self Quiz through flashcards, free recall, practice tests, study groups

Research on Studying

Dickinson and O'Connell (1990)

Research Question:

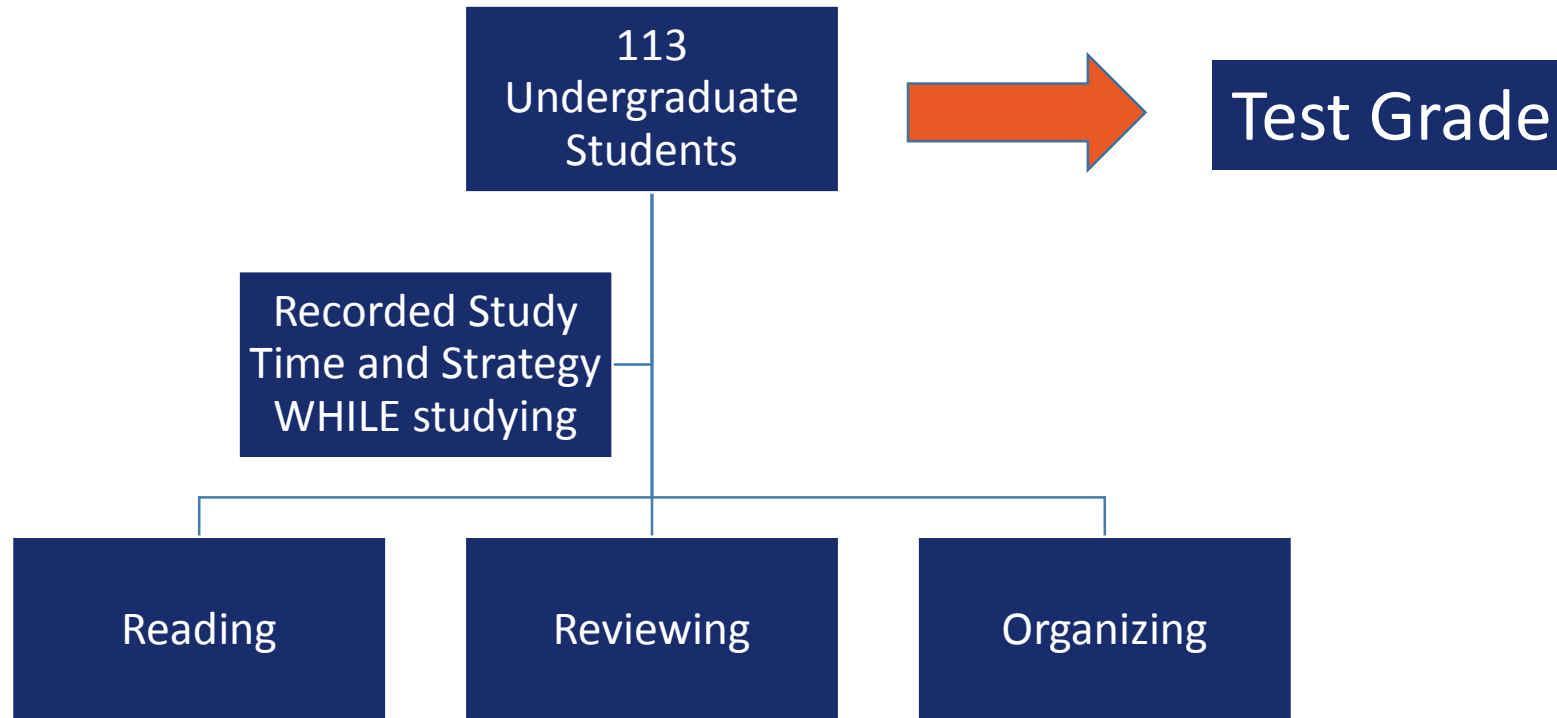
Does **how long** you study or **how** you study matter more? What study approach works best?



