Preparing Students for the Future by Actually Teaching Them about the Future

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Houston TX

Anticipation 2015
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Driving Questions

1. Why does strategic foresight appear at this time in history?
2. Why is it the preferred approach to the future today?
3. What is strategic foresight anyway?
4. What do educators say?
5. Are there ways of addressing their concerns?
6. Discussion -- Questions, objections, suggestions
The Invention of History
As We Know IT

Herodotus
The Histories
450s – 420s B.C.

Thucydides
The History of the
Peloponnesian War
431 B.C.

But why now?

Accelerating change
Accelerating rate of change

Time to 50% adoption
- Telephone = 45 yrs
- Internet = 10 yrs

Increasing Rate of Globalization

Development is faster and faster

Jose Cordeiro, Thinking about the Unthinkable, Olomouc University, 2010

We teach the future as we do the past.
Big Decisions Ahead

Manipulating the germ line

We teach the future as we do the past.

Alana Saarinen

From then...

...To now

If only we had eyes behind our head!

First International Conference on Anticipation
Trento IT, 6 Nov 2015

Dr. Peter Bishop
TeachtheFuture.org
When we drive in the fog, do we look more closely or turn away?

We teach the future as we do the past.

Three objections

1. We do not have time to teach the future because it is not required by any organization or curriculum standard, including AP and IB.

2. The future is unpredictable so we cannot know, much less teach, something that has not happened yet.

3. We were not taught the future so we do not know how to teach it.
1. We do not have the time

The future does not take any more time than anything else!

- **History** – flow, change over time, time series, patterns, uncertainties, contingencies, alternative histories, historical images of the future, historical analogy
- **Literature**, language – future tense, subjunctive mood, science fiction, the three questions for fictional conditions and characters
- **Mathematics** – time series, extrapolation, probability, preference ranking, criteria weighting
- **Physical science** – time series, extrapolation, technological applications, social consequences, public issues
- **Social science** – social change, time series, cultural concepts of time, national and global awareness

2. The future is unpredictable

- Airlines
- Automobiles
- Film
- Health care
- Military
- Music
- Newspapers
- Publishing
- Retail
- Telephones
- Television
- The energy crisis
- The PC
- The collapse of the Soviet Union
- The invasion of Kuwait
- The World Wide Web
- Y2K
- The Tech Bubble
- 9-11
- The Financial Crisis
Traditional Forecasting

Techniques

- Econometrics
- Commentators
  
  *Genius forecasters*

Uncertainties

- Parametric uncertainty
- Alternatives, but still looking for the “right” answer

What if there is no “answer” or multiple answers?

Not one future, but multiple futures?

The Actual Future

When more than one future is plausible, which one is correct? But why not use all three?

— The Expected Future

- Where we are headed
- The future if everything continues as it has
- The result of conditions and trends (momentum)

— The Alternative Futures

- What might happen instead
- The set of plausible futures if something less likely or unexpected happens
- The result of events and issues (contingencies)
The Future is many, not one.

Source: Charles Taylor, Army War College

Sources of Change

Anticipate
Research

Influence
Strategy

INBOUND
Change that happens to us

OUTBOUND
Change we create ourselves

…but within limits

We teach the future as we do the past.
The Actual Future

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– The Expected Future
  • Where we are headed
  • The future if everything continues as it has
  • The result of conditions and trends (momentum)

– The Alternative Futures
  • What might happen instead
  • The set of plausible futures if something less likely or unexpected happens
  • The result of events and issues (contingencies)

– The Preferred Future(s)
  • What we want to happen
  • Either the expected or any of the alternative futures that is preferable
  • The result of our vision, goals, plans and actions (agency)

The Cone of Plausibility

The Future is many, not one.

Vision

Expected

Alternative Futures

Present

Past

Limit of Plausibility

Vision is the preferred future

Source: Charles Taylor, Army War College

We teach the future as we do the past.
Foresight Techniques

Framing
- Purpose
- Scope

Research
- Information
- Scanning
- Intelligence

Forecasting
- Baseline
- Scenarios

Visioning
- Vision
- Goals

Planning
- Mission
- Strategy

Acting
- Initiatives
- Results

INBOUND
Change that happens to us

OUTBOUND
Change we create ourselves

Thinking about the Future: Guidelines for Strategic Foresight
Andy Hines & Peter Bishop, 2007

We teach the future as we do the past.

Foresight in the Classroom

Simple questions

What is happening today? — Present

What happened to make it that way? — Past

What do you expect to happen? — Expected future

What might happen instead? — Alternative futures

What do you want to happen? — Preferred future(s)

We teach the future as we do the past.
The Language of Predictability

**Plausibility**

<table>
<thead>
<tr>
<th>Indicative</th>
<th>Subjunctive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Will</td>
<td>May</td>
</tr>
<tr>
<td>Must</td>
<td>Might</td>
</tr>
<tr>
<td>Should</td>
<td>Could</td>
</tr>
</tbody>
</table>

**Outcomes – the bottom line**

- **The expected future**
  - Causal reasoning
  - Mathematical extrapolation
  - Critical thinking, identifying assumptions
  - Implications analysis
  - Evaluation

- **The alternative futures**
  - Challenging assumptions
  - Creativity, imagination
  - Causal reasoning from different premises
  - Estimation of plausibility
  - Implication analysis, evaluation

- **The preferred future**
  - Values clarification
  - Preference ranking, criteria weighting
  - Communication, persuasion
  - Planning, organizing

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*We teach the future as we do the past.*

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*Dr. Peter Bishop*  
*TeachtheFuture.org*
3. We do not know how

- *Teaching about the Future*, Bishop & Hines
- *Anticipate the School You Want*, Shostak
- World Futures Society -- *The Futurist*, Annual Conference
- World Futures Studies Federation – Pedagogical Resources
- *Global Foresight Books, Shaping Tomorrow*
- Organizations -- Future Problem Solving, Global Issues Network, Future Friendly Schools, Facing the Future, Foresight Education, Big History Project’s Futures Module
- In-service, professional development

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**What we have done already**

- **Teacher in-services** for school districts in Houston and for American schools around the world
- **Certificate courses** for professionals in Houston and Brussels each year, some of whom are teachers.
- **Articles** about teaching the future.
- **Teaching about the Future** that describes the curriculum at the University of Houston.
- A **high school course** last semester on the Future of Houston.
- A non-profit **corporation** and a successful crowd **funding** campaign.
- The development of draft **curriculum materials**.
Your Turn

- Will the futures field support this movement?
- In any case, what should we do next?

www.TeachTheFuture.org

For Additional Information

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