



Ministry of Education
SINGAPORE

Singapore's Curriculum Reform for Developing 21st Century Competencies

18th OECD/Japan Seminar
10 December, 2015



Ministry of Education
SINGAPORE

The Little Red Dot

- An artificial diamond created by stress from 1965
- Small population, too few babies, no hinterland
- Need to prepare our young to respond to a complex world
- Advantages
 - Location
 - Multiracial Society
 - Human Capital

Education enables students to:

- develop values, skills and competencies for life and work
- be plugged into innovation-driven global economy
- engage the region and the world



Drivers of change

- ❖ Globalisation
- ❖ Changing Demographics
- ❖ Mega trends & Issues
- ❖ Technology Advancements



Implications on Education

❖ Globalisation

- Increase awareness and knowledge of world issues
- Develop skills and abilities to learn continuously and manage complex situations
- Nurture civic and social responsibility, a sense of service to community and nation and an understanding of Singapore's perspectives



Implications on Education

❖ Changing Demographics

- Flexible, customised and collaborative education
- Language skills, civic and multi-cultural literacies



Implications on Education

❖ Mega trends & Issues

- Dynamic curriculum that is responsive to rapid change
- Develop new skills and mind-sets to be flexible and adaptable and cope with complexity and ambiguity



Implications on Education

❖ Technology Advancements

- Skills to navigate technology responsibly and safely
- Broaden students' learning experiences
- Provide strong foundation and deep skills for greater flexibility



Desired Outcomes of Education

Confident Person

- Thinks independently
- Communicates effectively
- Has good inter-personal skills

Self-directed Learner

- Takes responsibility for own learning
- Questions, reflects, perseveres
- Uses technology adeptly

Concerned Citizen

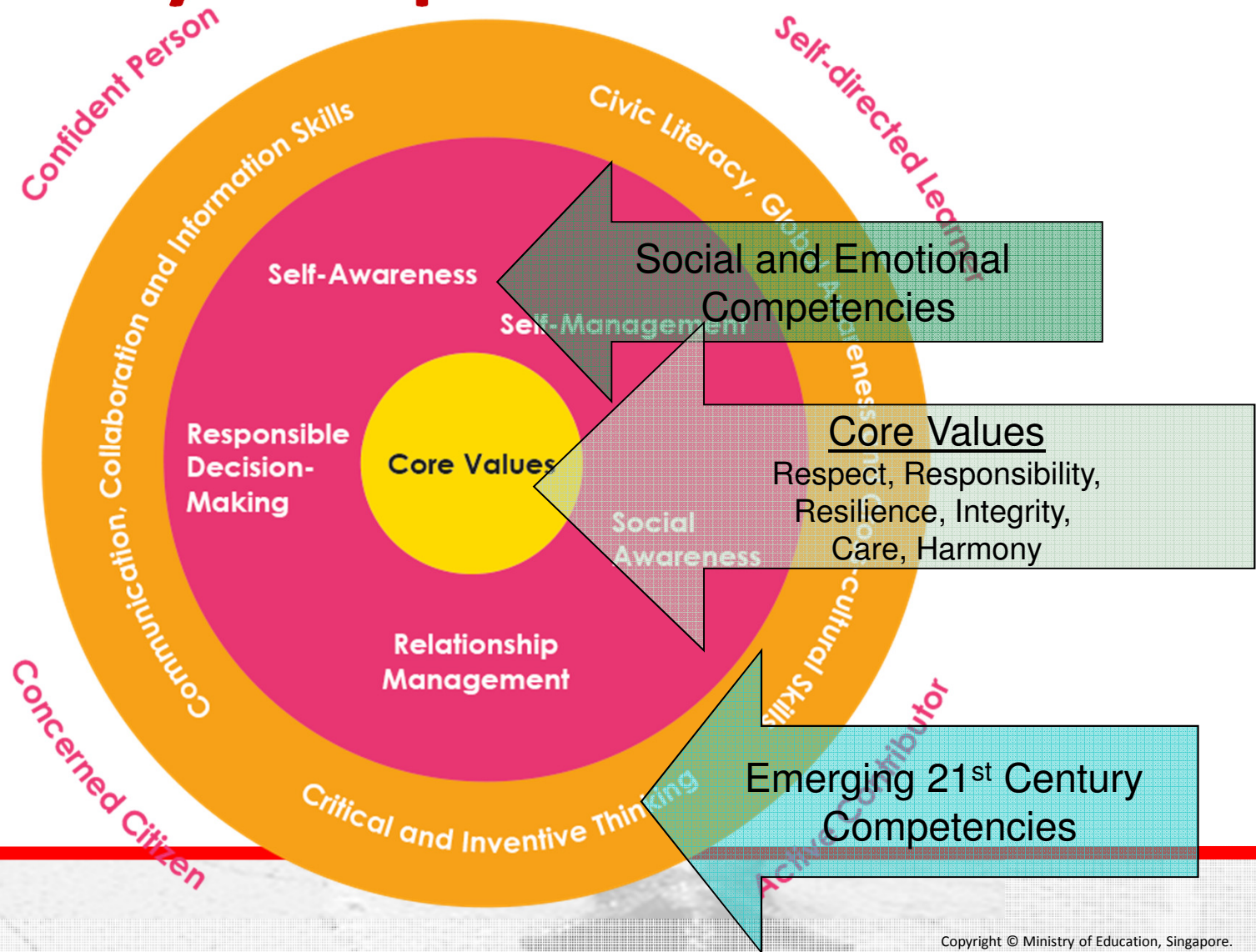
- Is informed about world and local affairs
- Empathises with and respects others
- Participates actively

