Transition to High School: Meta-cognition, Adolescent Development and Self-Advocacy

With Karen Kruger

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Karen Kruger, M.S. is the new Director of Education at Hidden Sparks. Previously, she served as Hidden Sparks’ Internal Coach Program (ICP) School based mentor, a regional facilitator and the lead trainer for No Child Left Behind funded workshops. She also mentored middle school teachers and administrators for the NYC Department of Education. Prior to this, Ms Kruger served as a field facilitator and course instructor for ‘Schools Attuned’, teaching courses offered by “All Kinds of Minds”, developing curricula for workshops, and mentoring and supervising teachers in grades K-12. A former adjunct professor at Bank Street College of Education where she received her Master’s degree, Ms. Kruger has taught in elementary and middle schools from Kindergarten through 8th grade.
During this session, we will be considering the importance of helping middle school students understand their unique learning profiles (metacognition) and how they can share this information with their future high school teachers.

We will also be looking at adolescent development and adolescent brain function and why it is important to share this information with students.
Session Goals:

• Consider how metacognition can promote a smoother transition to high school for middle school students.
• Learn how to help 7th and 8th graders understand their unique learning profiles and how they can become self-advocates.
• Understand the importance of teaching students how to effectively communicate their learning profiles through letter writing, talking to individual teachers, and running a meeting with their high school teachers to explain their IEPs (Individual Education Plans).
What are the teachers’ expectations?

High school teachers expect high school students are:

• Independent, self-motivated learners
• Mature, socially responsible young adults
• Capacity to handle 8 hours of classes/day and approximately 8 hours of homework/night
• Coherent, effective writers and readers
• Automaticity with math facts and procedures with conceptual understanding
• Basic understanding of biology, chemistry, ecology, and physiology
• Grounded knowledge of history, Judaic studies, art, and music.
Middle school teachers’ concerns about high school:

- My students will not have the individualized attention that they need in order to be successful.
- They will not be able to handle the increased workload and the impersonal vastness of a large high school.

Middle school students worry:

- That they will not have friends in high school.
- That they won’t be able to keep up with all the schoolwork demands.
- That they will disappoint their parents and severely limit their options for their future.
How can we help them?

- Teach the students about metacognition and self advocacy.
- The more they understand who they are as learners, the more effective they will be as communicators of this very important information.
- In addition to understanding their learning profiles, it is helpful for students to understand how their brains work.
- Even a cursory understanding of how the brain develops and how it is affected by emotions, nutrition, and sleep, can equip the student with a stronger sense of what they need to be successful in school and in life.
What is Metacognition?

• Thinking about thinking
• Knowing what we know
• Understanding how we learn
• Being able to discern when and how to apply strategies for learning
• Appreciating how our brains work

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Why is metacognition important?

• Studies show that direct instruction, in metacognition strategies, result in measurable increases in learning.
• For students who struggle, encapsulating the area of weakness lessens the feelings of overwhelming failure.
• Students who understand how they learn and what they need to be successful when they learn, are the best communicators of this very important information.
• When these students understand how to communicate their metacognitive awareness, they become their own advocates and can be reflective, independent, self-aware, strategic learners.
Middle school and Metacognition

- Middle school students love to talk about themselves, love to think about themselves and love to understand themselves. Early adolescents are the perfect candidates for metacognitive experiences. They are natural experts on their lives and they usually enjoy learning about how they learn.

- People underestimate adolescent students’ interest in learning about learning. It’s wonderful to observe the surprised reactions of seasoned middle school and high school teachers, when they discover the impact of their students metacognitive awareness.
How do we begin to teach metacognition?

- By modeling it
- Directly teaching the different pathways of learning
- Encouraging metacognitive thinking
Some examples of modeling metacognition

• “Here is what I am thinking…” Be transparent in your own thought processes.
• “I was making an assumption because…” Show the students how you come to conclusions/opinions.
• “I’m changing my mind now that I realize…” “I’m wondering if…” Give examples of how you think.
• “I have trouble remembering names and so I do…” Share your learning challenges and which strategies you use to be successful.
• “It’s easier for me to pay attention to my writing if I take short breaks every 20 minutes.”
• “I enjoy helping people organize their desks, it’s easy for me to see where things should go.” Share your strengths and give evidence to illustrate your points.
How to directly teach metacognition

- Share the different pathways of learning and encourage students to discuss what is difficult for them and what is easy.
- Memory (short term, active working, long term); Attention (mental energy, information input, academic/behavior output); Language (receptive, expressive); Social cognition (verbal pragmatics and behaviors); Higher order thinking (problem solving, concept formation, critical thinking, brainstorming, reasoning/logical thinking, rule use); Spatial ordering, Temporal sequential ordering, motor functions (gross motor, fine motor, graphomotor)
- Begin by asking students what they know about their memory – How do they remember things?
Some examples of a metacognitive lessons:

- 7 word activity – short term memory
- Paperclip activity – HOC (Higher Order Cognition) brainstorming/creativity/problem solving
- Brainstorm “What does it mean to ‘Pay Attention!’”? – attention awareness. Please see “Additional Resources” for more ideas for specific lessons to teach students about how their brains work and how they learn.
How to encourage metacognitive thinking

• Guided self-evaluation experiences can be introduced through checklists focusing on thinking processes. Gradually, self-evaluation will be applied more independently. Example: Ask students to predict how they did on a test – begins self assessing of performance.

