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OF THE AMERICAS 2013  
**NEW ORLEANS 18<sup>th</sup> - 21<sup>st</sup> JULY**



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# SEEING I.B. LEARNERS AS INTEGRATIVE THINKERS

*Presented by Giles Pinto*

**MYP Coordinator &**

**English/Theory of Knowledge Teacher**

**[BRANKSOME HALL: Toronto, Canada]**

# It's all how you see it

Teaching students a whole new way to think

BY LORI CONNOR

**F**or Branksome Hall and Upper Canada College, solving the world's problems begins with a few magic tricks.

Illusionist Ray Chance treated a gym full of grade 8 students to exercises in misdirection: guessing cards, emptying cups of water and cutting open a grapefruit to reveal a \$10 bill.

For most schools, it would be an entertaining diversion. But this show had education in mind.

"They had a good way to keep our attention," says Branksome Hall student Annalisa Lowenstein. "They're teaching us a bunch of stuff in ways that we wouldn't usually see."

The magic served as an introduction to the Rotman School of Management's annual iThink initiative at Branksome Hall, a day-long class in what it calls integrative thinking.

The purpose of the program is to make students notice things they wouldn't have noticed before, says Nogah Kornberg, who has spent three years developing integrative thinking at Rotman.

"There is too much information in the world for our brains to take it all in," Kornberg says. "Our brains have developed in a way that we remember what we think is most important. Once we realize we miss information, we can be better at seeking it out and we can be better at trying to find cool things in the world that we may have missed otherwise."

And by understanding that one's viewpoint is limited and that other people perceive the world differently, students can come up with new, comprehensive solutions to some of the world's problems.

"A magician is such a perfect way to start the day," Kornberg says. "Magic works because there's stuff we're paying attention to, but the stuff we don't pay attention to is what makes magic so magical."

After the show, students broke off into groups to explore displays designed to make them second-guess what they perceive.

In one room, they viewed unlabelled photographs of people and tried to guess why the subjects are famous. One yearbook photo of a pudgy, bespectacled boy garnered guesses like "CEO" or "computer programmer" — when it was really television personality Ryan Seacrest.

Students walked a gallery of optical illusions, watched a video on stereotypes, participated in debates, and built structures from spaghetti noodles by borrowing each other's ideas.

"I think they've taken a much different approach than a lot of the teachers I've had in the past," says Kimathi Muiruri, one of the boys visiting from Upper Canada College. "It's extremely different, but different in a good way, as in it includes us. It's not just a teacher telling us about learning. It's a teacher helping us learn how we learn. I like that approach because it gives us a chance to discover us, opposed to a test or a survey telling us who we are."

Lowenstein also finds it effective.

"I find it really useful to do hands-on work



PHOTO COURTESY JUILA DRAKE

**IT'S A MARSHMALLOW LESSON:** Students from Branksome Hall and Upper Canada College work together to build a structure with spaghetti noodles, tape, string, and a marshmallow to teach them different ways of thinking.

because it's a lot more interactive than sitting at a desk or on your computer," she says.

The iThink program began at Branksome Hall four years ago, was originally designed for Masters of Business Administration and company executives, Kornberg says. Rotman first brought it to Branksome as a 10-week after-school class for grade 10 girls.

"They demonstrated the capacity of young people to think if given the tools and the support to do so," Kornberg says.

She says Rotman plans to further modify the program for children as young as kindergarten, encouraging their inherent curiosity and fostering it as they grow.

"The full-day program, like the one here, is unique to UCC and Branksome Hall," Kornberg says. Rotman is looking into expanding the curriculum into grades 8 through 10 at the school.

"I have students who are in grade 11, and they remember this program," says Branksome Hall teacher Giles Pinto. "They get challenged."

"The research shows us: if the kids don't feel comfortable, secure, connected to other people, particularly girls, we will have problems with learning. We have to go back to that step and make them feel like they have the tools."

Muiruri says that being equipped with these tools helps integrative thinkers to become better people.

