Unlocking Student Talent
Gene Kerns, EdD
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Welcome!

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Please use the chat box for questions. Trouble? Email info@rapsa.org with questions.
Presenter: Gene Kerns, EdD

- Chief Academic Officer at Renaissance
- Third-generation educator
A moment for reflection...

1. Brainstorm a list of talented people—any field, any time period.
2. In your opinion, what made them talented?
Things we say...

- “Born to be...”
- “Destined to be...”
- “A natural”
CHAT QUESTION #1

What percentage of overall success can likely be attributed to innate talent?

More than 75%
More than 50%
More than 25%
Less than 25%
Ericsson, Prietula, and Cokely (2007)

“You’ve got to forget the folklore about genius that makes many people think they cannot take a scientific approach to developing expertise.”
Sir Francis Galton

- *Inquiries into Human Faculty*
- *Hereditary Genius*
- *Natural Inheritance*
Sir Francis Galton

- “Nature vs. nurture”
- “Novel statistical concepts” like correlation and regression
K. Anders Ericsson

Conradi Eminent Scholar and Professor of Psychology at Florida State University
Ericsson, Prietula, and Cokely (2007)

“Consistently and overwhelmingly, the evidence showed that experts are always made, not born.”
Coyle (2009)
“Hotbeds of talent”

- The Brontë sisters (Victorian literature)
- The Z-Boys (extreme skateboarders from California)
- Spartak Tennis Club (Russia)
- Brazil (soccer)
- Curaçao (baseball)
- Meadowmount School (classical music)
- Septien School of Music (vocal)
Coyle’s three key points

• Deep practice
• Ignition
• Master coaching
Other resources

Outliers
MALCOLM GLADWELL

Talent Is Overrated
GEOFF COLVIN

Bounce
MATTHEW SYED
CHAT QUESTION #2
Have you read any of the books mentioned?
A new book on student talent
1. Motivation
   What are its two main forms?

2. Deliberate practice
   Are your students practicing like experts practice?

3. Coaching
   How do you coach for maximum growth?

4. The impact of sharing this
   Does it make a difference?
Motivation
What are its two main forms?
An inspiring commercial
Super Bowl 2016
Motivation—two forms
A “vision of future self” is critical

• A field trip
• An assembly
Passion and persistence (Coyle, 2009)

Q: Why are these essential?

A: Because wrapping myelin around a big circuit requires immense energy and time. If you don’t love it, you’ll never work hard enough to be great.
Deliberate practice
Are your students practicing like experts practice?
Practice and the brain
Myelin
Myelin was thought to be inert
An essential idea

• The role of practice (in building myelin) is vitally important.

• Myelin can increase speed significantly!

• “The story of skill and talent is the story of myelin.” (Coyle, 2009)
Deliberate practice

“The most powerful approach to learning that has yet been discovered...”

(Ericsson and Pool, 2016)
Practice

Why is deliberate practice fundamentally different?
POLL QUESTION #3
What do you think contributes most to practice being more deliberate?
• Challenge
• Repetitions
• Results/Formative Feedback
What makes practice more deliberate?
Define deliberate practice as “activities that have been specially designed to improve the current level of performance” and that are crafted in consideration of the following:

1. The design of the task should take into account the preexisting knowledge of the learners so that the task can be correctly understood after a brief period of instruction.

2. The subjects should receive immediate informative feedback and knowledge of results of their performance.

3. The subjects should repeatedly perform the same or similar tasks.
Deliberate practice requires:

- **REPS**
  Myelin is built through repetition.

- **RESISTANCE**
  Growth is maximized by appropriate challenge.

- **RESULTS**
  A lot of reps are required and often are not fun. Seeing your results improve is.

- **RECOVERY**
  True deliberate practice is exhausting.
What’s the effect of making practice more deliberate?
Topping (1999)

• “Simply increasing time devoted to reading practice might not be sufficient to raise achievement.”

• “A literature review on the practice of allocating classroom time for Sustained Silent Reading (SSR) revealed mixed results, with six studies noting a positive effect on reading scores and five noting no effect.”

• “Of twelve studies of Accelerated Reader® that cite substantial outcome data, only one failed to find evidence of the program's impact.”
Coaching

How do you coach for maximum growth?
How is assessment related to deliberate practice?
In seeking to meet key motivational needs, Chappius adapted the work of Australian professor Royce Sadler, resulting in 3 paramount questions students must always be able to sufficiently answer to maintain and maximize motivation:

1. Where am I going?
2. Where am I now?
3. How can I close the gap?
<table>
<thead>
<tr>
<th>Where am I going?</th>
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<tbody>
<tr>
<td>Strategy 1: Provide students with a clear and understandable vision of learning targets.</td>
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<tr>
<td>Strategy 2: Use examples and models of strong and weak work</td>
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<table>
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<tr>
<th>Where am I now?</th>
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<tr>
<td>Strategy 3: Offer regular descriptive feedback.</td>
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<tr>
<td>Strategy 4: Teach students to self-assess and set goals.</td>
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<tr>
<th>How can I close the gap?</th>
</tr>
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<tbody>
<tr>
<td>Strategy 5: Design lessons to focus on one learning target of aspect of quality at a time.</td>
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<tr>
<td>Strategy 6: Teach students focused revision</td>
</tr>
<tr>
<td>Strategy 7: Engage students in self-reflection, and let them keep track of and share their learning.</td>
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</tbody>
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“My students are lazy”

Academic pursuits often lack the tangibility offered in sports and other fields.
Ericsson, Krampe, and Tesch-Römer (1993)

“We claim that deliberate practice requires effort and is not inherently enjoyable. Individuals are motivated to practice because practice improves performance.”
The impact of sharing this

Does it make a difference?
Mindset

What can we achieve when we change our mindset about talent and communicate this to our students, thereby changing their mindsets?
Dweck (2006)
Dweck’s research

• New York City junior high school

• Struggling students, falling grades

• “Developed an eight-session workshop in which both the control group and the growth-mindset group learned study skills, time management techniques, and memory strategies.”
Dweck’s research

Experimental group “also learned about their brains and what they could do to make their intelligence grow:”

i. The brain is like a muscle

ii. The more they exercise it, the stronger it becomes

iii. When you try hard and learn something new, the brain forms new connections that, over time, make you smarter
Dweck’s research

• “They learned that intellectual development is not the natural unfolding of intelligence, but rather the formation of new connections brought about through effort and learning.”

• “You mean I don’t have to be dumb?”
The results

• “Both groups had experienced a steep decline in their math grades.”

• The growth-mindset intervention showed a significant rebound.

• The teachers singled out three times as many students in the growth-mindset intervention as showing marked changes in motivation.
Really?!

• What about talent?

• You’re telling me there’s no such thing as raw talent?
Colvin (2008)

Talent is Overrated

What Really Separates World-Class Performers from Everybody Else

GEOFF COLVIN

Senior Editor at Large, FORTUNE
Fogarty, Kerns, and Pete (2018)

• “Guided by the inaccurate folklore around talent, we may unconsciously limit the aspirations of our students and ourselves and fail to align our schools and classrooms for optimal growth.”

• “You can promote expertise systematically and consistently, and research documents this.”
RAPSA provides ongoing webinars and other professional development opportunities for leaders serving opportunity youth.

Access this webinar and other webinars at: www.rapsa.org

Email: ernie.silva@siatech.org

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