21st Century Competences, Global Citizenship Education and Global Competence

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Open University Of Hong Kong
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THE 21ST CENTURY COMPETENCES AGENDA

From an ad hoc agenda to

a convergent agenda
Partnership for 21st century skills (P21) is a public-private organization formed in 2001 with the sponsorship of the U.S. government and several organizations from the private sector (Apple Computer, Cisco Systems, Dell Computer Corporation, Microsoft Corporation, National Education Association).
THE P21 FRAMEWORK

21st Century Student Outcomes and Support Systems

- Learning and Innovation Skills – 4Cs
  - Critical thinking • Communication
  - Collaboration • Creativity

- Core Subjects – 3Rs and 21st Century Themes

- Information, Media, and Technology Skills

- Life and Career Skills

Source: http://www.p21.org/overview
The P21 framework which was developed to help practitioners integrate 21CCs into the teaching of core academic subjects: English, Reading or language arts, World languages, Arts, Mathematics, Economics, Science, Geography, History, Government and Civics.

Schools must promote understanding of academic content at much higher levels by weaving 21st century interdisciplinary themes into core subjects:

- Global Awareness
- Financial, Economic, Business and Entrepreneurial Literacy
- Civic Literacy
- Health Literacy
- Environmental Literacy

Learning and Innovations Skills
- Creativity & Innovation
- Critical Thinking & Problem Solving
- Communication & Collaboration

Information, Media and Technology Skills
- Information Literacy
- Media Literacy
- ICT Literacy

Life and Career Skills
- Flexibility & Adaptability
- Initiative and Self-Direction
- Social and Cross Cultural Skills
- Productivity & Accountability
- Leadership & Responsibility

Source: http://www.p21.org/overview
P21 – 21st Century Support Systems

- 21st Century Standards
- Assessment of 21st Century Skills
- Curriculum & Instruction
- Professional Development
The aim of AT21CS is to provide clear operational definitions of 21st century skills for the design of innovative assessment tasks to be used in the classroom. The ATC21S member countries include Australia, Finland, Singapore, U.K etc.

The goal of the Assessment and Teaching of 21st Century Skills (ATC21S) project is to create a new assessment framework with teaching and learning resources to help students develop 21st-century skills, and develop methods to assess skills that will form the basis for 21st-century curricula. ATC21S identified 10 major 21st century skills and grouped them into 4 categories:

**Ways of Thinking**
- Creativity and innovation
- Critical thinking, problem solving, decision making
- Learning to learn, Metacognition

**Ways of Working**
- Communication
- Collaboration (teamwork)

**Tools for Working**
- Information literacy
- ICT Literacy

**Living in the World**
- Citizenship (local and global)
- Life and career
- Personal and social responsibility (incl. cultural awareness and competence)

Source: Binkley et al. (2010)
THE OECD - DESECO FRAMEWORK

21st century skills and competences for new millennium learners is an initiative undertaken by the Organization for Economic Co-operation and Development (OECD) with the goal of providing policy-makers, researchers, and educators with orientations for the design of educational policies and practices that address the requirements of learners in the knowledge society.
The DeSeCo (Definition and Selection of Competencies) Project’s conceptual framework for key competencies classifies such competencies in three broad categories.

**Why**
- The need to keep up to date with technologies
- The need to adapt tools to own purposes
- The need to conduct active dialogue with the world

**What competencies**
- Use language, symbols and texts interactively
- Use knowledge and information interactively
- Use technology interactively

**Why**
- The need to deal with diversity in pluralistic societies
- The importance of empathy
- The importance of social capital

**What competencies**
- Relate well to others
- Co-operate, work in teams
- Manage and resolve conflicts

**Why**
- The need to realize one’s identity and set goals, in complex world
- The need to exercise rights and take responsibility
- The need to understand one’s environment and its functioning

**What competencies**
- Act within the big picture
- Form and conduct life plans and personal projects
- Defend and assert rights, interests, limits and needs

Source: OECD (2005)
21CC FRAMEWORKS

Voogt and Roblin (2012):

- All frameworks seem to converge on a common set of 21st century competences: collaboration, communication, ICT literacy, and social and/or cultural competencies (including citizenship).

- Most frameworks also mention creativity, critical thinking, productivity, and problem-solving.

Source: Voogt and Roblin (2012)
21CC FRAMEWORKS CONT’D

- Each framework has a different focus and areas of emphasis within the overarching competences.
  
  (a) The P21, European Union, and OECD-DeSeCo frameworks can be regarded as more generic frameworks that provide a conceptualization of 21st century competences from which the other frameworks build on.
  
  (b) The ATC21S and NAEP are primarily concerned with the assessment of 21st century competencies.
  