Active Contributor

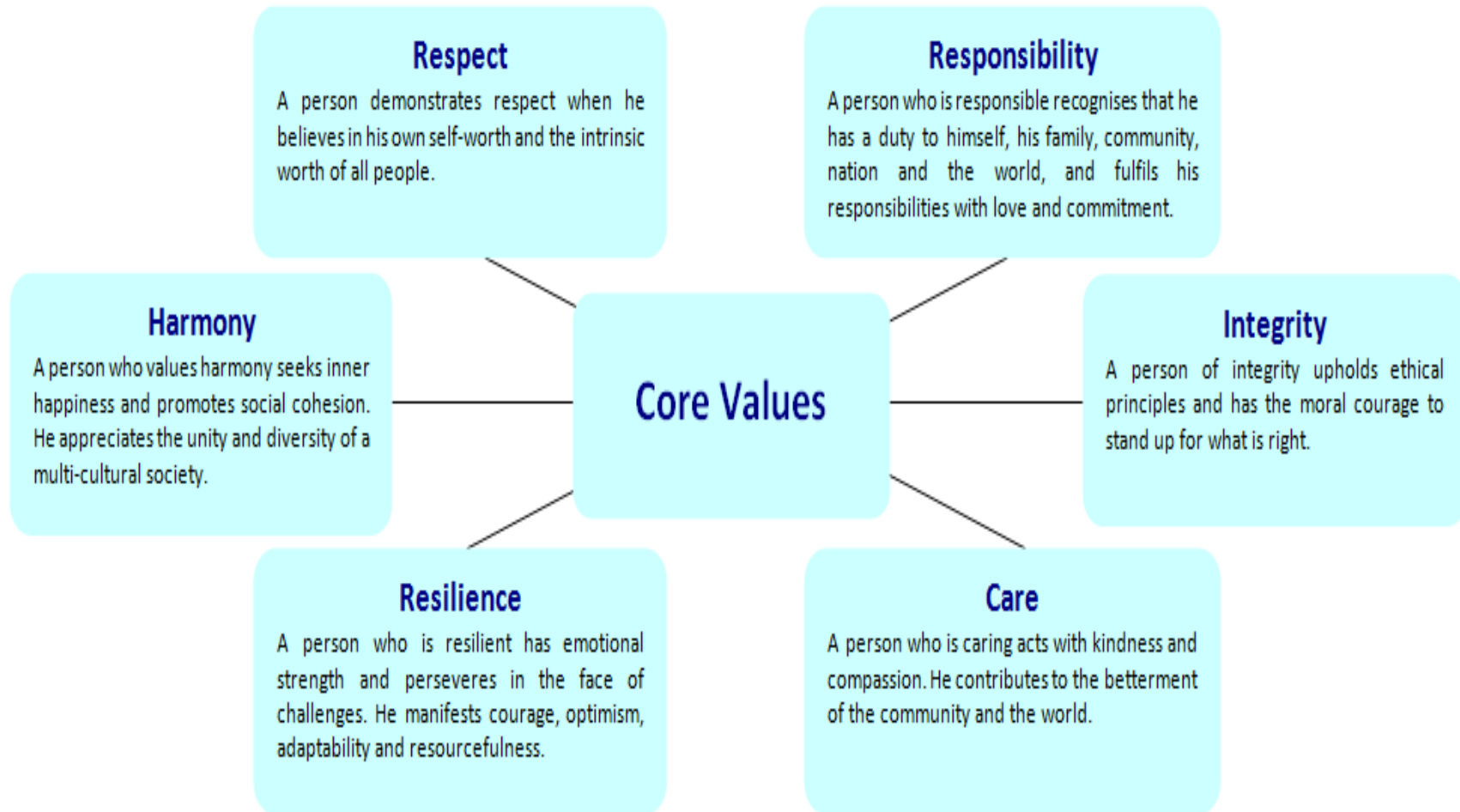
- Exercises initiative and takes risks
- Is adaptable, innovative, resilient
- Aims for high standards