Tom Peterson, Middlesex County College

The Study

Dickinson and O'Connell (1990)



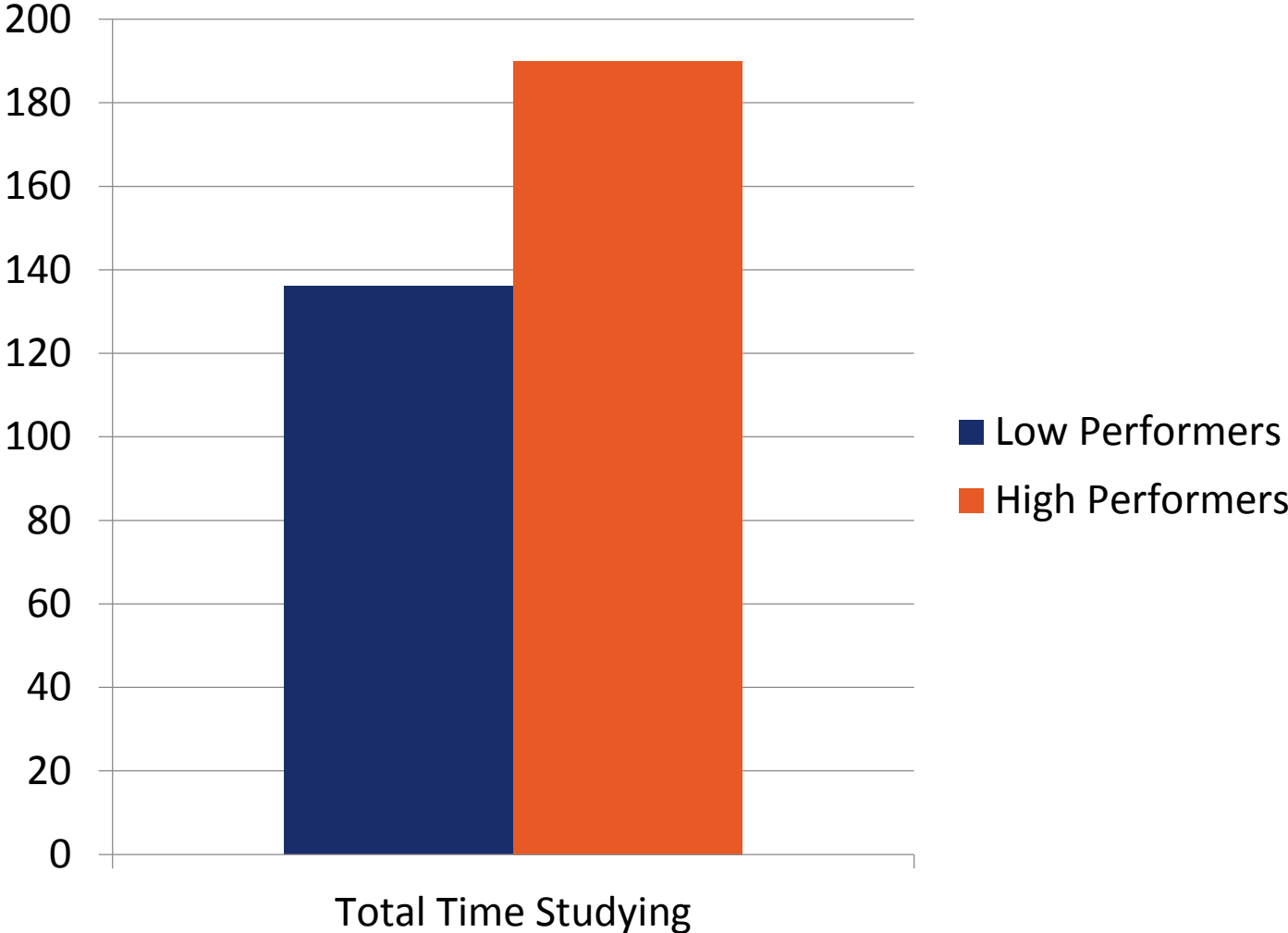
Defining Organizing

Dickinson and O'Connell (1990)