• Ask students to state what they already know about a new topic that you are introducing – encourages reflection about what they do/do not know/what they want to know.

• Encourage students to describe their thinking processes: “How did you come to that conclusion? What were you thinking when you read that passage?” “How did you decide which research topic to choose?”

• Increase students responsibility for planning and regulating their learning. It’s difficult for learners to become self-directed when their learning is planned and monitored by someone else.

• Teach students to estimate time requirements and organization of materials to complete an activity.
### Table 2.1 Adolescent Developmental Tendencies, Implications for Learning

<table>
<thead>
<tr>
<th>Adolescent Developmental Tendencies</th>
<th>Implications for Learning</th>
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</thead>
<tbody>
<tr>
<td><strong>Personal</strong></td>
<td><strong>Learning Needs</strong></td>
</tr>
<tr>
<td>• Anxious for developmental normality</td>
<td>• Climate of Acceptance, tolerance</td>
</tr>
<tr>
<td>• Easily Angered, slow to recover</td>
<td>• Emotional Safety, guidance</td>
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<tr>
<td>• Push for independence, autonomy</td>
<td>• Choice, responsibility, accountability</td>
</tr>
<tr>
<td>• Easily discouraged if do not achieve</td>
<td>• Appropriate challenge, relative success</td>
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<tr>
<td><strong>Intellectual</strong></td>
<td><strong>Learning Needs</strong></td>
</tr>
<tr>
<td>• Have diverse knowledge, interests, abilities</td>
<td>• Opportunities to develop range of skill and to pursue variety of content areas</td>
</tr>
<tr>
<td>• Can see relationships among similar concepts, ideas, and experiences</td>
<td>• Complex subject matter, relevant issues</td>
</tr>
<tr>
<td>• Capable of inferential thinking, reasoning</td>
<td>• Higher-level, analytical questioning</td>
</tr>
<tr>
<td>• Capable of critical evaluation, extended focus</td>
<td>• Time and opportunity for critical thinking</td>
</tr>
<tr>
<td>• Reflective, metacognitive, self-motivated</td>
<td>• Self-evaluation, choice</td>
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<tr>
<td><strong>Social</strong></td>
<td><strong>Learning Needs</strong></td>
</tr>
<tr>
<td>• Can be indifferent to adult figures</td>
<td>• Opportunity to interact with knowledgeable adults in collaborative projects</td>
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<td>• Concerned about self-presentation to peers</td>
<td>• Emphasis on cooperation, inclusiveness, group contribution</td>
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<tr>
<td>• Strive to conform for peer acceptance</td>
<td>• Structured, positive student interaction</td>
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Developmental Considerations:

- Starting around age 9 to 10, the brain has a growth spurt that lasts into the mid-20s. The outer covering of the brain (called the cortex) gets thicker.
- The brain follows the simple principle of use it or lose it: the brain connections that teens use again and again become stronger.
- The connections they do not use just fade away. What teens do will help to shape their brains.
- One of the last areas of the brain to mature is called the prefrontal cortex (PFC). Located right behind the forehead, the PFC helps teens to learn how to solve problems, control their feelings and impulses, and set goals.
Activities to help the teen brain grow:

• Encourage teens to try a new hobby or practice a new skill like learning a musical instrument.
• Help your teen learn how to manage time and tasks. Teach your teen to make lists of things to do. Help her or him use a calendar to keep up with homework and chores.
• Help your teen to be physically active. Sports, exercise, and being outdoors are good for the brain.
• Work with your teen to set time limits for the computer and TV. Also set limits for cell phones and playing video games.
• Find ways to expand your teen’s role in family decision making, how to budget money, and other tasks.
Teen brains need sleep...

- Talk to your students about why teens need more sleep.
- Sleep helps to build a stronger, smarter brain.
- Sleep helps to lower stress.
- Sleep helps with memory.
- Teens who get more sleep do better in school.

PARENTS:
- Help your teen plan for time to sleep. Sleeping in on the weekend can be a good thing.
- Talk about ways to relax before going to bed. That means no video games, no heavy exercise, and no coffee, soda, or energy drinks late at night.
More brain considerations:

• Teens are drawn to new and exciting experiences. They want to be free and do things on their own. Chemical changes in the brain motivate teens to look for risks and challenges. This is normal.

• But, the part of the brain that helps teens assess risk and control impulses is still growing. This means that teens may not think about the consequences of their actions. Teens need your help to think through the outcomes of their decisions.

• Teens also need practice in making decisions. You can provide chances to share responsibility, to make decisions, and to weigh the pros and cons of different types of choices. This will help your teen develop good judgment.

• Make sure that you share all of this information with your students and their parents. This will help them understand how the teen brain work best.
Some suggestions for parents of teens:

• Help your teen take positive risks, like trying out for a new sport, making new friends, or visiting new places. This will build confidence and self control.