"You become an individual," he says. "You become your own. I believe that if everybody was the same, it would be an extremely boring world, so I think learning how you perceive is good."

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# READING ACTIVITY

- Please **skim** over the article on a partnership between the University of Toronto, Branksome Hall and Upper Canada College.
- What learner profile attributes do you **see** being highlighted?
- What do you **think** makes this work pedagogically?
- What do you **wonder** about this initiative?
- Please **share** your observations.

Activity from  
Project Zero  
@ Harvard University

# WHERE DO WE GO FROM HERE?



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# KEY FINDINGS FROM I.B. LEARNER PROFILE IN REVIEW (April 2013)

- Both ‘resilience’ and ‘resourcefulness’ could augment the existing attributes. → *Can we use problem-solving to develop these values?*
- “The learner profile is seen as having less impact on adult members of the IB community.” → *What theoretical and practical elements could activate the LP for teachers?*

# RECOMMENDATIONS FROM I.B. LEARNER PROFILE IN REVIEW (April 2013)

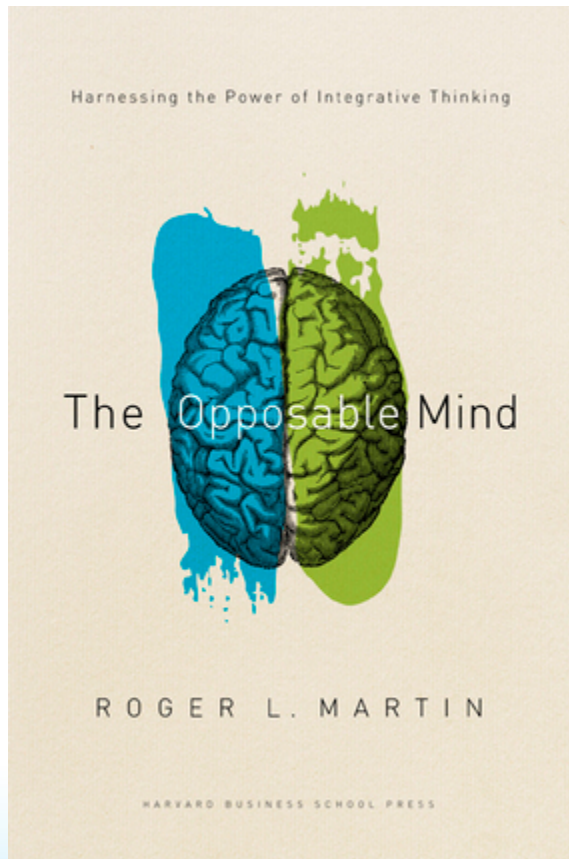
- We need “an explicit statement of the LP’s relationship to the development of international-mindedness.” → *How can we connect the attributes to concepts like intercultural awareness?*
- Schools should be encouraged to question, revise, add and develop age-appropriate and contextually appropriate variations on the LP. → *Where should we start? How should we frame these lines of inquiry and revision?*

# RECOMMENDATIONS FROM I.B. LEARNER PROFILE IN REVIEW (April 2013)

- The LP should be seen as connected to a “dynamic, interrelated and open-ended family of ideas / aspirations / outcomes.” → *What kinds of ideas would complement the LP attributes within the MYP and DP contexts? How could these link with subject group aims and objectives?*
- The LP review indicates the need for “explorations of our common humanity and human capabilities in the face of emerging global challenges” → *How can we do this important work as ‘action research’ in a school-based context?*



# WHAT IS INTEGRATIVE THINKING (I-THINK)?



***“The test of a first-rate intelligence is the ability to hold two opposing ideas in mind at the same time and still retain the ability to function.”***  
***~ F. Scott Fitzgerald***

# INTEGRATIVE THINKING EXPLAINED

Please refer to this video from the *TVO Parents* website\* for an explanation of the Integrative Thinking framework from Roger Martin (Former Dean & Professor of Strategic Management, Rotman School of Management @ the University of Toronto):

<http://tvoparents.tvo.org/video/184876/roger-martin-integrative-thinking>

\*tvoparents.tvo.org

# DEBRIEFING THE VIDEO: Pair & Share

- Find someone else who was considering the same attribute as you:
  - *How could this attribute be engaged and/or activated through Integrative Thinking?*
  - *What specifically would work in your school context?*

# A THEORETICAL CONTEXT TO CONSIDER

“Peer-driven change should be about **pulling** people into exciting changes and sometimes also **pushing** and **nudging** them beyond what they perceive as their limits.”

~ Michael Fullan & Andy Hargreaves,

“Reviving Teaching with ‘Professional Capital’”

[*Education Week*: June 5, 2012]

# OUR RATIONALE FOR IMPLEMENTING INTEGRATIVE THINKING

- **The Pull:**
  - **A chance to augment initiatives around mindset and critical thinking**
- **The Push:**
  - **Unique professional learning opportunity with a post-secondary partner**
- **The Nudge:**
  - **Pressures from government and IB mandates to develop and assess 21<sup>st</sup> century learning skills**

# IMPACTS ON *APPROACHES TO LEARNING*

- Key I-Think Tool:
  - Causal Modelling
- Application:
  - Connecting to the *Brainology* online curriculum
- Effect:
  - Increased student self-awareness on how our own mental models can enable or prevent cognitive growth

# IMPACTS ON *GUIDANCE & COUNSELLING*

- **Key I-Think Tool:**
  - **Assertive Inquiry**
- **Application:**
  - **Helping students to resolve interpersonal conflicts by shifting away from advocacy**
- **Effect:**
  - **Better social dynamics within student population + enhancement of anti-bullying strategies**

# THE NEXT STEP: *SOCIAL & EMOTIONAL LEARNING (S.E.L.)*

- **Key I-Think Tool:**
  - **Ladder of Inference**
- **Application:**
  - **Building a scope and sequence for S.E.L. capabilities**
- **Desired Effect:**
  - **Students with greater personal resilience and better overall capacity when it comes to academic performance**



# WHAT IS SOCIAL & EMOTIONAL LEARNING?

- A **constructive** process for learning interpersonal and intrapersonal life skills
- Develops the ability to **recognize and manage feelings** productively
- Creates capacity for sympathy, empathy and **positive relationships**
- Leads to **ethical** decision-making

**SOURCE:**

***Collaborative for Academic,  
Social & Emotional Learning***



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# GROUP BRAINSTORM:

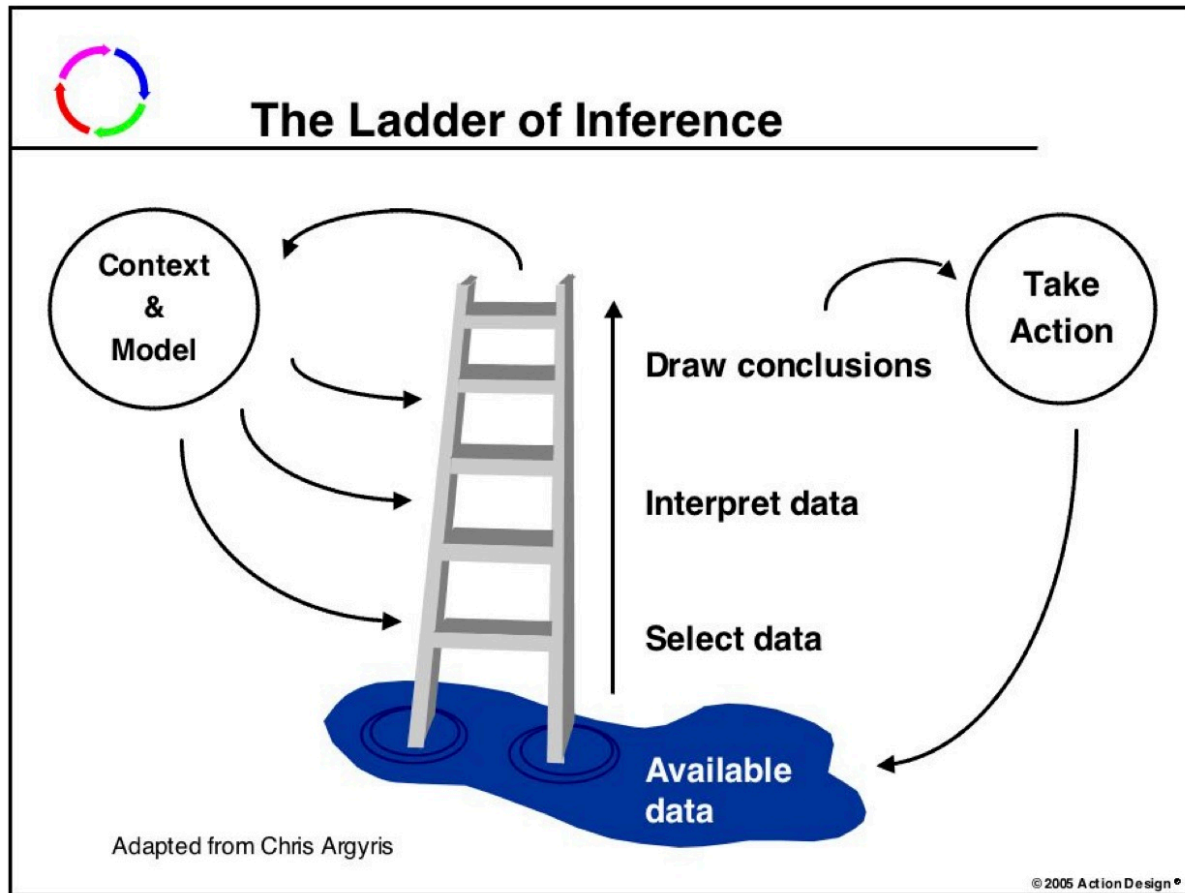
## *S.E.L. + LADDER OF INFERENCE*

*How could this tool enhance these skill sets?*

- 1. Reflecting on emotions in oneself and others**
- 2. Listening and communicating accurately and clearly**
- 3. Caring for others and appreciating differences**
- 4. Courageously problem-solving, decision-making and planning**
- 5. Open-minded group work**

PICK ONE TO THINK  
ABOUT FOR NEXT SLIDE!

# GROUP BRAINSTORM: *I-THINK, S.E.L. & THE LEARNER PROFILE*



# *THE LEARNER PROFILE IN CONTEXT:* LINKING I-THINK TO SUBJECT GROUPS

**ATTRIBUTE: BEING INQUIRERS**

POSSIBLE SUBJECT GROUP LINK:  
Visual Arts

**I-THINK TOOL: 'Assertive Inquiry'**

*The master artist continually seeks other ways of looking at a work or representing a subject → moving beyond advocacy of one's own perspective (using critiques)*



Leonardo Da Vinci



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# THE LEARNER PROFILE IN CONTEXT: LINKING I-THINK TO SUBJECT GROUPS

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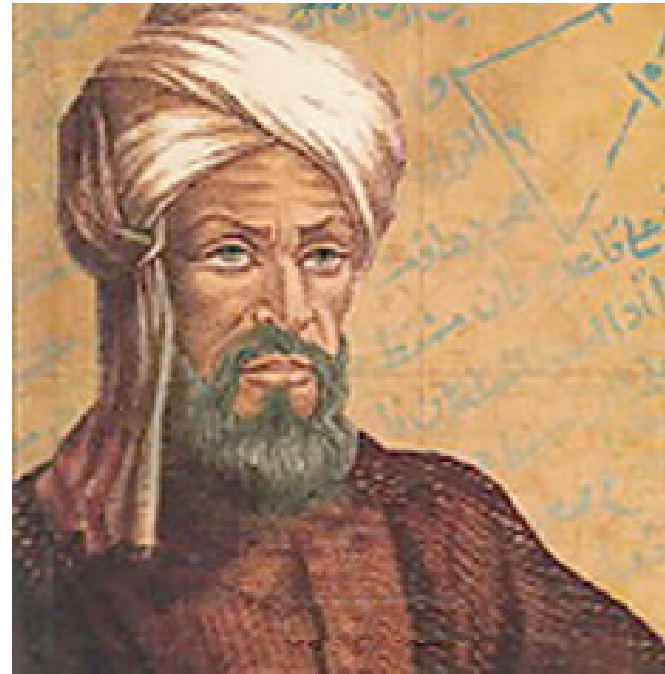
**BEING KNOWLEDGEABLE**