- Put information into your own words
- Create links between concepts via a hierarchical structure
- Create examples to help concepts come alive

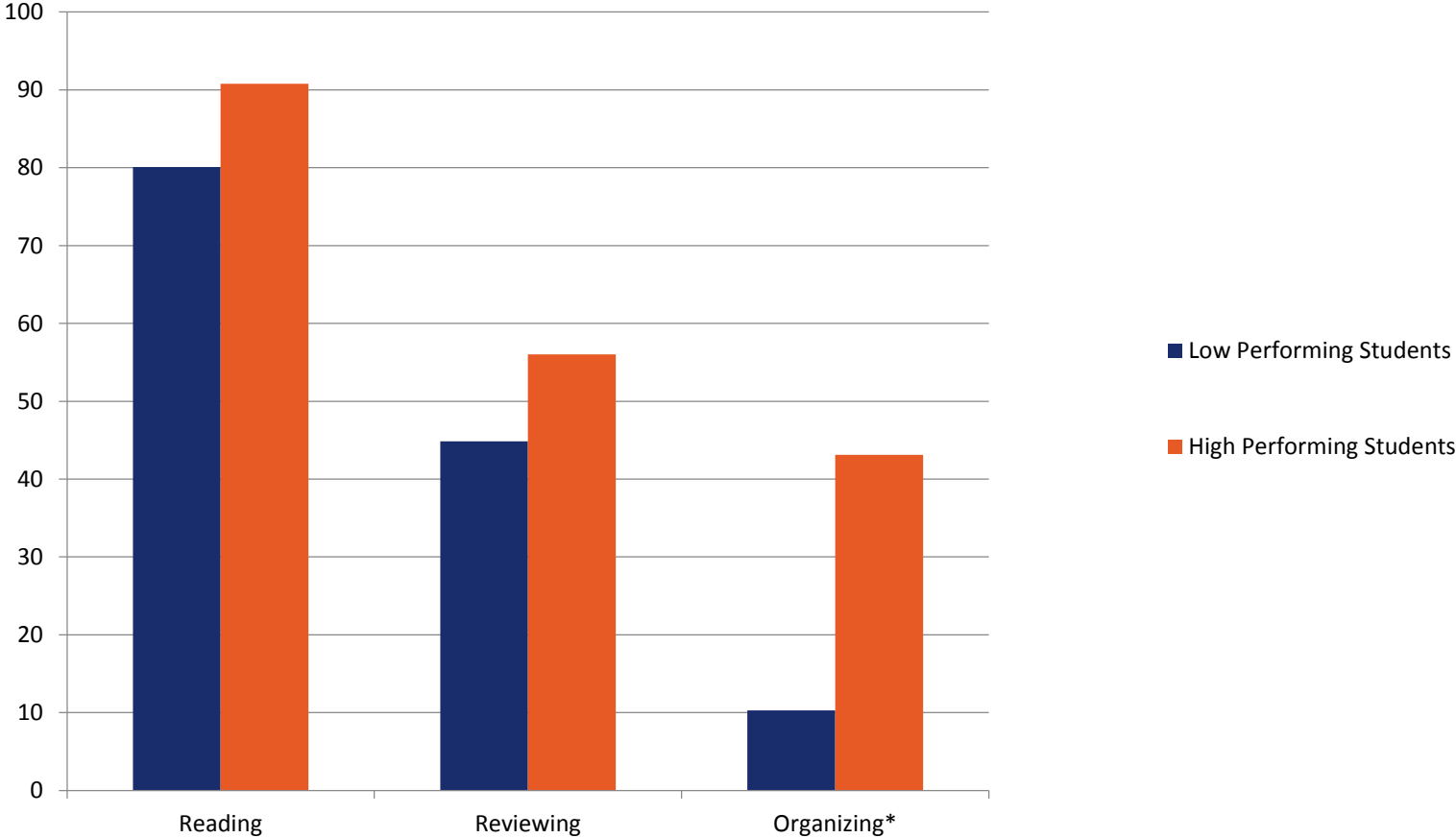
The Results!