  (c) The NETS, En Gauge, and UNESCO frameworks focus mainly on issues related to digital literacy and the integration of technology in the curriculum.
<table>
<thead>
<tr>
<th><strong>Thinking Skills</strong></th>
<th>P21</th>
<th>ATC21S</th>
<th>OECD</th>
<th>European Union</th>
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</thead>
<tbody>
<tr>
<td><strong>Learning and Innovations Skills</strong></td>
<td>Learning and Innovations Skills 1) Creativity &amp; Innovation 2) Critical Thinking &amp; Problem Solving</td>
<td>Ways of thinking 1) Creativity and innovation 2) Critical thinking, problem solving, decision making 3) Learning to learn, Metacognition</td>
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</tr>
<tr>
<td><strong>Interpersonal Skills</strong></td>
<td>3) Communication &amp; Collaboration</td>
<td>Ways of Working 4) Communication 5) Collaboration (teamwork)</td>
<td>Interacting in Heterogeneous Groups 1) Relate well to others 2) Co-operate, work in teams 3) Manage and resolve conflicts</td>
<td>2) Communication in the mother tongue 3) Communication in foreign languages</td>
</tr>
<tr>
<td><strong>ICT Skills</strong></td>
<td>Information, Media and Technology Skills 4) Information Literacy 5) Media Literacy 6) ICT Literacy</td>
<td>Tools for Working 6) Information literacy 7) ICT Literacy</td>
<td>Using Tools Interactively 4) Use language, symbols and texts interactively 5) Use knowledge and information interactively 6) Use technology interactively</td>
<td>4) Mathematical competence and basic competences in science and technology 5) Digital competence</td>
</tr>
</tbody>
</table>

Source: Binkley et al. (2010); OECD (2005); Gordon et al. (2009); [http://www.p21.org/overview](http://www.p21.org/overview)
Singapore’s positioning in the 21st century as a global and cosmopolitan city.

The Singaporean of the 21st century is a cosmopolitan Singaporean, one who is familiar with global trends and lifestyles and feels comfortable working and living in Singapore as well as overseas….

Singapore 21 has “a culture of internationalisation.”

Globalisation is not a choice, but a necessity.
<table>
<thead>
<tr>
<th>C2015 Student Outcomes</th>
<th>Associated C2015 Skills &amp; Mindsets</th>
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</thead>
<tbody>
<tr>
<td><strong>Confident Person</strong></td>
<td>• Thinking skills/Communication skills/Collaborative skills/Interpersonal skills/Leadership skills</td>
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<tr>
<td>• Thinks Independently/</td>
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<tr>
<td>Communicates effectively/</td>
<td></td>
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<td>Has good inter-personals skills</td>
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<td><strong>Self-Directed Learner</strong></td>
<td>• Self-management skills</td>
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<tr>
<td>• Takes responsibility for own learning/</td>
<td>• Problem-solving skills</td>
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<tr>
<td>Questions, reflects, perseveres/</td>
<td>• Information and Media literacies</td>
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<tr>
<td>Uses technology adeptly</td>
<td>• Technological literacy and skills</td>
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<tr>
<td><strong>Concerned Citizen</strong></td>
<td></td>
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<tr>
<td>• Is informed about world and local affairs/</td>
<td>• Multicultural literacy</td>
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<tr>
<td>Empathises with and respect others/</td>
<td>• Cross-cultural skills</td>
</tr>
<tr>
<td>Participates actively</td>
<td>• Civic literacy</td>
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<tr>
<td><strong>Active Contributor</strong></td>
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<tr>
<td>• Exercises initiative and takes risks/</td>
<td>• Planning skills</td>
</tr>
<tr>
<td>Is adaptable, innovative, resilient/</td>
<td>• Management and organizational skills</td>
</tr>
<tr>
<td>Aims for high standards</td>
<td>• Innovative skills</td>
</tr>
</tbody>
</table>

Source: MOE, p. 22
GLOBAL CITIZENSHIP COMPETENCE & 21ST CENTURY SKILLS

Skills in perspective consciousness to understand points of views of people different from themselves;

- Intercultural competence to participate effectively in today’s multicultural societies;

- Critical thinking skills, especially the ability to evaluate conflicting information;