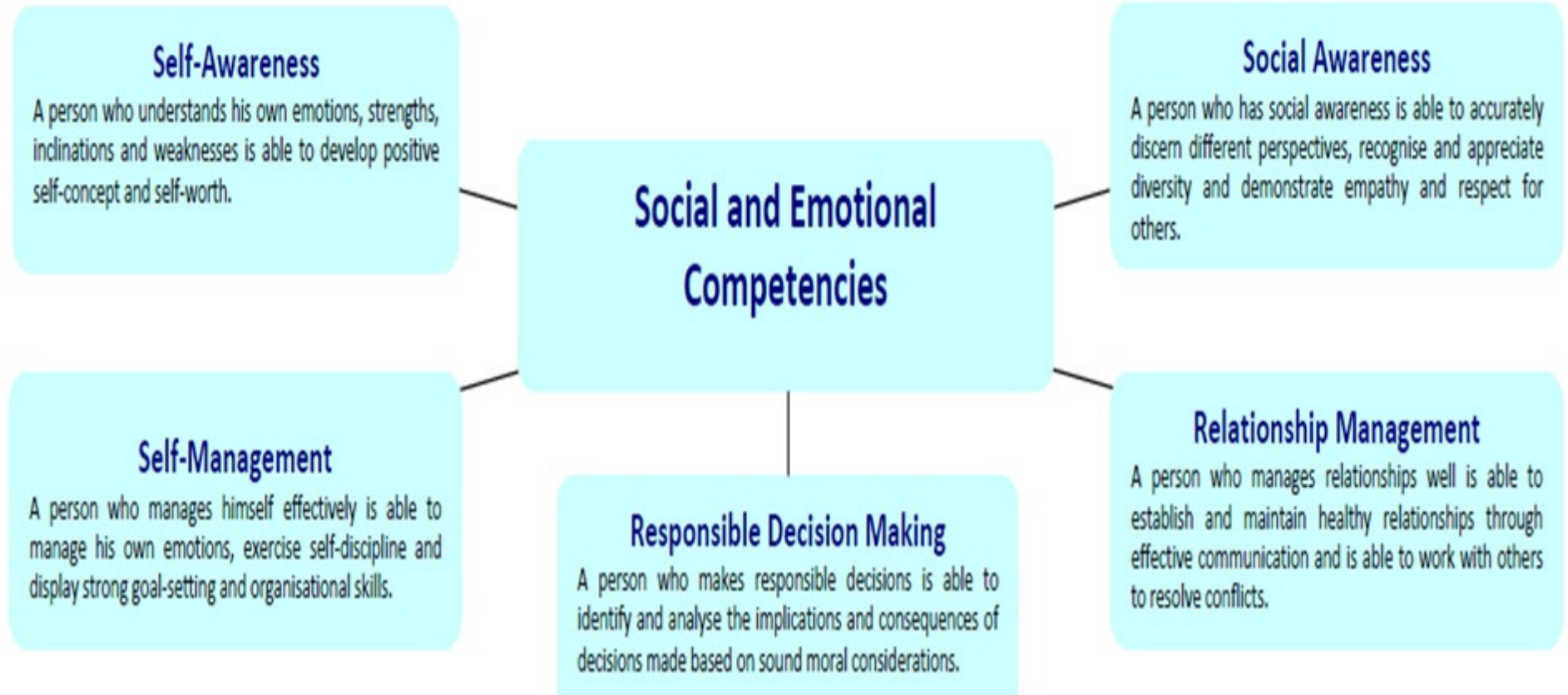
Future Learning – 21st Century Competencies Framework



Core Values



Social and Emotional Competencies



Emerging 21st Century Competencies

21CC

1. Civic Literacy, Global Awareness & Cross Cultural Skills

Active Community Life

National and Cultural Identity

Global Awareness

Socio-Cultural Sensitivity and Awareness

2. Critical and Inventive Thinking Skills

Curiosity and Creativity

Sound Reasoning and Decision-Making

Metacognition

Managing Complexities and Ambiguities



Emerging 21st Century Competencies

21CC

3. Communication, Collaboration and Information Skills

Effective Communication

Effective Collaboration

Management of Information

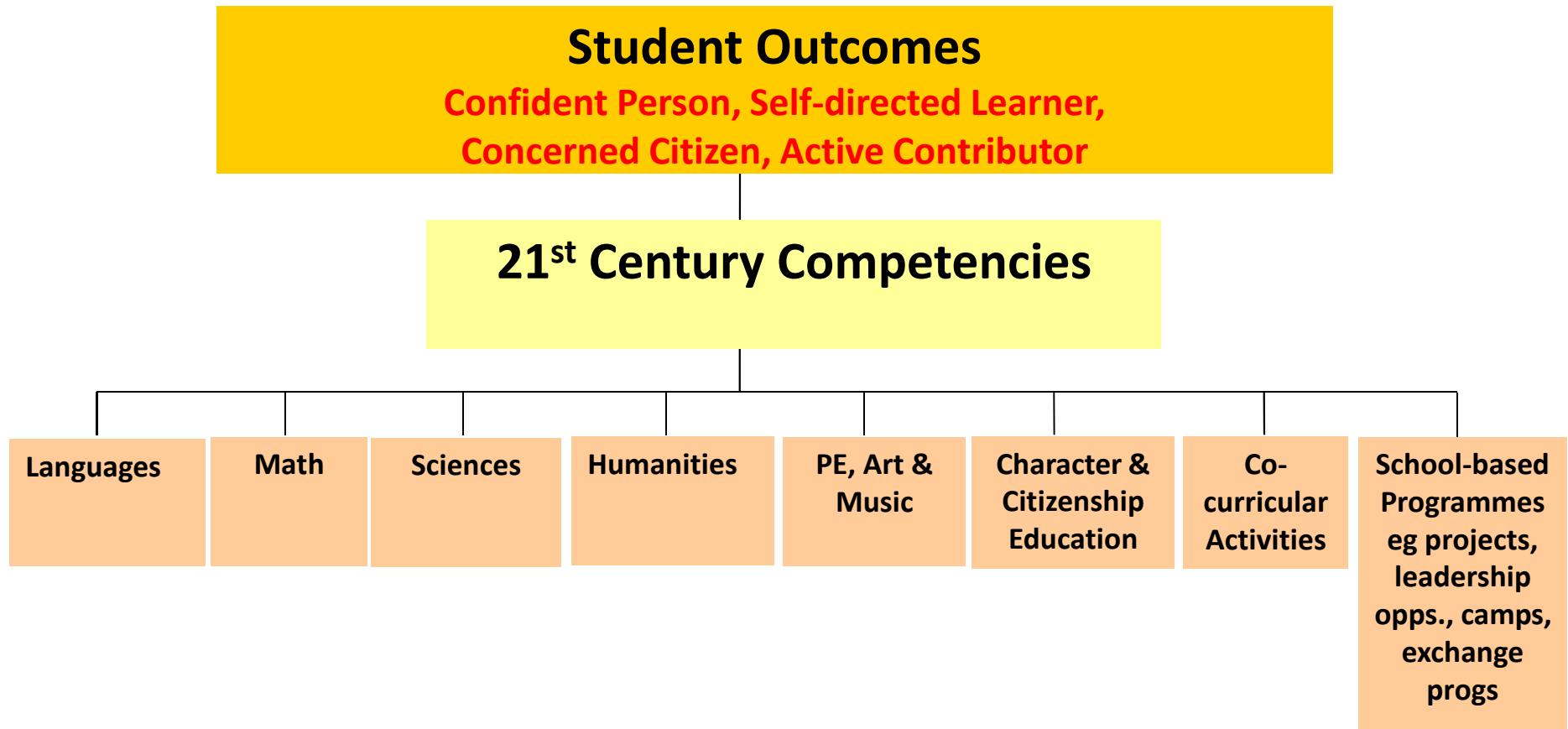
**Responsible Participation in the
Information Landscape**



Standards and Benchmarks

Standards	Benchmarks				
	By end of P3	By end of P6	By end of S2	By end of S4/S5	By end of JC2/PU3
CIT 1 Explores possibilities and generates ideas	1.1a The student is able to generate ideas to respond to an issue/ challenge.	1.1b The student is able to generate ideas and explore different pathways to respond to an issue/ challenge.	1.1c The student is able to generate ideas and explore different pathways that are appropriate for responding to an issue/ challenge.	1.1d The student is able to generate ideas and explore different pathways that lead to solutions.	
CIT 2 Exercises sound reasoning, decision-making and metacognition	2.1a The student is able to explain his/ her reasoning and decisions.	2.1b The student is able to use evidence to explain his/ her reasoning and decisions.	2.1c The student is able to use evidence and adopt different viewpoints to explain his/ her reasoning and decisions.	2.1d The student is able to use evidence and adopt different viewpoints to explain his/ her reasoning and decisions, having considered the implications of the relationship among different viewpoints.	
	2.2a The student is able to recount relevant experiences which he/ she has learnt from.	2.2b The student is able to reflect on his/ her thoughts, attitudes, behaviour and actions during his/ her learning experiences and determine the modifications required.		2.2d The student is able to suspend judgement, reassess conclusions and consider alternatives to refine his/ her thoughts, attitudes, behaviour and actions.	
CIT 3 Manages complexities and ambiguities	3.1a The student is able to identify the expectations of the task/ role and stay focused on them.	3.1b The student is able to identify essential elements of multiple tasks/ roles, stay focused on them and persevere when he/ she encounters difficulties and unexpected challenges.		3.1d The student is able to identify essential elements of complex tasks, stay focused on them, take on diverse roles and persevere when he/ she encounters difficulties and unexpected challenges.	
		3.2b The student is able to accept different perspectives, solutions and/ or methods, even in the face of uncertainty.		3.2d The student is able to manage uncertainty and adapt to diverse demands and challenges in new and unfamiliar contexts.	

Developing 21CC through the Total Curriculum



Total curriculum - learning experiences within and outside structured time-table

Deliberate Design of Learning Opportunities

- Integrate 21CC into curricular documents
 - Help teachers better understand how 21CC development is related to learning outcomes
 - Highlight possible ways to develop students' 21CC (e.g. through lesson plans)
- Professional development (upgrading of subject content and/or Pedagogical Content Knowledge) to sharpen teachers' ability to design learning opportunities



Deliberate Design of Learning Opportunities

Our Changing World (Human Geography)

Global Tourism – Is tourism the way to go?

Key Question	Learning Outcomes	Knowledge/Skills	Key Geographical Concepts / Content Concepts	MOE Initiatives
<p>KQ1: How does the nature of tourism vary from place to place?</p>	<p>CONTENT</p> <ul style="list-style-type: none"> Describe and give examples of different types of tourism. Explain why tourist activities are different at different places. 	<p>Knowledge</p> <ul style="list-style-type: none"> Tourists are people who travel and stay away from their normal place of residence for more than 24 hours. Different places and environments provide different opportunities for tourist activities: <ul style="list-style-type: none"> Places of scenic beauty (e.g., mountain regions, coastal resorts, national parks - honeypot tourism) Places with good facilities - MICE (e.g., Singapore), educational facilities - educational tourism (e.g., Singapore), medical facilities - medical tourism (e.g., Thailand), spa facilities – health tourism, theme parks Places with rich culture – heritage tourism (e.g., London, Angkor Wat), film-induced tourism (e.g., Korea), gourmet/shopping tourism (e.g., Hong Kong), pilgrimage tourism (e.g., Mecca) Places of conflicts - dark tourism (e.g., Killing Fields and Tuoi) 	<p><u>Geographical Concepts</u></p> <ul style="list-style-type: none"> Place Space Physical and human Processes Environmental and cultural diversity <p><u>Content Concepts</u></p> <ul style="list-style-type: none"> Tourist MICE Honeypot tourism Educational tourism Medical tourism Health tourism Film-induced tourism Heritage tourism Pilgrimage tourism Dark tourism Space tourism 	<p>Desired Outcomes of Education: Confident Person; Self-directed learner; Active Contributor; Concerned Citizen</p> <p>21st CC: Civic Literacy, Global Awareness & Cross-Cultural Skills – global awareness, socio-cultural and religious sensitivity and awareness;</p>

Deliberate Design of Learning Opportunities

Designing Rich Learning Experiences

- Rich learning experiences, with student-centric approaches are designed to help students develop their 21CC
 - These are reflected in lesson plans and instructional materials designed
- Use of assessment to provide formative feedback to support students' 21CC development



Deliberate Design of Learning Opportunities

Co-Curricular Activities (CCA)

- Clubs and Societies
- Sports and Games
- Uniformed Groups
- Visual and Performing Arts



Deliberate Design of Learning Opportunities

Intentional design of activities to create opportunities for 21CC development:

By tweaking design of existing activities



Opportunities created must allow students' learning of 21CC to be **Visible** (i.e. to express learning in various ways)



Visibility of learning allows teachers to provide **Feedback** through observation



Challenges in Implementation

- ❖ Assessment of some 21CC competencies
- ❖ Some quarters may over-emphasise academic success (particularly examination success) over holistic education
- ❖ Levelling up teachers' capacity to be effective in developing students' 21CC
- ❖ Ascertaining the effectiveness of our systemic efforts



Moving forward with 21CC Development

- ❖ Continue learning from international efforts and educational research related to 21CC development
- ❖ Continued emphasis on holistic education
- ❖ Continue to improve teachers' pedagogy and understanding of assessment



Thank you