Dickinson and O'Connell (1990)



The Results!

Dickinson and O'Connell (1990)



Application

- Reading and reviewing, while important, are NOT enough!
- Increasing organizing techniques will maximize study time
- Use Elaborate Rehearsal – summaries, graphic organizers, teach others, alternate problem solving techniques



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Exploring the Research

McDaniel, Howard, & Einstein (2009)

Research Question:

Which reading strategy works best?

- Re-reading
- Note-taking
- 3R



Tom Peterson, Middlesex County College

The 3R Method



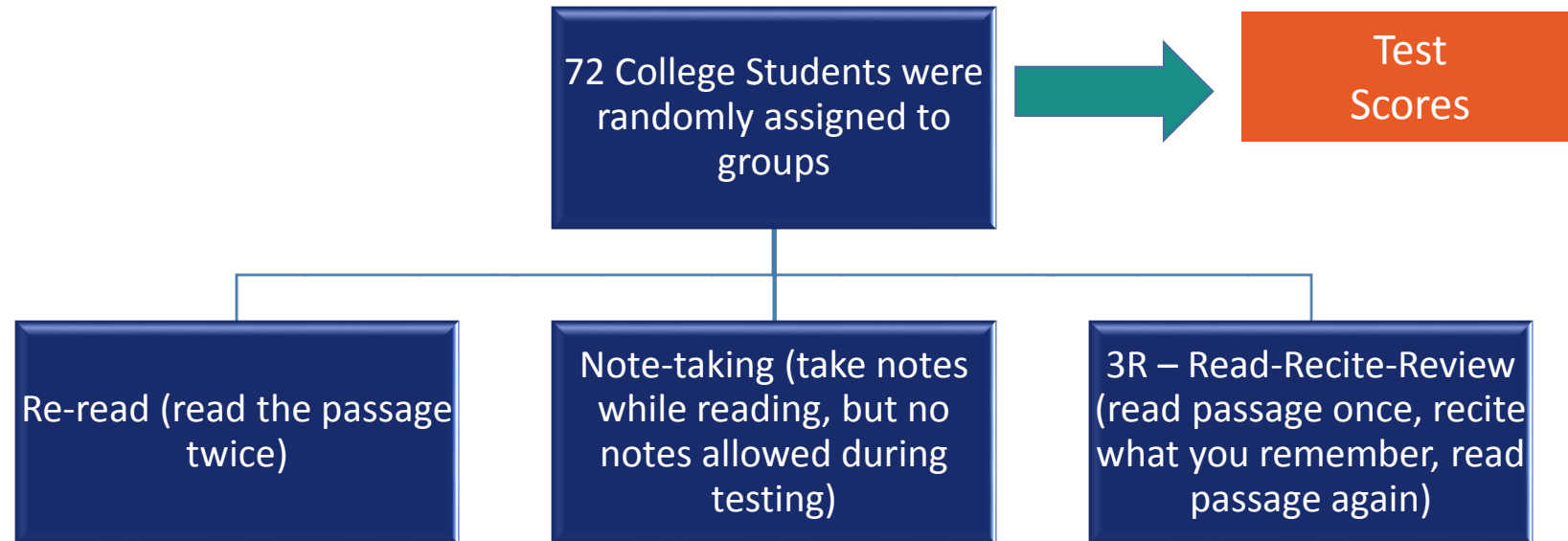
Read

Recite

Review

The Study

McDaniel, Howard, & Einstein (2009)




The Results!