• Let your teen decide what, when, and how to do things. This will help your teen become a leader. Community service projects, summer jobs, and after school programs are good for the brain.

• Get to know your teen’s friends. Together, set rules on how often your teen should check in with you. Say that you want to know what she or he is doing, where, and with whom. This builds trust between you.

• Work together to set rules and agree on curfews. Together, decide what will happen if your teen breaks the rules. Listen to what she or he wants. Talk about what you want for your teen.
How Self-Advocacy can combine with Metacognition

• One of the most powerful gifts we can give to students who struggle with academics or behavior issues is the ability to understand how they learn, which strategies help them to be successful in school and how to self-regulate their emotions.

• This process will gradually and intentionally transfer the role of “critic” from the teacher to the student.

• The next step is to teach the student how to effectively communicate this vital information: what the student has learned and continues to learn, metacognitively.
What is self-advocacy?

- Advocacy = active support
- Self-advocacy = active support of self
Why is self-advocacy important?

• Every parent of a struggling student voices the same concern about their child’s future:
  “I just hope they can learn to become independent, successful adults.”

• One of the best ways to encourage learning independence is to teach children about how they learn so that they can understand who they are as learners.

• Goal: Self aware, independent, motivated students who can effectively communicate their strengths, challenges and strategies that help them be successful in school and in life.
Directly teach it

Self-advocacy workshop for Students

• Brainstorm: “What is Advocacy?” or “What is an Advocate?”
• Discuss: How do you advocate for yourself in school?
  • Talking to a teacher
  • writing to a teacher
  • meeting with teachers
• Practice…
Self Advocacy Template for Students

Self Advocacy

- How do you self advocate?
  - Talking
  - Writing
  - Meeting

- About what?
  - Strengths: (What I can do well)
  - Affinities: (What I am interested in)
  - Challenges (What is difficult for me)
  - Strategies (What helps me with my challenges)

- With whom do you self advocate?

- Things to consider when I self advocate: (expressive language, social cognition, HOC)
  - How do I like to communicate information about myself?
  - I prefer to talk with people—meeting in person, one-on-one, with 2-3 people together, small groups.
  - I prefer to write to people—formal letters, emails (with an offer to follow up in person to answer questions and provide additional information.)
Practice

- Support students in writing letters to their high school teacher in which they politely describe their learning profiles and which strategies they use to be successful in school/life.
- Role play with students to demonstrate how to converse with high school teachers and how to constructively engage in a dialogue about the student’s learning needs.
- Help students understand their IEPs and how to communicate the content of their IEPs.
- For older students: practice attending and then running their own IEP meetings/conferences.
Looking forward...

- For the Fall: Invite some freshman students (from a variety of high schools – if possible) to return to the middle school and be panelists, sharing their high school experiences. Ask them to address issues such as:
  - How it’s going so far (what are the classes like?, what do they do with their friends?, how are the teachers?, how much homework do they have? etc.)
  - What surprised them about high school?
  - What do they wish they had known as 8th graders?
  - What advice do they have for current 7th/8th graders?
  - Open Q&A
• Understanding how you learn and what is your unique learning profile — your strengths and your weaknesses and the strategies that you use to be successful, can be a powerful tool for navigating life.

• Two wonderful byproducts of teaching metacognition to your students are: you are giving them lessons in diversity and empathy.

• You are modeling compassion for people who learn differently, for people who struggle in areas that might seem easy for others, and how to support and not judge these areas of struggles. At the same time, you are modeling the appreciation of strengths and the importance of acknowledging and emphasizing what we can do well.
Additional Resources

• For more information about teaching students about the learning pathways, please visit:
  • [www.hiddensparks.org](http://www.hiddensparks.org) and see the archived webinars. There are specific webinars about Attention, Memory and Social Cognition as well as “An Overview of How We Learn”, “Helping Students Discover How They Learn”, “How to Ask Questions that Stimulate Students to Think and Learn”, “How to Talk to Students about Their Learning Strengths and Struggles”, and “Metacognition and Self-Advocacy.”
  • [www.allkindsofminds.org](http://www.allkindsofminds.org) Click on “Reach More Learners” and you’ll find a learning library, case studies about students and helpful tips and teaching techniques and strategies.
• [All Kinds of Minds](http://www.allkindsofminds.org) by Dr. Mel Levine
• [Keeping a Head in School](http://www.allkindsofminds.org) by Dr. Mel Levine
• [A Mind at a Time](http://www.allkindsofminds.org) by Dr. Mel Levine
Additional resources on Brain Function:

• All books by Judy Willis: website RAD (Reach and Discover)  www.radteach.com
• Your Brain at Work  by David Rock
• Learning & the Brain: www.LearningAndTheBrain.com
• Brain Rules by John Medina
• Tools of the Mind: (for younger children – self regulation of behavior)  http://www.mscd.edu/extendedcampus/toolsofthemind/
• “What Cocktail Parties Teach Us” Wall Street Journal, April 23, 2012
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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