Today’s Kids, Tomorrow’s Creatives

Preparation young people for living, learning and earning in the Conceptual Age

Erica McWilliam

1. The most important centuries for education are the 19th and the 21st.
‘Homo sapiens’

• Maleness

• Modern anatomy

• Capacity for abstract reasoning, language, introspection and problem solving

• Self-awareness, rationality, judgment
‘Globo Sapiens’

• Empathy
• Global consciousness
• Thinking beyond own generation
• Willingness to change
• Courage

Ian Lowe, 2011
2. The urgent drives out the important.
Global Mega-Trends

new economic world order; major demographic changes; new tribalisations; new notions of security, privacy and terror; enduring development of technology; asianisation; spiritual revolution; climate change; food shortage; new definitions of happiness, ideals & ethics; new energy economy; bespoke wellness & healthcare; new power balances; boys surplus; new management of anger.

Adjiedj Bakas, 2009
3. The future is something we create, not somewhere we are going.
women working; women speaking their mind; a far freer use of swearwords; calling the boss by his or her first name; couples living together before marriage; 24/7 shopping; use of terms like 24/7; acceptance, even celebration of openly gay relationships; the admonition of church and corporate leaders; deference to minority communities (eg, ‘welcome to country’ rituals); tolerance of graffiti; children telling their parents what they want; sexual images used in advertising, newspapers and television.

Bernard Salt, 2010
IBO: A Utopian Vision?

- To develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect.

- To encourage students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right.
4. Education is more important and less relevant than ever.
Why more important?

- Better lifestyle
- Better health
- Bigger pay-packet
- Less likely to be unemployed
- More chance of re-engagement
- More community infrastructure
Why less relevant?

- Credentials are ‘tick box’ items
- Creative capital is worth more
- Learning through ‘kids-to-kids’ networks
- 21st century needs more than routine thinking
- Learning matters more than knowing
In demand: a good credential *plus*:

- Ability to theorise and/or relate empirical data or other forms of evidence using formulae and equations but also innovative models and metaphors;
- Ability to see the part in the context of the wider and more complex whole;
- Ability to intuitively or analytically experiment with ideas and their products;
- Ability to bring function and aesthetics together in value-adding ways;
- Ability to collaborate with others in ways that increase opportunities for successful innovation.

Yorke, 2006
5. It is our knowledge that prevents us from taking risks, not our ignorance.
‘High Flying’ Alumni
‘High flyer’ Attributes

• Skilled in and beyond one discipline
• Highly literate and numerate
• Confident in their capacity to learn
• Risk-taking - welcoming error & complexity
• Relentlessly curious
• Creative, imaginative, cognitively agile
• Self-starting, self-managing, self-critical, self-evaluating
• Team-oriented, collaborating
• Techno-savvy – able to apply tools to higher order thinking
Typically assessed...

- Skilled in and beyond the discipline
- Highly literate and numerate
- Confident in their capacity to learn
- Risk-taking - welcoming error & complexity
- Relentlessly curious
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Aligning Outcomes and Practices

Desired Graduate Attributes

Assessment Models

Curriculum Content

Pedagogical approaches

Learning Technologies

Learning Aesthetics
What sort of creativity?
6. In this century, we need to unlearn as much as we need to learn.
Unlearning Creativity

Gen 1 (Artistic)
- Individual genius
- ‘Soft’/Arts-based
- Non-teachable
- No rules
- Spontaneous
- Non-assessable
- Technology-enabled

Gen 2 (Scientific, Economic)
- Team-based design
- ‘Hard’/Productivity-based
- Teachable
- Good constraints
- Learnable
- Assessable
- Technology-enabled
<table>
<thead>
<tr>
<th>Myth</th>
<th>Reality</th>
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<tbody>
<tr>
<td>Flash of insight</td>
<td>Comes from immersion</td>
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<tr>
<td>Brilliant idea</td>
<td>Fail often but early</td>
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<tr>
<td>Individualistic</td>
<td>Collaborative</td>
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<td>New knowledge</td>
<td>Admitting ignorance</td>
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<tr>
<td>Invention</td>
<td>Mostly development</td>
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<tr>
<td>Originality</td>
<td>Borrowing</td>
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<tr>
<td>Look to the future</td>
<td>Look sideways and backwards</td>
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<td>All about learning</td>
<td>But unlearning just as vital</td>
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<td>Internal R &amp; D</td>
<td>Networked, open innovation</td>
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<tr>
<td>Product pipeline</td>
<td>Consumers as innovators (prod-users)</td>
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<tr>
<td>Coming up with answers</td>
<td>Asking better questions</td>
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Source: Charlie Leadbeater, 2006
Design Capacity

If the Answer is 27, what is the question?
Design capacity

If the Answer is 27, what is the question?

Design one star question, then a two star question, then a three star question
7. Creativity is not merely artistry – it is also epistemological agility.
‘Truth mode’ pedagogy

• Knowledge is an accumulation of known facts and concepts
• Facts are best organised through disciplines
• Instruction is the most promising strategy
• Memory and imitation are useful
• Answers are right or wrong
• Test results measure success
• Best evidence of learning is exam results
‘Design Mode’ Pedagogy

• What is this idea good for?
• What does it do and fail to do?
• Does it have a future?
• How could it be improved?
• What is the value-add?
High Concept/High Touch

- correctness
- function
- argument
- focus
- logic
- teaching focused
- accumulation
- new ideas
- learning focused
- story
- empathy
- meaning

(Daniel Pink, 2005)
8. Epistemological agility can be taught as well as caught.
What sort of teaching?
Future-focused Teaching

sage on the stage

guide on the side

meddler in the middle
9. Creative futures demand less threat and more challenge from schooling.
Low Threat, High Challenge Pedagogy

• Diversity and differentiation without deficit (respect-rich)

• Obligatory engagement with broad and deep formal and informal knowledge work (information-rich)

• Ambiguity, argument and activity in traditional and non-traditional learning spaces (conversation-rich)

• Explicit expectations are aligned with learning purposes (structure-rich)

• Students succeed and fail without shame in a high cognitive demand environment (challenge-rich)
10. Challenge-rich teaching has specific techniques, norms and habits.
Challenge-Rich Teaching

- Meaningfulness of the learning is paramount
- Clear and explicit learning intentions are shared
- T&L routines are aligned with intentions & technologies
- Obligatory engagement is the norm – no opt out
- Questions/responses ‘cause’, probe and extend student thinking
- Students design tests, not just do them
- Formative assessment (incl. peer-based) feeds forward
- Innovative assessment of broad & deep learning
11. The ‘gulliver’ era of teaching has passed.
Re-thinking Teaching as Teaming
High-flying team capacities

- Alignment
- Steering
- Responsiveness
11 Debatable Propositions

- The most important centuries for education are 19th and 21st.
- The urgent drives out the important.
- The future is something we create, not somewhere we are going.
- Education is more important and less relevant than ever.
- It is our knowledge that prevents us taking risks, not our ignorance.
- This century demands that we unlearn as well as learn.
- Creativity is more than artistry – it is also epistemological agility.
- Epistemological agility can be taught as well as caught.
- Future ‘creatives’ need less threat & more challenge from schooling.
- Challenge-rich teaching has specific techniques, norms and habits.
- The ‘gulliver’ era of teaching has passed.
Chuang Tzu – Taoist, 4AD

“A sage leads by the bright light of confusion and doubt.”
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