- Habits of mind compatible with civic responsibilities in a global age, such as to approach judgments and decisions with open-mindedness, anticipation of complexity, resistance to stereotyping, and develop the habit of asking – is this the common good. (Merryfield with Duty, 2008)
<table>
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<tr>
<th>Multiple Citizenship</th>
<th>Citizenship Education for the 21&lt;sup&gt;st&lt;/sup&gt; Century</th>
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<tbody>
<tr>
<td><strong>Personal</strong></td>
<td>A personal capacity for and commitment to a civic ethic characterized by responsible habits of mind, heart, and action</td>
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<tr>
<td><strong>Social</strong></td>
<td>Capacity to live and work together for civic purposes</td>
</tr>
<tr>
<td><strong>Spatial</strong></td>
<td>Capacity to see oneself as a member of several overlapping communities – local, regional, national, and multinational</td>
</tr>
<tr>
<td><strong>Temporal</strong></td>
<td>Capacity to locate present challenges in the context of both past and future in order to focus on long-term solutions to the difficult challenges we face</td>
</tr>
</tbody>
</table>

Cogan & Derricott, 1998
Globalisation and the knowledge economy

• Intellectual capital of citizens i.e., political, social and economic advances in any country will be possible only if the intellectual potential of its people is developed

• Similar to Putnam’s (1995) social capital, or ‘soft skills’ (trust, teamwork, social cohesion, and social networks)

• Worldwide curricular reforms to develop ‘21st century skills’ (critical, creative and inventive thinking; information, interactive and communication skills; civic literacy, global awareness and cross-cultural skills)
Preparing teachers for global citizenship education: Pulling it all together and conclusions

27-29 July 2015, Bangkok

PROGRAMS & INNOVATIONS

- MyDev Program
- PEACEXCELS
- LEADeXCELS
- SEAeXCELS

Digital Empowerment

- INFOLLUTION

DRRM initiatives

Maker Culture

Crowdsourcing: Global Digital Citizens

UNertia

Learning Metrics
BREAKTHROUGHS

Redefining Curriculum (Crowdsourcing):

*People coming together and make a curriculum together, a participatory approach*
Redefining Assessment (Learning Metrics):

- Redefining learning outcomes by providing a *regional culturally appropriate metrics* and towards a more equitable and meaningful education for all children across all regions.
- Assessment for LEARNING: Assessments to ask students’ values and attitudes; teachers’ views about school ethos.
STRATEGIC POSITIONING

GCED

Yoko Mochizuki:
As an individual discipline
  – weak structure
As integrated into multidisciplinary subject
  – strong structure
SOME HIGHER GOALS TO ACHIEVE

Lay Cheng:

• The road to Education 2030: Towards *inclusive and equitable quality education* and lifelong learning for all

Tim Curtis:

• Promoting *inter-cultural dialogue* and a culture of peace

Sir Arthur C Clarke:

• “We need to educate our children *for their future*, not our past”

GiFT:

• Co-creation to *learn together* for the future
SHARPENING THE FOCUS

GCED is Education *for the future*

GCED is *student-centred*, cares about students’ voices, and their socio-emotional well being (Happy Schools Project)

GCED invites *students’ participation* to co-create the curriculum, and co-create the future

GCED is a *journey* that keeps refining and redefining itself for a higher goal and better future, grounding itself on universal values such as human rights, equity and inclusiveness; thus

*GCED is transformative education in itself*
PISA DIRECTIONS

According to UK NFER (National Foundation for Educational Research):
PISA 2012: Creative problem solving

- Measures students’ capacity to respond to non-routine situations in order to achieve their potential as constructive and reflective citizens.
- A broader measure of problem-solving than previous assessments.
- Focus on general cognitive processes involved in problem solving, rather than particular school subjects.
- Contexts students may encounter outside of school as part of their everyday experience.
PISA 2015: Collaborative problem solving

- **Planning a group activity day** – considering times, costs, transport options and individual preferences.

- **Crisis management** – how to achieve a desired end when obstacles present themselves.

- **Project management** – collaborative tasks where elements are agreed and designed and iterative adaptations made as the project unfolds.

PISA 2018: assessing Global Competence

- PISA 2018 will include an assessment of Global Competence.
- It will be a computer based assessment including cognitive and non-cognitive items.
- It may cover: knowledge and skills, attitudes, and dispositions towards global issues, as well as aspects of global employability and mobility of young people.
- It will complement existing international surveys of citizenship (e.g. ICCS).
- Framework should be available December 2015.
PISA education surveys and global competences

Friday November 07 2014

In 2018, for the first time, the OCED ‘PISA’ international comparisons of students will measure ‘global competences’. Watch the video of Think Global’s lunchtime talk on 6th November, Assessing students’ skills – the relevance for global learning by Bethan Burge, Research Director, Centre for International Comparisons, National Foundation for Educational Research.

Global skills are essential for work and life in the 21st century. In an ever-globalising world, young people need the ability to communicate and work with people from different backgrounds and cultures. They will need to think critically about global issues and be able to articulate their views. To succeed in work, and as global citizens, they’ll need to feel comfortable with conflict and difference.

At Think Global’s lunchtime presentation Bethan’s talk covered: