

# The Next Big Things... Creating the Future

By  
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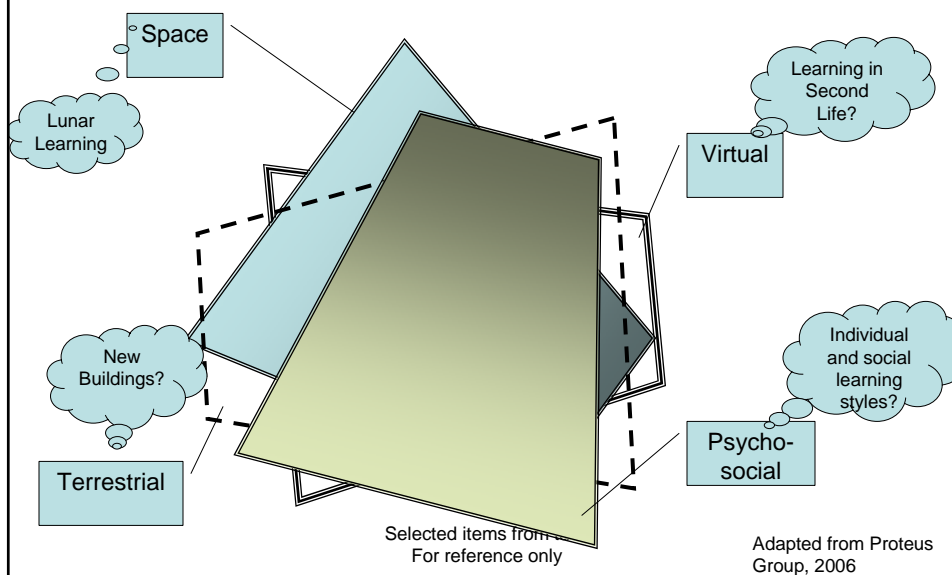
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Howard Community College



Selected items from talk,  
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## “Influence Planes” for Thinking <sup>14</sup>





## **Driving Forces and Trends – What “might be” the Next Big Thing?**

Selected items from talk,  
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### **Driving forces? *Building Material... for Futures Creation***

“There are many **Driving forces or events** that shape the future, but some are more important and evident than others.

**Driving forces are these major future shapers.”**

Roger Caldwell, U. of Arizona [ag.arizona.edu/futures/home/glossary.html](http://ag.arizona.edu/futures/home/glossary.html)

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## ***Eight Selected Driving Forces*** for a ***Short-term*** Future

### General

- Globalization, “Talent Wars” and, specifically, the rise of China and India – not new, but how do we deal with it?<sup>1</sup>
- Accelerated change, offloaded complexity and the compression of time and space”<sup>3</sup>
- “Innovation economy, society”<sup>4</sup>
- *Emerging “glocal” challenges (new energy, “GRIN,” space, “green” concerns)*<sup>10 11</sup>

### Learning

- Artificial Intelligence and “conscious computers.”<sup>6</sup>
- *Sensemaking* - The new science and technology of meaning<sup>9</sup>
- Mass customization of Learning... and about everything else<sup>7</sup>
- *Transformation beyond the “little red schoolhouse” metaphor.*

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## ***Driving force: Globalization, “Talent Wars” and,*** ***specifically, the rise of China and India –*** ***not new, but how do we deal with it?***

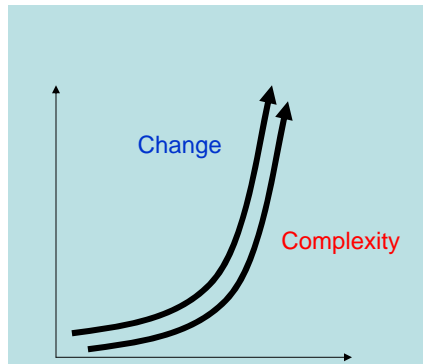
- **Culture**  
“Multicultural Tsunami” (Dator)  
“Cultures in Collision”  
“Deculturation”<sup>2</sup>
- **Community**  
c –the local community we serve  
C- the global community  
Global/local = Glocal
- **Cooperation**  
Shared resource use  
Idea and creativity  
development
- **Competition**  
Global competition  
Continuous improvement models  
Productivity and quality
- **Transparency**  
“get over” ethnocentrism and reduce cultural  
Diversity is a powerful  
force for creativity