**POSSIBLE SUBJECT GROUP LINK:**

**Mathematics**

**I-THINK TOOL: 'Causal Modelling'**

*Doing problem-solving in math requires that we develop and use our understanding of how particular concepts lead to others.*



**Mohammed al-Khwarizmi**

# ***THE LEARNER PROFILE IN CONTEXT: LINKING I-THINK TO SUBJECT GROUPS***

**ATTRIBUTE: BEING THINKERS**

**POSSIBLE SUBJECT GROUP LINK:**

Personal Project /  
Theory of Knowledge

**I-THINK TOOL: 'Abductive Logic'**  
*Moving from critical to creative thinking requires 'modal reasoning' and considering other possible truths.*



**Akbar the Great**

# *THE LEARNER PROFILE IN CONTEXT:* LINKING I-THINK TO SUBJECT GROUPS

**ATTRIBUTE:**

**BEING COMMUNICATORS**

**POSSIBLE SUBJECT GROUP LINK:**  
Dramatic Arts

**I-THINK TOOL:**

**‘Articulation of Models’**

*Expressing ourselves confidently and creatively is essential for effective sharing of ideas and inspiring others to act.*



**Joseph Fiennes as  
William Shakespeare**



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# THE LEARNER PROFILE IN CONTEXT: LINKING I-THINK TO SUBJECT GROUPS

**ATTRIBUTE:**

**BEING PRINCIPLED**

**POSSIBLE SUBJECT GROUP LINK:**  
Language & Literature

**I-THINK TOOL:**

**‘Reserving Judgment’**

*Being responsible and careful  
with our own decision-making  
can foster integrity, honesty and  
fairness.*



**Sancho Panza & Don Quixote**



# THE LEARNER PROFILE IN CONTEXT: LINKING I-THINK TO SUBJECT GROUPS

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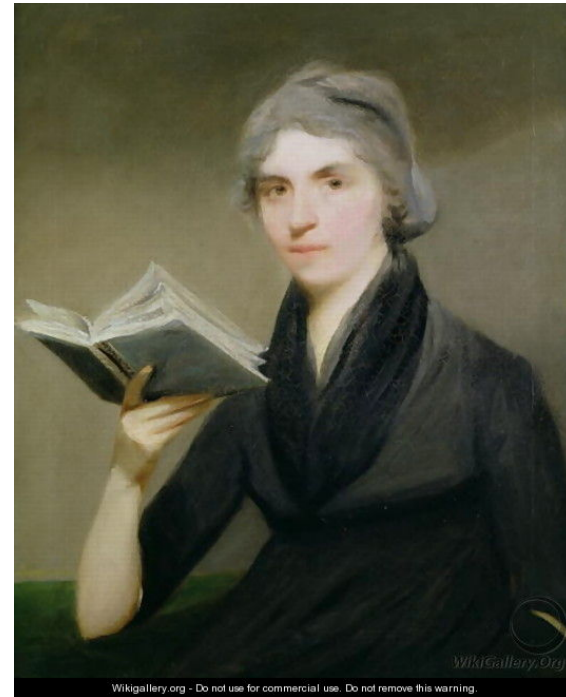
**BEING OPEN-MINDED**

**POSSIBLE SUBJECT GROUP LINK:**  
Individuals & Society

**I-THINK TOOL:**

**‘Seeking Multiple Explanations’**

*We recognize that growth comes from seeking and evaluating a range of points of view.*



**Mary Wollstonecraft**

# THE LEARNER PROFILE IN CONTEXT: LINKING I-THINK TO SUBJECT GROUPS

**ATTRIBUTE: BEING CARING**

**POSSIBLE SUBJECT GROUP LINK:**  
Physical & Health Education

**I-THINK TOOL:**

**‘Empathetic Stance’**

*An orientation toward empathy shows compassion and respect, leading toward making a positive difference in the lives of others.*

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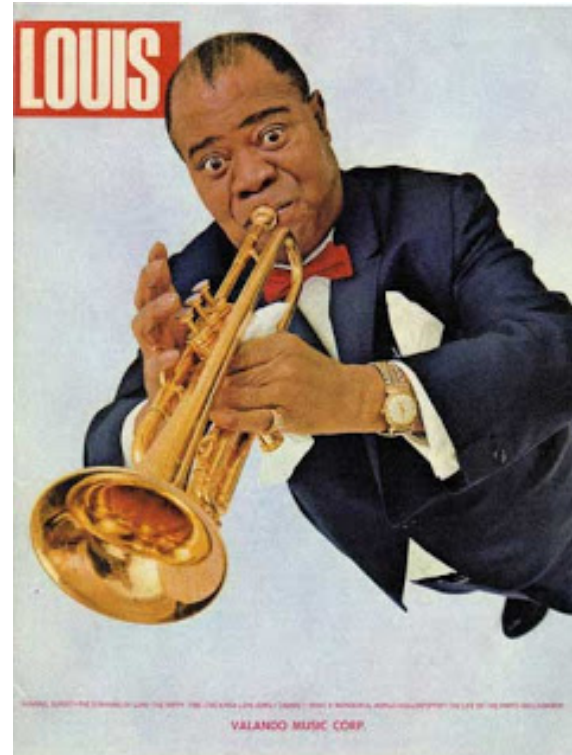
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# THE LEARNER PROFILE IN CONTEXT: LINKING I-THINK TO SUBJECT GROUPS

**ATTRIBUTE:  
BEING COURAGEOUS**

**POSSIBLE SUBJECT GROUP LINK:  
Musical Arts**

**I-THINK TOOL:  
'Leveraging Beyond Compromise'  
*Going beyond the easy solutions in  
uncertainty requires resiliency and  
the creative application of new  
ideas and risk-taking.***



# THE LEARNER PROFILE IN CONTEXT: LINKING I-THINK TO SUBJECT GROUPS

**ATTRIBUTE: BEING BALANCED**

**POSSIBLE SUBJECT GROUP LINK:**  
Design

**I-THINK TOOL:**

**‘Directional Knowledge’**

*Our lives and our pursuits  
should connect the intellectual,  
physical, spiritual and emotional  
aspects of existence.*



# THE LEARNER PROFILE IN CONTEXT: LINKING I-THINK TO SUBJECT GROUPS

**ATTRIBUTE: BEING REFLECTIVE**

**POSSIBLE SUBJECT GROUP LINK:**  
Science

**I-THINK TOOL:**

**‘The Ladder of Inference’**

*Thoughtful consideration of the data in the world around us – in relation to our own ideas and experience – yields better conclusions.*



**Marie Curie**

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*(published by the IBO in April 2013)*

## **FOR FURTHER INFORMATION OR TRAINING OPPORTUNITIES RELATED TO INTEGRATIVE THINKING:**

Please contact Ellie AviShai, Director of the I-Think Initiative at the Rotman School of Management (University of Toronto):  
*ellie.avishai@rotman.utoronto.ca*

## **TO JOIN FUTURE ACTION RESEARCH RELATED TO INTEGRATIVE THINKING & THE LEARNER PROFILE:**

Please contact Giles Pinto, MYP Coordinator at Branksome Hall:  
*gpinto@branksome.on.ca*