Underpinning Academic Mindset:

How Students Can Change Their Minds

and Why They Should
## Competitive Preference Priority 1(a)

### Five related factors:

<table>
<thead>
<tr>
<th>Factor</th>
<th>Definition or example</th>
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</thead>
<tbody>
<tr>
<td>Academic behaviors</td>
<td>Regularly attending class, Arriving ready to work, Paying attention, Participating in instructional activities and class discussions, Devoting out-of-school time to studying and completing homework</td>
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<tr>
<td>Academic Mindsets</td>
<td>Psychosocial attitudes or beliefs one has about oneself in relation to academic work, such as sense of belonging to the academic community, Belief that one’s ability and competence will grow with effort, that effort will lead to success and that academic work is valuable</td>
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<tr>
<td>Academic Perseverance</td>
<td>Staying focused on a goal despite obstacles, Delaying gratification, Exhibiting self-discipline and self-control</td>
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<tr>
<td>Learning Strategies</td>
<td>Using strategies to recall facts, Using strategies to monitor one’s own comprehension, Using strategies to self-correct</td>
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<tr>
<td>Social Skills</td>
<td>Cooperation, Assertion, Responsibility, Empathy</td>
</tr>
</tbody>
</table>

*Table 1. Non-cognitive factors impacting academic performance*
Linchpin factor: Academic Mindset

Psychosocial attitudes or beliefs one has about oneself in relationship to academic work, such as a sense of belonging to the academic community.

Belief that one’s ability and competence will grow with effort, that effort will lead to success and that academic work is valuable.
Growth vs Fixed Mindset

- Fixed Mindset: Intelligence and talent are fixed at birth.
- Growth Mindset: Intelligence and talent can go up or down.
False Growth Mindsets

“Dweck recently noticed a trend: a widespread embrace of what she refers to as “false growth mindset”—a misunderstanding of the idea’s core message. Growth mindset’s popularity was leading some educators to believe that it was simpler than it was, that it was only about putting forth effort or that a teacher could foster growth mindset merely by telling kids to try hard.”
Simply telling students to think that they’re able does not equip them to change their thinking habits.
What is intelligence?

- Historically, people considered intelligence to be a single, fixed dimension.
- This belief drove educational planning that reinforced the idea, streaming students into fixed tracks for career or college prep.
Advances in brain science began to change that perception

- Hemisphere dominance
- Personal learning styles
- Plasticity
Advances in brain science began to change that perception

Over three years, Matt McCabe logged more than 50,000 miles on motorbike and foot within the city, the equivalent of two circumnavigations of the Earth, while studying to become a London taxi driver.
A different view

• After hundreds of interviews and years of brain research, Howard Gardner proposed the theory of multiple intelligences. Elements of his definition of intelligence include the ability to create an effective product or offer a service that is valued in a culture, a set of skills that makes it possible for a person to solve problems in life, and the potential for finding or creating solutions for problems, which involves gathering new knowledge.
Other characteristics of MI

- All human beings possess all intelligences in varying amounts
- Each person has a different intellectual composition
- Education can be improved by addressing the multiple intelligences
- These intelligences are located in different areas of the brain and can work independently or together
- These intelligences may define the human species
- Multiple intelligences can be nurtured and strengthened, or ignored and weakened
- Each individual has nine intelligences (and maybe more to be discovered)
Word Smart

- Linguistic Intelligence
- Encompasses both the creation of literature and the enjoyment of literature
Logic Smart

- Logical-mathematical intelligence
Picture Smart

- Spatial intelligence
- Design
- Observations
Music smart

• Capacity to perceive, appreciate and produce rhythms and melodies
Body smart

- Bodily-kinesthetic intelligence
- Intelligence of the physical self
People Smart

- Interpersonal intelligence
- Understanding of others’ motivations
- Ability to empathize
Self Smart

- Intrapersonal intelligence
- Awareness of emotions and motivations
- Related to ability to form commitments
- Ability to be alone
Nature Smart

- Naturalistic intelligence
- Love of the outdoors
- Ability to categorize
“Why” Smart

- Existential intelligence
- Big picture questions
Evidence for MI

• Each intelligence can be symbolized
• Each has its own developmental history
• Each is vulnerable to impairment through insult or injury
• Each has a culturally valued endstate
Developing MI

- Understand that each intelligence can be cultivated
- “Growth mindset” enables success
- Remember brain plasticity
Using your understanding of MI

- Look at the total picture
- Celebrate your strengths
- Pay attention to your hidden intelligences
- Be optimistic about your weaknesses
Other supporting ideas

• **Cognitive behavioral therapy (CBT)** is a short-term, goal-oriented psychotherapy treatment that takes a hands-on, practical approach to problem-solving. Its goal is to change patterns of thinking or behavior that are behind people's difficulties, and so change the way they feel.

• **Offering specific ‘thought prescriptions’ to help develop new habits.**
Self-test

- http://www.literacynet.org/mi/assessment/cgi-bin/results.cgi
- http://www.edutopia.org/multiple-intelligences-assessment
- http://psychologytoday.tests.psychtests.com/take_test.php?idRegTest=3209

NOTE: This assessment is available for a fee.
Credits

This presentation is condensed from Seven Kinds of Smart by Thomas Armstrong, supplemented with information from the following sources:

• https://www.scientificamerican.com/article/London-taxi-memory
• http://sharpbrains.com/blog/2008/02/26/brain-plasticity-how-learning-changes-your-brain/
• http://web.cortland.edu/andersmd/learning/MI%20Theory.htm
• http://www.nytimes.com/2014/11/10/t-magazine/london-taxi-test-knowledge.html
• https://www.youcubed.org/