Selected items from talk,  
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## Accelerated change, offloaded complexity and the compression of time and space”<sup>3</sup>

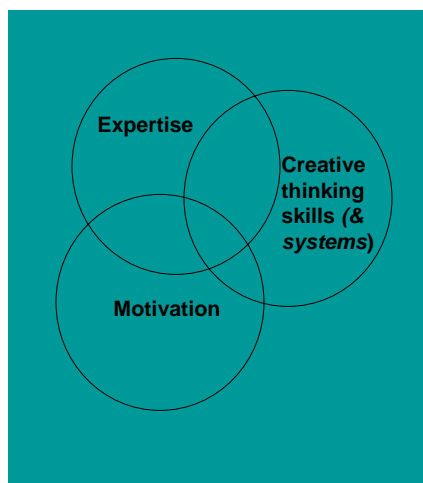
- Change and complexity (Smart) ...*time compression*?
- Toward the “singularity?”
- We can gear up for change through creativity
- Searching for questions with multiple answers as well as no answers at all vs only “**the right answer...**”
- Building an environment in which risk is rewarded and supported
- “Risk Encouragement Officer?”



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## “Innovation economy, society”<sup>4</sup>

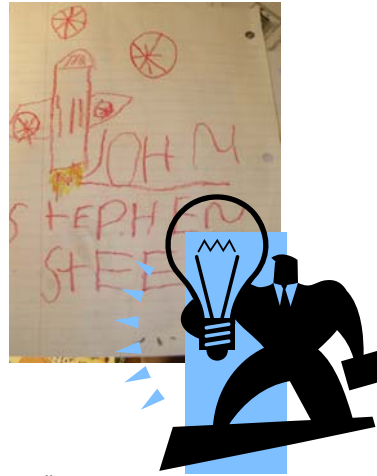
- **Innovation** – adapting rapidly, flexible
- **Invention- *creating new realities***
  - **Improvement** – continuous
- **Creativity to deal with Change**  
If Richard Florida is correct: bottom line is enhanced by creativity.
  - Creative institutions grasp the accelerating nature of a changing world



Source: T. Arnabile, “How to Kill Creativity,”  
Selected items from talk, Harvard Business Review, Sep-Oct 1998, 77-87  
For reference only

## *Driving force: Emerging “glocal” challenges (new energy, “GRIN,” space, “green” concerns)<sup>10 11</sup>*

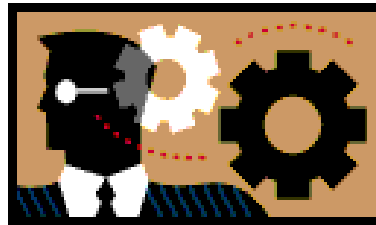
- “Weird science” Genetically Modified organisms mainstream (Canton)
- “Sweat the Small Stuff” Cyber Beings, biotech, nanotech
- Sweat the Large stuff –Environment, Space <sup>14</sup>
- Glocal Products to solve problems– transformation from information distribution system to information production and repackaging system
- The 'globalization of the local' dominates the worldwide landscape <sup>13</sup>
- Productivity – more rapid transformation of idea-to product



Selected items from talk,  
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## *Driving force: Artificial Intelligence and “conscious computers:” <sup>6</sup>*

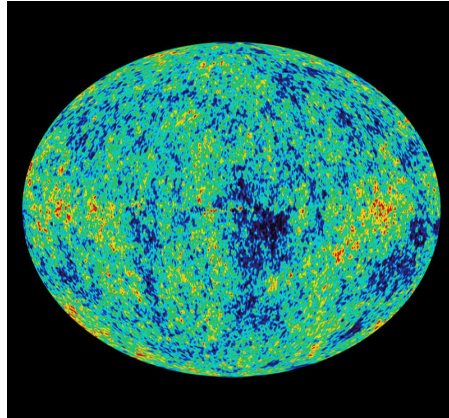
- *Age of conscious computers challenges learning paradigms*
- *Classroom assistants 2008-2012 (Halal)*
- AI partners?  
“Faculbots” and “Adminbots?”
- Transhumans? Chip enhanced intelligence (Canton)
- Who is in charge?



Selected items from talk,  
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## Driving Force: *Sensemaking* - The new science and technology of meaning<sup>9</sup>

- Surrounded by information
- What does it all mean?
- Creating and using tools to begin to empower persons to “make sense.”
- Freidman .. Pattern discernment jobs (paraphrase)
- Solve problems – with multiple answers



The Wilkinson Microwave Anisotropy Probe (WMAP)  
“survey the sky to measure the temperature of the radiant heat left over from the Big Bang.”

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## *Driving force: Mass customization of Learning... and about everything else<sup>7</sup>*

- **Tailored learning** – more effectively connecting individual needs with system capabilities
  - Enlightened learning consumer
- Expanded opportunities for alternatives
- “Active Learning Innovators”
- Learning for ourselves: a new paradigm for education<sup>8</sup>  
Learning by and for “self”



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## *Driving force: Transformation beyond the “little red schoolhouse” metaphor.*

- Synergistic sites for the transformation to a more dynamic society
- Wrong questions:  
“What will schools look like?”  
“What will classrooms look like?”
- “Learning Space of the Future”  
(Herman Miller)  
Appropriate scale and high flexibility
- Agents of transformation
- Fully integrated learning?



Selected items from talk,  
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## *“Get me up to speed!”*

- **Organizations?**  
There are many... start here  
World Future Society, Tim Mack, President, [www.wfs.org](http://www.wfs.org)
- **Time for one book?**  
Primer: Cornish, E. Exploring the Future, World Future Society, Bethesda, MD, 2004.  
  
Great overview of forces: Canton, James The Extreme Future: New York: Dutton, 2006
- **Programs in the U.S?**  
Bishop, Peter. Director, Futures Studies Program, University of Houston  
<http://b3308-adm.cl.uh.edu/futureweb/>  
  
Dator, Jim. Director Hawaii Center for Futures Studies, University of Hawaii, Manoa, HI <http://www.futures.hawaii.edu/index.php>
- **Community College Efforts?**  
Institute for the Future @ Anne Arundel Community College, [www.aacc.edu/future](http://www.aacc.edu/future), 410-777-7208, [if@aacc.edu](mailto:if@aacc.edu) or [sfsteELE@aacc.edu](mailto:sfsteELE@aacc.edu)
- Tom Lombardo, Director, Odyssey of the Future, Rio Salado College, Tempe, Arizona, <http://www.odysseyofthefuture.net/>

Selected items from talk,  
For reference only

## Some references for this work...

The Driving Forces in this presentation were extracted and adapted from the work of professionals and sources below:

- Bishop, Peter. Director, Futures Studies Program, University of Houston  
<http://b3308-adm.cl.uh.edu/futureweb/>
- Canton, James. *The Extreme Future*. New York: Dutton, 2006.
- Cornish, E. *Exploring the Future*. World Future Society, Bethesda, MD, 2004.
- Dator, Jim. Director Hawaii Center for Futures Studies, University of Hawaii, Manoa, HI  
<http://www.futures.hawaii.edu/index.php>
- Florida, Richard. "What are the implications of the 21st century global creative economy for the United States and its long-term economic well-being?" Questions and Answers About the Future, IF @ AACC, <http://www.aacc.edu/future/askfutureflorida.cfm>
- Garreau, Joel. *Radical Evolution*. New York: Doubleday, 2005.

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## More references...

- Halal, William E., *Technology's Promise*, The Futurist, World Future Society, Bethesda, November-December 2006, pp41-50
- Heimstra, Glen. *Turning the Future into Revenue What Businesses and Individuals Need to Know to Shape Their Futures*. Hoboken, New Jersey: John Wiley, 2006.
- Leggett, Mark. An Indicative Costed Plan for Mitigation of Global Risks *Futures*: 38:7, September 2006, 778-809  
[http://www.accessmylibrary.com/coms2/summary\\_0286-18445871\\_ITM](http://www.accessmylibrary.com/coms2/summary_0286-18445871_ITM)
- Lombardo, Tom. Question: "In what ways might the human mind and human psychology evolve in the future?" "Questions and Answers About the Future, IF @ AACC, <http://www.aacc.edu/future/Askfuturelombard.cfm>
- Lundt, John C.. *Learning for ourselves: a new paradigm for education; Learning should be taken out of the hands of antiquated school systems and put into the hands of learners, argues a professor and education consultant*. The Futurist 38.6 (Nov-Dec 2004): p18(5).

