

Acquiring Knowledge & Student Engagement

Welcome!

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If the segment involves new knowledge what
do you expect to see?

- Identifying critical information
- Organizing students to interact with new information
- Previewing new content
- Chunking content into 'digestible bites'
- Group processing of new information
- Elaborating on new information
- Recording and representing knowledge
- Reflecting on learning

Let's Try It...



Our Learning Goal

We will understand
multitasking.



SUPERVISING JAY
PRODUCER KOSOV

Activity (Worksheet)

Activity

Multitasking is worse than a lie

1st Try

M
1

Activity

Multitasking is worse than a lie

2nd Try

M
1

Table Family Discussion

- When do YOU multitask?
- WHY do you multitask?
- When do you NOT multitask?

A Quiz...

Multi-tasking

True/False

- People get better at multi-tasking if they practice.

True/False

- People get better at multi-tasking if they practice.
- True – to a point...

True/False

- Women are better at multi-tasking than men.

True/False

- Women are better at multi-tasking than men.
- False – sort of

True/False

- Digital natives are better at multi-tasking than digital tourists.

True/False

- Digital natives are better at multi-tasking than digital tourists.
- False

True/False

- People who multi-task have better memories.

True/False

- People who multi-task have better memories.
- False

True/False

- People who multi-task are more efficient.

True/False

- People who multi-task are more efficient.
- False

True/False

- People who multi-task are more stressed.

True/False

- People who multi-tasking are more stressed.
- True

Volunteer, Please?

Multi-tasking Activity

- ▶ <http://www.nytimes.com/interactive/2009/07/19/technology/20090719-driving-game.html>
- ▶ This simulates driving and texting.

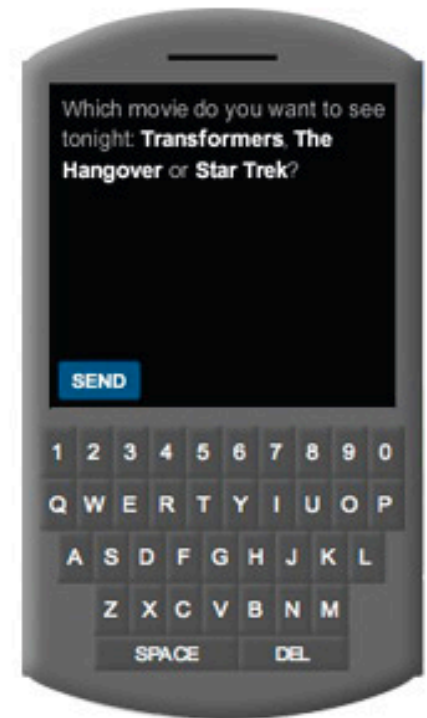
How It Works

- 1 Change lanes by using the numbers (1 through 6) on your keyboard. (You cannot use the number pad.)
 - 2 When you see a green sign with a number, switch to that lane. Try to align with the designated lane as quickly as possible.
 - 3 At three intervals, a cellphone with a text message will appear. Read and respond to the messages while driving.
 - 4 When you answer a text message, answer with the same words that appear in bold on the phone's screen.
 - 5 Use your mouse to text from the on-screen phone.
 - 6 The game will end soon after you respond to the final text message.
-

Please Note:

This game is designed to demonstrate the potential consequences of distractions like texting on your driving ability.

As with all games, intense levels of concentration or repetition can lead to more successful outcomes.



START GAME

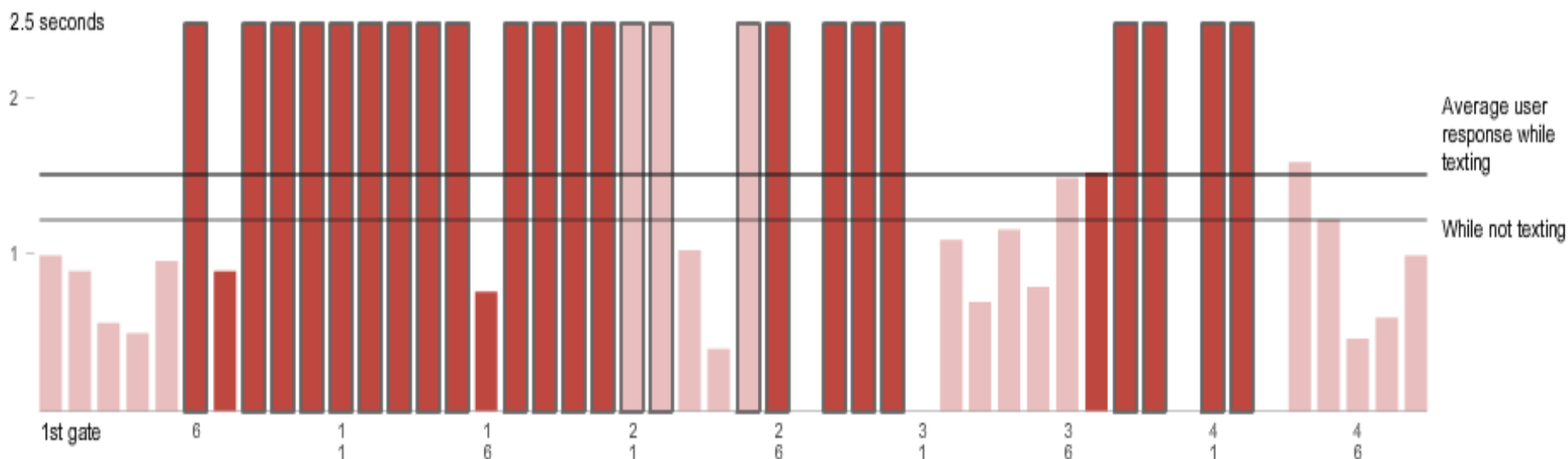
Dance, G. (2011, September 29). Gauging Your Distraction - Interactive Feature - NYTimes.com. *NY Times Advertisement*. Retrieved September 29, 2011, from <http://www.nytimes.com/interactive/2009/07/19/technology/20090719-driving-game.html>

New studies show that drivers overestimate their ability to multitask behind the wheel. This game measures how your reaction time is affected by external distractions. Regardless of your results, experts say, you should not attempt to text when driving.

0.88 seconds slower while texting and **63%** more gates missed while texting

0.24 seconds slower while texting **8%** more gates missed while texting

Reaction time: ■ While texting ■ While not texting Missed gate



Or were you too distracted while trying to text?

Cellphone use contributes to an estimated 6 percent of all crashes and 2,600 deaths each year.

Cellphone Use While Driving: Fact Sheet
(National Safety Council)

More Information About Distracted Driving:

National Highway Traffic Safety Administration
Distracted Driving Studies From the University
of Utah

Combination Notes

Written Notes

Symbol, picture
or graphic

Summary

*There's no such thing as **multitasking**.
Just **task switching** – or at best,
background tasking, in which one
activity consumes our attention while
we're mindlessly performing another.*

John Medina, Brain Rules

Until researchers started measuring the effects of cell phone distractions under controlled conditions, nobody had any idea how profoundly they can impair a driver.

John Medina, Brain Rules

...it's like driving drunk ... Cell-phone talkers are a half-second slower to hit the brakes in emergencies, slower to return to normal speed after an emergency, and more wild in their "following distance" behind the vehicle in front of them...

John Medina, Brain Rules

... more than 50% of the visual cues spotted by attentive drivers are missed by cell-phone talkers. Not surprisingly, they get in more wrecks than anyone except very drunk drivers.

The Brain Cannot Multitask

- Multitasking, when it comes to paying attention, is a myth.
- We are biologically incapable of processing attention-rich inputs simultaneously.

- A person who is interrupted takes 50% longer to accomplish a task.
- AND he/she makes up to 50% more errors.

Task-Switching

- Some people, particularly younger people, are more adept at task-switching.
- If a person is familiar with the tasks, the completion time and errors are much less than if the tasks are unfamiliar.

Add Non-Linguistic Representation

We are Less Efficient

- Our brains aren't hardwired to perform two actions concurrently. When we attempt to juggle multiple tasks, our brains have to turn off the cognitive rules for the old task and turn on a different set of rules for the new one.

Multitasking Inhibits Creativity

- A Harvard Business School Study found that those who focused on one activity for long periods of time exhibited higher levels of creative thinking.
- Those who experienced highly fragmented days, with ongoing interruptions and constant interaction with others, showed significantly lower levels of creative thinking.

The Myth of Multitasking

Submitted by [Blogging Innovation](#) on February 18, 2011 – 12:03 am

Multitasking Causes Stress

- Multiple studies have shown that multitaskers exhibit higher levels of stress hormones.
- In addition, surveys have found that a large majority of people believe that struggling to keep up with information overload has lowered job satisfaction and caused conflict in their personal relationships.

The Myth of Multitasking

Submitted by [Blogging Innovation](#) on February 18, 2011 – 12:03 am

Multitasking May Possibly be Addictive

- A Harvard study found that multitaskers often report feeling the equivalent of a “dopamine squirt” (dopamine is one of the feel-good brain chemicals) when engaged in a multitasking episode.

The Myth of Multitasking

Submitted by [Blogging Innovation](#) on February 18, 2011 – 12:03 am

Add Non-Linguistic Representations

Peer to Peer

- *When you realize you are multitasking, how do you narrow your focus to what is important?*

Summary...

In 150 words, define what is meant by multitasking and explain why 98% of humans are not good at it. In your answer, describe what happens in the brain when people try to text while driving a car, and how this affects performance.

