The Role of Memory in School Success

with Claire Wurtzel
November 18, 2008
Conference Call Etiquette

- Remember to mute your phone by pressing *1.
- Press *1 again, when you would like to speak, this will un-mute your phone.
- *Do not* use your phone HOLD or mute button. If you do, your music will be broadcast to all of us on the call.
Our Guest: Claire Wurtzel

Claire Wurtzel is the Director of Faculty Development for the Churchill School and Center in New York, working within and beyond the school to develop the Churchill Center for professional development. Prior to this position, Ms. Wurtzel was the Director of Faculty Development for the New York City Schools Attuned initiative for All Kinds of Minds, an institute co-founded in by Dr. Mel Levine and Charles Schwab to help educators work effectively with struggling learners. In her capacity as Director, Ms. Wurtzel oversaw Schools Attuned courses, mentor training and facilitator training for over 400 New York City schools.

Ms Wurtzel is also one of two educational directors for Hidden Sparks, providing training, supervision and ongoing mentoring to the Hidden Sparks teams of coaches, principals and Internal Coaches in twenty-eight yeshivot. A long-standing interest of Ms. Wurtzel has been to provide professional development workshops for Jewish Day School educators and has worked to adapt the Schools Attuned professional development program for Jewish day schools.

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Agenda

- Welcome and Introductions

- Session Goals
  - To develop an awareness of the memory demands on students.
  - To appreciate the difference between students’ remembering and understanding information.
  - To become familiar with the signs that indicate a student might have some memory challenges.
  - To develop strategies to accommodate memory challenges.

- In these two sessions we will:
  - Examine memory from the student’s perspective and identify memory strengths and struggles.
  - Discuss strategies to support weak areas of memory.
  - Explore the memory demands of your curriculum.

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Life after school does not demand as much memorization as does school life.

Students have an enormous amount of information to remember daily—new ideas, concepts and skills. As they move up the grades they are expected to access basic skills from memory very rapidly and in large chunks—so that they may use the skills and facts to interpret higher order ideas.
Introduction

- Teach students about memory so that they can understand the various forms of memory and how to use effective memory strategies.

- Students need to acquire efficient filing systems for memory, otherwise learned information gets lost in memory.
Imagine the fourth grader who has an IQ of 135 and is still unable to remember the months of the year, the times tables, or is not sure of the sounds of the letters in English or Hebrew?

How do you think the student feels? How might he/she behave in class?

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Some very bright students have good thinking skills but can’t remember simple things. Others, have learned the information, but can’t retrieve it quickly enough to answer fast paced questions.

They feel stupid, defective and humiliated, even when they are very bright and have higher level skills and ideas.

Some students are strong cognitively, but process slowly. They are slow, bright learners.

Too many children feel stupid and lose motivation in school because they can’t keep up with the memory demands as they move up the grades.
The Memory System

- In order to remember something, you have to attend to the information spoken or written. Poor attention can be confused with memory deficits.

You must attend to remember.

- One also needs to be able to store information effectively, to be able to retrieve it rapidly.

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Discussion

Is it possible to know information and not be able to retrieve it?

How can you determine if the student absorbed the information and can’t retrieve it quickly enough, or if the information was not consolidated into memory?

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Ineffective and Effective Storage
Keep in Mind

- Don’t assume the student doesn’t remember the information if he or she is unable to rapidly respond to a question.

- Find alternative ways to check for consolidation of content.

- Offer a choice between two responses i.e. on exams use:
  - a word bank
  - multiple choice
  - or matching options.

These choices support students with weak retrieval memories.
Can you remember something you don’t understand?

Many people memorize their way through some subjects in school, but don’t understand them.

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Can you understand something and not remember it?

Often students understand the homework assignment when you give it in class, but then cannot remember how to do it when they get home.
Remembering and Understanding

- To learn, you need the right balance between understanding and remembering.

- Because of high stakes testing educators may focus on memorizing and not assess students on comprehension.

- Teaching for understanding takes more time.

- Making multiple connections with a concept to understand it takes time.

Example: if you study an animal and its habitat you might remember where it lives, or what it eats, and then all the information about the animal will emerge.
Strategies to Support Weak Memory

- **Semantic Webs of Words**
  We can help children build semantic webs of words and ideas to develop more than one reference in the brain.

- **Student planning**
  Ask students to tell you how they will remember what they are learning.

- **Context**
  Ask if it reminds them of something they already know. This taps into prior knowledge and helps categorize information in efficient ways.

- **Examples/paraphrasing**
  Have them give examples and paraphrase what they hear or read.

- **Formats for presentation**
  Verbal, visual, kinesthetic
When you walk into a room and forget why you are there, what do you do?
Importance of Physical Location

As soon as we retrace our steps the memory pops in.

Students with I.E.Ps often take exams in a separate room, not in the room where they were taught. They would recall information more readily if they were in the physical space in which they were taught.

Location is an important memory trigger.

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Types of Memory- Activity

Please listen to the list of words I will recite.
Just remember them in your head –
don’t write them until I instruct you to do so.

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Cognitive science tells us that 7 items is generally the maximum number that people can hold in short term memory, unless you do something to recode it in some way.

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Participant Strategies for Short Term Memory

Memory and attention work very closely together. In order to register the words you needed to attend to them.

Memory and anxiety go together. It your immediate response was “I can’t do this kind of task” then anxiety prevented you from going forward.

Short term memory is the gatekeeper for memory. It is the shortest duration but can prevent anything else from happening.
Some Clues that a Student may have Short Term Memory Problems

- The student only takes down part of the homework assignment.
- The student needs instructions repeated.
- The student keeps looking back at the board when asked to copy something.
- The student always looks around to see what his peers are doing.
What might you do differently in your classroom tomorrow as a result of our conversation?
For Next Session

Please try any two of the three suggestions:

1. List some of the memory demands on students in one or more lessons you taught over the week.

2. Involve students in a discussion about ways that help them store new content efficiently in memory.

3. Note some anecdotal evidence of students who seem to have memory strengths, and those who seem to be struggling with some aspect of memory. You may discuss the same student if he/she has both strengths and weaknesses.
In the next session we will:

- Explore active working and long-term memory
- Share effective strategies to support students with various memory weaknesses
Upcoming Hidden Sparks Without Walls Sessions

Language, Learning and Literacy – Dec. 3, Dec. 10
with Claire Wurtzel

Course on Attention – Dec. 9, Dec. 16
with Naomi Weiss
Hidden Sparks is a non-profit fund whose purpose is to help children with learning differences reach their full potential in school and life. Hidden Sparks develops and supports professional development programs for Jewish day schools to help increase understanding and support for teaching to diverse learners.

Guided by a philosophy that by helping schools meet the needs of children with learning and behavioral differences, ultimately all students will benefit. Hidden Sparks’ programs combine professional development in learning and positive behavioral support, guided classroom observation and one on one coaching. The Hidden Sparks model and program is currently in 21 Jewish Day Schools/Yeshivot in New York and 7 in Boston, through a partnership with Gateways: Access to Jewish Education.

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