Today's Kids, Tomorrow's Creatives Preparing young people for living, learning and earning in the Conceptual Age

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IBO Regional Conference, The Hague, 27-30 October, 2011

# 1. The most important centuries for education are

the 19<sup>th</sup> and the 21.<sup>st</sup>

#### '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



lan Lowe, 2011



#### **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.



#### Social Values: Australia 50 Years On

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. Ducation 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-tokids' networks
- 21<sup>st</sup> 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.





## 5. Et 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
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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. Bu this century, we need to unlearn as much as

we need to learn.

#### **Unlearning Creativity**

Gen I (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** 

#### **Unlearning Innovation**

#### Myth

Flash of insight Brilliant idea Individualistic New knowledge Invention Originality Look to the future All about learning Internal R & D Product pipeline Coming up with answers

#### Reality

Comes from immersion Fail often but early Collaborative Admitting ignorance Mostly development Borrowing Look sideways and backwards But unlearning just as vital Networked, open innovation Consumers as innovators (prod-users) Asking better questions

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. Preativity 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**



(Daniel Pink, 2005)

# 8. Spistemological 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. Preative 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 nontraditional 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. Bhallenge-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 19<sup>th</sup> and 21<sup>st</sup>
- 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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