imaginative education
Presentation Outline

• Introduction and Overview of Imaginative Education

• The Theoretical Foundations of Imaginative Education

• Imaginative Education in Action
Introduction

❖ What is new about IE?
- a new understanding of how knowledge grows in the mind, and how our imaginations work and change during our lives
- innovative teaching methods based on these insights offer new ways of planning and teaching

❖ So what is the imagination?
- ability to think of the possible, not just the actual
- source of invention, novelty, and flexibility in human thinking that greatly enriches rational thinking
- tied to our ability to form images and our emotions
- “reaching out” feature of minds that picks up new ideas, tries them out, weighs their qualities and possibilities, and finds a place for them amidst the things already learned: “Look! See what I can do with this!”
What are the theoretical foundations for IE?

- Socio-cultural theories of Lev Vygotsky
  - richest elaboration of Vygotsky’s ideas about learning and imagination developed for education

- Cultural Recapitulation Theory
  - thinking tools (cognitive tools) that were invented in cultural history are recapitulated
  - best described in Kieran Egan’s *The Educated Mind: How cognitive tools shape our understanding*

“A new theory of education that is (believe it or not) useful... 'The Educated Mind' is something very new and different.”

“Kieran Egan has one of the most original, penetrating, and capacious minds in education today. This book provides the best introduction to his important body of work.”
-- Howard Gardner, Harvard University
Overview of Imaginative Education

Kinds of Understanding: The Core of Imaginative Education

Cognitive Tools: How We Can Develop the Five Kinds of Understanding
Kinds of Understanding: The Core of Imaginative Education
Kinds of Understanding

- **IE is based on five distinctive kinds of understanding that enable people to make sense of the world in different ways**
  - enable each student to develop these five kinds of understanding while they are learning math, science, social studies, and all other subjects
  - needs to be accomplished in a certain order because each kind of understanding represents an increasingly complex way that we learn to use language

  - Somatic Understanding (pre-linguistic)
  - Mythic Understanding (oral language)
  - Romantic Understanding (written language)
  - Philosphic Understanding (theoretic use of language)
  - Ironic Understanding (reflexive use of language)
Kinds of Understanding:

- all five kinds of understanding make a distinctive contribution to one’s understanding and they work best if they can be combined
  - Somatic + Mythic + Romantic + Philosophic + Ironic

- each kind of understanding does not “naturally” develop at a particular age in some steady and inevitable process
  - occurs when the appropriate forms of IE are used adequately
  - teachers can focus their efforts on engaging students’ imaginations and emotions with knowledge about the world and on developing their use of an array of... cognitive tools
Somatic Understanding

Understand experience in a physical, pre-linguistic way

- Make sense of experiences through the information provided by the senses of sight, hearing, touch, taste, and smell, and crucially with the emotions that these are tied up with.
- Experience the world and sensations of balance, movement, tension, pain, pleasure, and so on, through the way the body physically relates to the objects and persons encountered.
Mythic Understanding

- understand experience through oral language
  - no longer limited to making sense of the world through direct physical experience
  - can now rely on language to discuss, represent, and understand even things not experienced in person
Romantic Understanding

- understand experience through written language
  - realization of independence and separateness from a world that appears increasingly complex
  - relate readily to extremes of reality, associate with heroes, and seek to make sense of the world in human terms
understand experience through the theoretic use of language
- systematic understanding - more focus on the connections among things
- recognition that there are laws and theories that can bring together, and help make sense of, what originally seemed to be disconnected details and experiences
Ironic Understanding

- understand experience through the reflexive use of language
  - realization of the limits to systematic thinking
  - appreciation that theories, and even language, are too limited and crude to capture everything that is important about the world
  - recognition that the way we make sense of the world depends on our unique historical and cultural perspective
Cognitive Tools: How We Can Develop The Five Kinds Of Understanding
students can most successfully develop the five kinds of understanding by acquiring sets of cognitive tools

- “thinking tools” invented and developed by our ancestors for making sense of the world and acting more effectively within it
  - stories – helped people to remember things by making knowledge more engaging
  - metaphors – enabled people to understand one thing by seeing it in terms of another
  - binary oppositions like good/bad – helped people to organize and categorize knowledge

- referred to as tools because they are mental devices that help us think and do things more effectively
these cognitive tools, and many others, have become a part of our culture
- hard to imagine life without basic cognitive tools such as stories or metaphors
- each of us can learn to use these cognitive tools to enlarge our powers to think and understand

most teachers will intuitively recognize the importance of many cognitive tools
- teachers may be less familiar with how to routinely use them in the classroom
- IE shows how cognitive tools can be effectively used to make everyday teaching more interesting and meaningful while also developing the kinds of understanding
The sets of Cognitive Tools students should acquire to develop each Kind of Understanding

<table>
<thead>
<tr>
<th>Somatic Understanding</th>
<th>Mythic Understanding</th>
<th>Romantic Understanding</th>
<th>Philosophic Understanding</th>
<th>Ironic Understanding</th>
</tr>
</thead>
<tbody>
<tr>
<td>bodily senses</td>
<td>story</td>
<td>sense of reality</td>
<td>drive for generality</td>
<td>limits of theory</td>
</tr>
<tr>
<td>emotional responses &amp; attachments</td>
<td>metaphor</td>
<td>extremes &amp; limits of reality</td>
<td>processes</td>
<td>reflexivity &amp; identity</td>
</tr>
<tr>
<td>rhythm &amp; musicality</td>
<td>abstract binary opposites</td>
<td>association with heroes</td>
<td>lure of certainty</td>
<td>coalescence</td>
</tr>
<tr>
<td>gesture &amp; communication</td>
<td>rhyme, meter, &amp; pattern</td>
<td>wonder</td>
<td>general schemes &amp; anomalies</td>
<td>particularity</td>
</tr>
<tr>
<td>referencing</td>
<td>joking &amp; humour</td>
<td>humanizing of meaning</td>
<td>flexibility of theory</td>
<td>radical epistemic doubt</td>
</tr>
<tr>
<td>intentionality</td>
<td>forming images</td>
<td>collections &amp; hobbies</td>
<td>search for authority &amp; truth</td>
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<tr>
<td></td>
<td>sense of mystery</td>
<td>revolt &amp; idealism</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>games, drama &amp; play</td>
<td>context change</td>
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</tbody>
</table>
**Figure 1:** Imaginative Education in Action

**Cognitive Tools for Mythic Understanding:**
- story
- metaphor
- abstract binary opposites
- rhyme, meter & pattern
- joking & humour
- forming images
- sense of mystery
- games, drama & play

**Science Lesson on the Life Cycle of the Butterfly**
- taught using various Cognitive Tools for Mythic Understanding

**Students’ Imagination:**
- Imaginations (depicted by the green line) are drawn in to the subjects taught using the cognitive tools because the subjects are now emotionally engaging and meaningful. In this process, imagination is seen as the “reaching out” feature of students’ minds that picks up new ideas and finds a place for them amidst the things they have already learned.

**Now that students’ imaginations are in play, their thinking is more deeply and energetically engaged. At this point, they are able to effectively learn the knowledge about each subject.**

**Imagination**

**Knowledge**

**Kinds of Understanding**
- Somatic: Cognitive Tools: bodily senses, emotional responses, & attachments; rhythm & musicality, communication, referencing, intentionality
- Mythic: Cognitive Tools: story, metaphor, abstract binary opposites, rhyme, meter & pattern; joking & humour; forming images; sense of mystery; games, drama & play
- Romantic
- Philosophic
- Ironic

**Teachers use the cognitive tools to structure and teach the subjects in the curriculum. In this example, a science lesson is being explained at the Mythic Understanding level.**

**Science Lesson on the Life Cycle of the Butterfly**
- the story of the butterfly’s life cycle told in a way that evokes wonder and has emotional meaning
- the abstract binary opposites that best capture the wonder of the butterfly’s life cycle, e.g., constrained/free (the caterpillar in the cocoon/the butterfly flying around)
- jokes & humour that draw attention to various aspects of the butterfly’s life cycle, e.g., the voracious appetite of the caterpillar

Q: What does a caterpillar do on New Year’s Day?
A: Turns over a new leaf!

**While they are learning the knowledge, the students are also made aware of and learn how to use the cognitive tools. As they learn these tools, they enlarge their powers to think and make sense of the world. This enables them to develop the kinds of understanding. In this example, the students are learning the tools that develop Mythic understanding. In later years, they will learn the tools that develop Romantic, Philosophic, and Ironic understandings.**
PLANNING FRAMEWORKS

1. Brief version of the Mythic Framework
2. Brief version of the Romantic Framework
3. Brief version of the Philosophic Framework
Mythic Planning Framework

1. Locating importance

2. Thinking about the content in story form
   2.1. Finding binary opposites
   2.2. Finding images, metaphors and drama
   2.3. Structuring the body of the lesson or unit

3. Conclusion

4. Evaluation
Romantic Planning Framework

1. Identifying transcendent qualities

2. Organizing the content into a narrative structure
   2.1 Initial access
   2.2 Structuring the body of the unit or lesson
   2.3 Humanizing the content
   2.4 Pursuing details

3. Conclusion

4. Evaluating
Philosophic Planning Framework

1. Identifying powerful underlying ideas

2. Organizing the content into a theoretic structure
   2.1. Initial access
   2.2. Organizing the body of the lesson or unit

3. Introducing anomalies to the theory

4. Presenting alternative general theories

5. Encouraging development of the students’ sense of agency

6. Conclusion

7. Evaluation
Please feel free to contact us to give us your feedback, to join our online community, or to receive more information.

Imaginative Education Research Group
c/o Faculty of Education
Simon Fraser University
Burnaby, B.C. Canada V5A 1S6.
Ph: 604 291 4479. Fax: 604 268 7014
Email: ierg-ed@sfu.ca
http://www.ierg.net