McDaniel, Howard, & Einstein (2009)

Students who used the 3R method did better on fact based questions



The 3R and Note-taking methods worked best with problem-solving tasks



The 3R method was less time consuming than the note-taking method

Application

- Using the 3R technique will not add significantly to study time, but will likely lead to more positive academic outcomes
- Consider both verbal and written methods for step 2- Recite



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The Research Question

Dietz-Uhler & Lanter (2009)

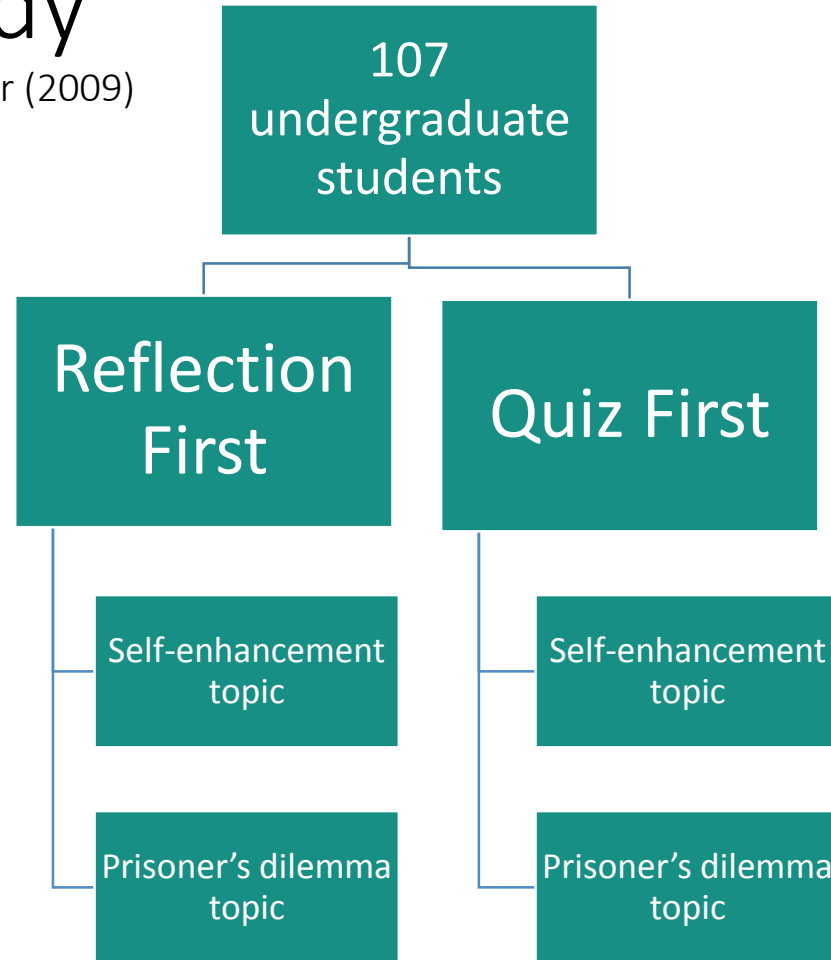
Will students who complete a four question self-reflection activity before a quiz perform better than students who complete this activity after the quiz?



Tom Peterson, Middlesex County College

The Study

Dietz-Uhler & Lanter (2009)