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## And, more references...

- Mannermaa, Mika *Traps in Futures Thinking – And How to Overcome Them in Thinking Creatively in Turbulent Times*. WFS, 2005.
- Pearson, Ian and Ian Neild. *A timeline for technology: to the year 2030 and beyond; What's ahead in technology, and what will it mean?* (Editorial)(Table) *The Futurist* 40.2 (March-April 2006): p31(6).
- Smart, John. "What is accelerating change, and what does it mean for 21st century human beings?" *Questions and Answers About the Future*, IF @ AACC, <http://www.aacc.edu/future/askfuturejsmart1.cfm>
- Von Holzen, Roger. *The emergence of a learning society: a specialist in instructional communications explains how new technologies will enable lifelong education for people everywhere*. *The Futurist* 39.1 (Jan-Feb 2005): p24(2).
- Wagner, Cynthia G.. *Machines vs. education?*(FUTURIST NEWSMAKERS). *The Futurist* 39.3 (May-June 2005): p67(1).
- World Future Society Annual Meeting, Toronto, Canada, July 29, 2006  
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## Support for Driving Forces..

- <sup>1</sup> Canton, James *The Extreme Future*: New York: Dutton, 2006.
- <sup>2</sup> Cornish, E. *Exploring the Future*, World Future Society, Bethesda, MD, 2004
- <sup>3</sup> Smart, John. *Questions and Answers about the Future: "What is accelerating change, and what does it mean for 21st century human beings?"* Answer by John Smart, president of the nonprofit Acceleration Studies Foundation (ASF). <http://www.aacc.edu/future/askfuturejsmart1.cfm>
- <sup>4</sup> Canton, James *The Extreme Future*: New York: Dutton, 2006.
- <sup>5</sup> Gail D. Foster in Cynthia G. Wagner. *The Futurist* 40.3 (May-June 2006): p16(2).
- <sup>6</sup> Ian Pearson and Ian Neild. *The Futurist* 40.2 (March-April 2006): p31(6).
- <sup>7</sup> Tucker, Robert B. *The Innovation Resource*, in Santa Barbara, California. He is the author of the bestselling *Managing the Future: 10 Driving Forces of Change for the Next Century* (Berkeley Books)
- <sup>8</sup> John C. Lundt. "Learning for ourselves: a new paradigm for education; Learning should be taken out of the hands of antiquated school systems and put into the hands of learners, argues a professor and education consultant." *The Futurist* 38.6 (Nov-Dec 2004): p18

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## More Support for Driving Forces..

- <sup>9</sup> Institute for the Future The *2006 Map of the Decade* tells six big stories about the world that will shape our lives and our decisions over the next ten years:  
[http://www.iff.org/features/map\\_of\\_the\\_decade.html](http://www.iff.org/features/map_of_the_decade.html)
- <sup>10</sup> Garreau, Joel. *Radical Evolution*. New York: Doubleday, 2005
- <sup>11</sup> William E. Halal, Technology's Promise, *The Futurist*, WFS, Bethesda, November-December 2006, pp41-50
- <sup>12</sup> Barker, J and Erickson, S. *Five Regions of the Future*, New York, New York: Penguin Group, 2005
- <sup>13</sup> Day, David "Getting to 2025: Inspiring Cross-cultural Leadership," *FUTUREtakes*, Vol 6. No. 1 Spring 2007, pp 34-37 (adapted from O'Hare-Devereaux *Navigating the Badlands*)
- <sup>14</sup> Day From a presentation by Bill Wimbish: "PROTEUS- New Insights for a New Age, at Anne Arundel Community College, 19 June 2007, <http://www.carlisle.army.mil/proteus>.
- <sup>15</sup> Naisbitt, John. *Mind Set!* New York: Harper Collins, 2006.

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