Reflect...

One thing that I learned today that I found interesting:

One thing I'm still wondering after today:

One thing I'm going to share with my family/friend that I learned today:

How'd I Do?
What'd You See?



Handout

- See Pages 2-5

If the segment involves new knowledge what do you expect to see?

- Identifying critical information
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Monitoring?

- What did you see?
- What questions would you ask me?

Generic Format of Scales for Domain 1

<i>UNSATISFACTORY</i>	<i>BASIC</i>	<i>PROFICIENT</i>	<i>DISTINGUISHED</i>
<i>Strategy was called for but not exhibited OR uses strategy incorrectly or with parts missing.</i>	<i>Engages students in the strategy with no significant errors or omissions.</i>	<i>Engages students in the strategy and MONITORS the extent to which it produces the desired outcomes.</i>	<i>Adapts and creates new strategies for unique students needs and situations.</i>

Self-Audit

Lesson Segments Addressing Content

Design Question: What will I do to help students effectively interact with new knowledge?

Element	4 Innovating	3 Applying	2 Developing	1 Beginning	0 Not Using
6. What do I typically do to identify critical information?					
7. What do I typically do to organize students to interact with new knowledge?					
8. What do I typically do to preview new content?					

Element	4 Innovating	3 Applying	2 Developing	1 Beginning	0 Not Using
9. What do I typically do to chunk content into digestible bites?					
10. What do I typically do to help students process new information?					
11. What do I typically do to help students elaborate on new information?					
12. What do I typically do to help students record and represent knowledge?					
13. What do I typically do to help students reflect on their learning?					

Student Surveys

New Information

- | | | | |
|---|------------|---------|------------------|
| 6. My teacher tells me when I need to listen carefully because she's saying important things. | I disagree | I agree | I strongly agree |
| 7. Sometimes we work in groups in my class. | I disagree | I agree | I strongly agree |
| 8. My teacher helps me remember things I already know. | I disagree | I agree | I strongly agree |
| 9. My teacher teaches me new things a little bit at a time. | I disagree | I agree | I strongly agree |
| 10. My teacher helps me think about what I learn. | I disagree | I agree | I strongly agree |
| 11. My teacher lets me draw about what I learn. | I disagree | I agree | I strongly agree |
| 12. My teacher asks me to think about what was going on inside my head while I was learning. | I disagree | I agree | I strongly agree |

Set a Goal...

- Share with your cross-town buddy/hold one another accountable between now and February.

Let's Get Started!

Student Engagement

Part I

Handout, pages 6-13

John Medina

*“Physical activity is
cognitive candy.”*

Slap Count

- Slap Count:
 - Partners or triads
 - Can 'slap' 1, 2, or 3 times
 - Goal: to be the last one to 'slap' on the final number
 - Can mix it up with even numbers, factors, etc.

Brain Gym

- Touch left hand to right ear and right hand to nose (at the same time).
- Bring both hands back to your sides.
- Now swap: touch right hand to left ear and left hand to nose (at the same time).
- Bring both hands back to your sides...
- *How fast can you go???*

Identifying and Using Positive Information About Students

Five ways to acquire and use information:

1. Class inventory
2. Class discussions
3. Parents and guardians
4. Fellow teachers
5. Extinguishing negative conversations about students

21st Century Ideas:

1. Have students create a [Pinterest](#) board with 10 pins that summarizes them.
2. Ask students to create a 30 second podcast that introduces themselves. Then allow students to present them or play them on separate devices as an audio gallery.
3. Create a classroom blog and ask each student to write a blog post introducing themselves to the rest of the classroom.
4. Have students create a [quick comic strip](#) to describe themselves or to recreate a recent funny moment in their lives.

5. Use [PollEverywhere](#) to ask students interesting questions and get to know them as a class, like their favorite subjects, bands or TV shows.
6. Use [GoogleForms](#) or [SurveyMonkey](#) to survey students about their interests, academic inclinations, and background info – a 21st century alternative to the “Getting to Know You” info sheet!
7. Have students create [word clouds](#) to describe themselves and share with the rest of the class.

Give everyone 5
post it notes and tell
them to write one
fact on each post it
note and stick it to
their bodies.

Children walk
around and meet
each other.

Create a New Map via Google Maps and have students add to it showing where they come from! Great if you have many students from various countries and cultures!
You can then even open it up to other classes and cohorts!

@CorrieB



Self-Assessment (n 3)

Element	Innovating	Applying	Developing	Beginning	Not Using
24. What do I typically do to notice when students are not engaged?					
25. What do I typically do to use academic games?					
26. What do I typically do to manage response rates?					
27. What do I typically do to use physical movement?					
28. What do I typically do to maintain a lively pace?					
29. What do I typically do to demonstrate intensity and enthusiasm?					
30. What do I typically do to use friendly controversy?					