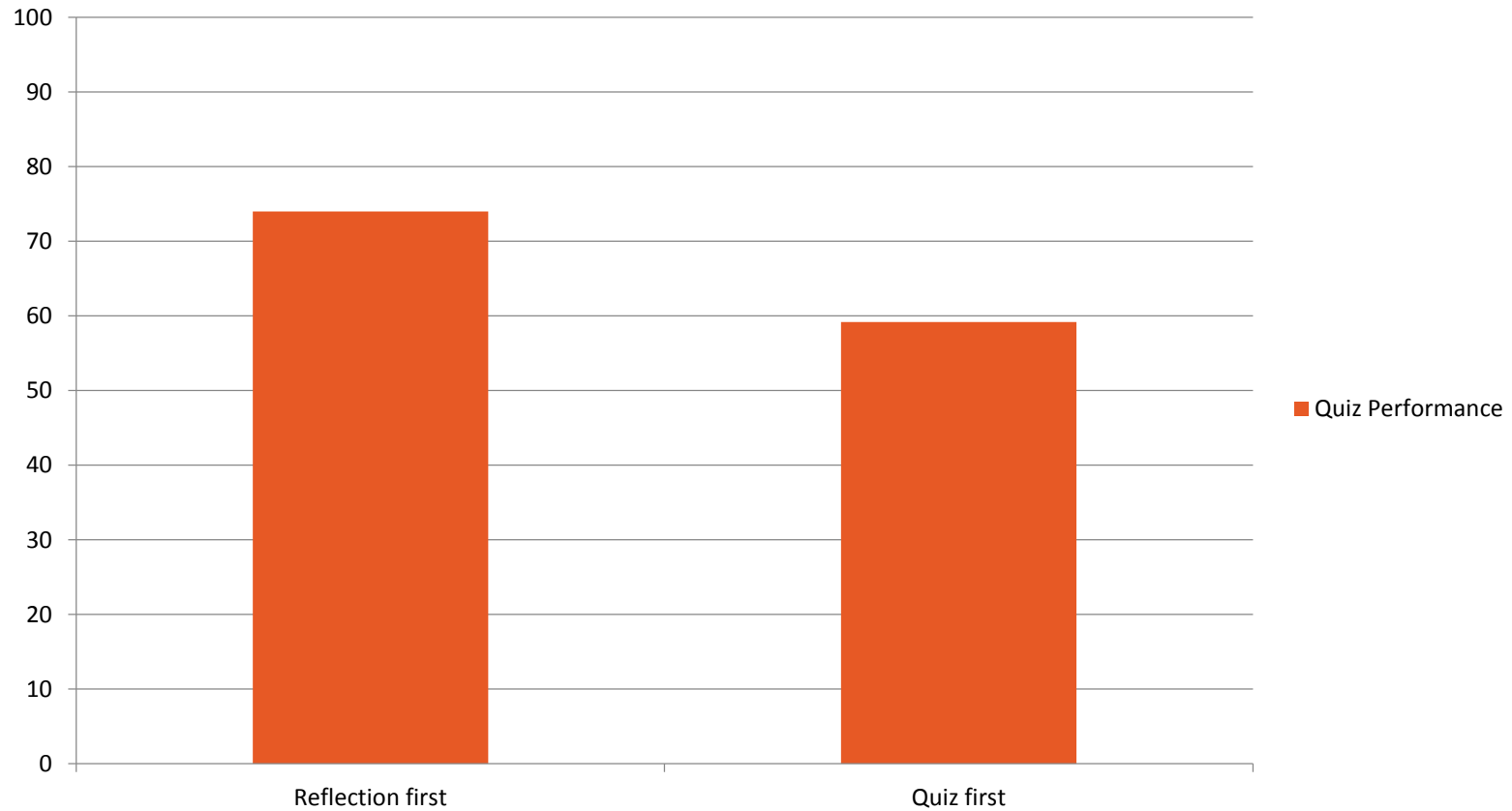
The Reflection Exercise:

- Analyze
- Reflect
- Relate
- Question

The Results!

Dietz-Uhler & Lanter (2009)

Quiz Performance



Harrington, 2014

Application

Dietz-Uhler & Lanter (2009)



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Ask yourself reflective questions such as:

- “What is the purpose of learning this information?”
- “What are the benefits of learning this information?”

What do we know?

- <https://play.kahoot.it/#/k/a404e79a-4642-44d6-9e06-d779b448957c>

On your card:

What's one study strategy you can use or share in your class next week?



Questions????