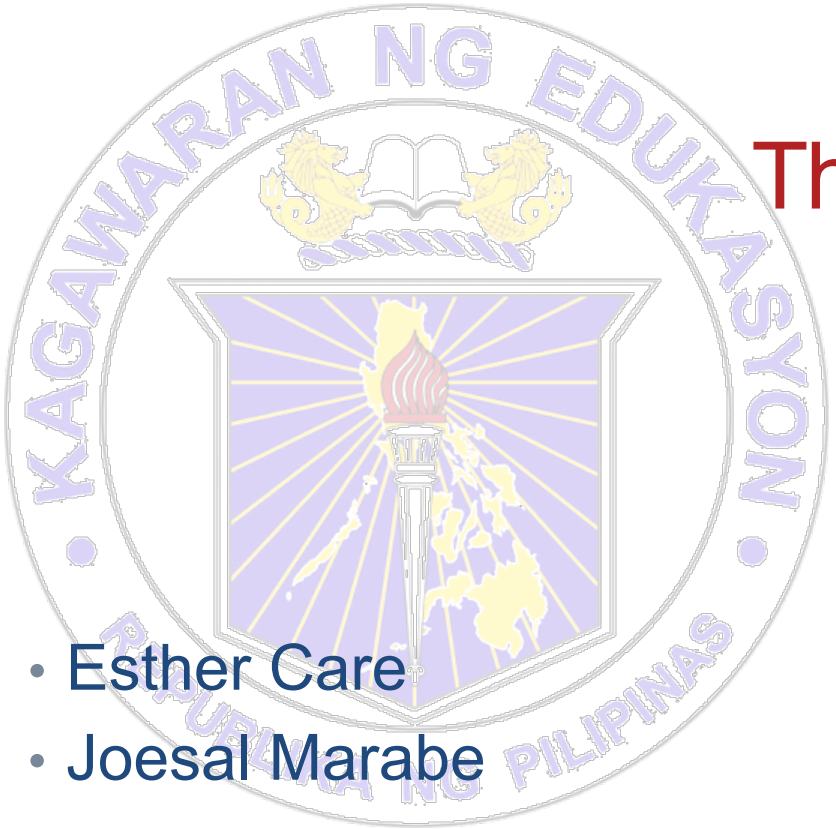

The Philippines' approach to assessment of 21st century skills

- Esther Care
- Joesal Marabe

ACTRC Assessment Curriculum & Technology Research Centre

This presentation represents the activity undertaken by the Department of Education of the Government of the Philippines.

Collaborating with the Department are academics and educators who are staff in the Assessment Curriculum and Technology Research Centre (ACTRC), and in the Assessment Research Centre of the University of Melbourne.

Contributors to this presentation include:

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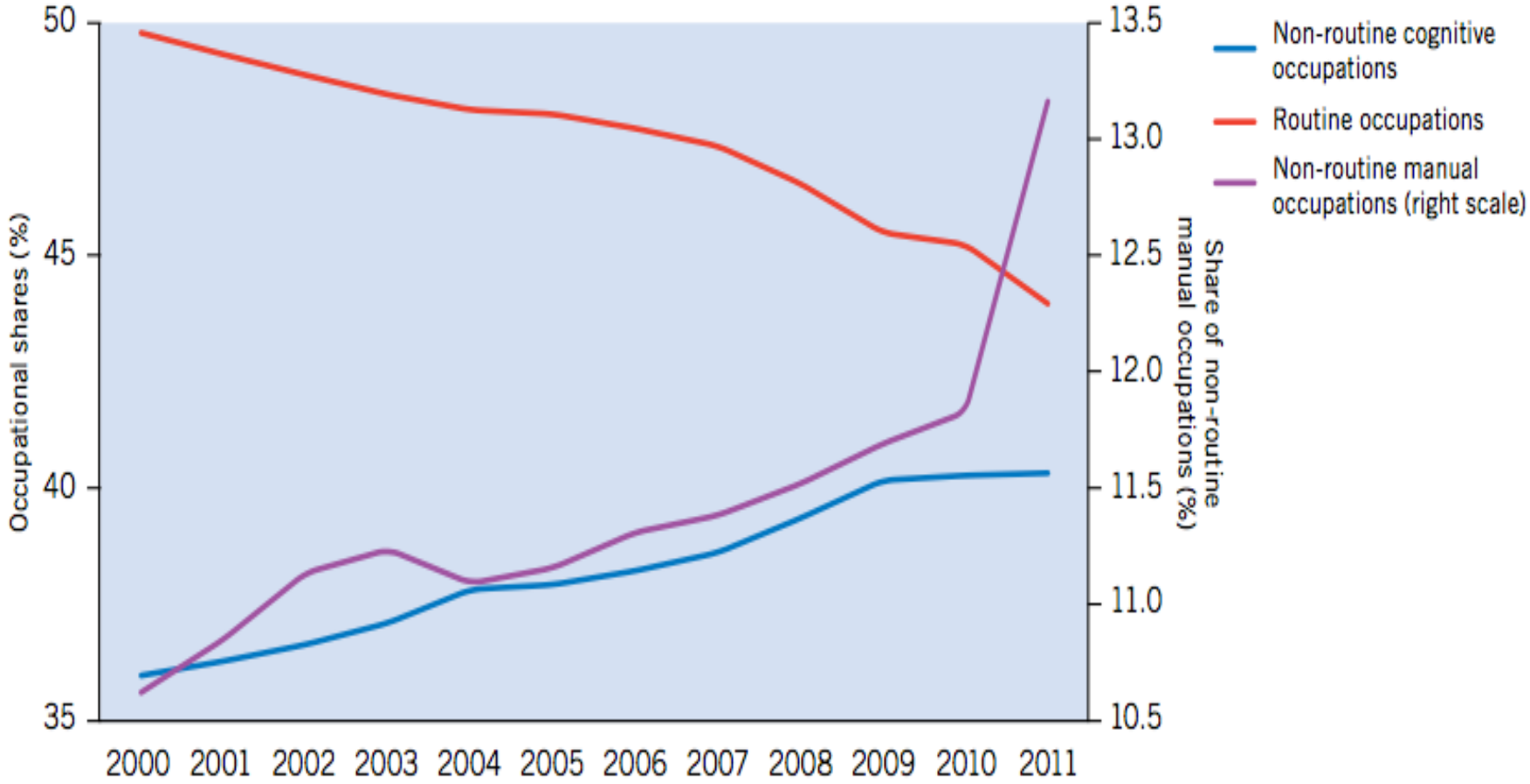


Global measures routine and non-routine task input 2000-2011, Global Employment Trends (2013)
Data derived from Key Indicators of the Labour Market, 7th ed., International Labour Organization
Jaimovich & Siu (2012); Autor, Levy & Murnane (2003)

FAQ 4

HOW ABOUT THE CURRICULUM?

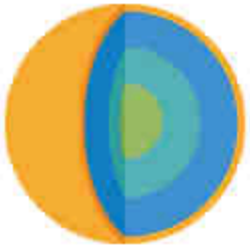
The K to 12 curriculum aims for holistic development and acquisition of 21st century skills

SEAMLESS

Continuum from Kindergarten to Grade 12, and to technical-vocational and higher education

ENHANCED & STREAMLINED

Enhancement of all levels in the current curriculum, giving more focus to allow mastery of learning



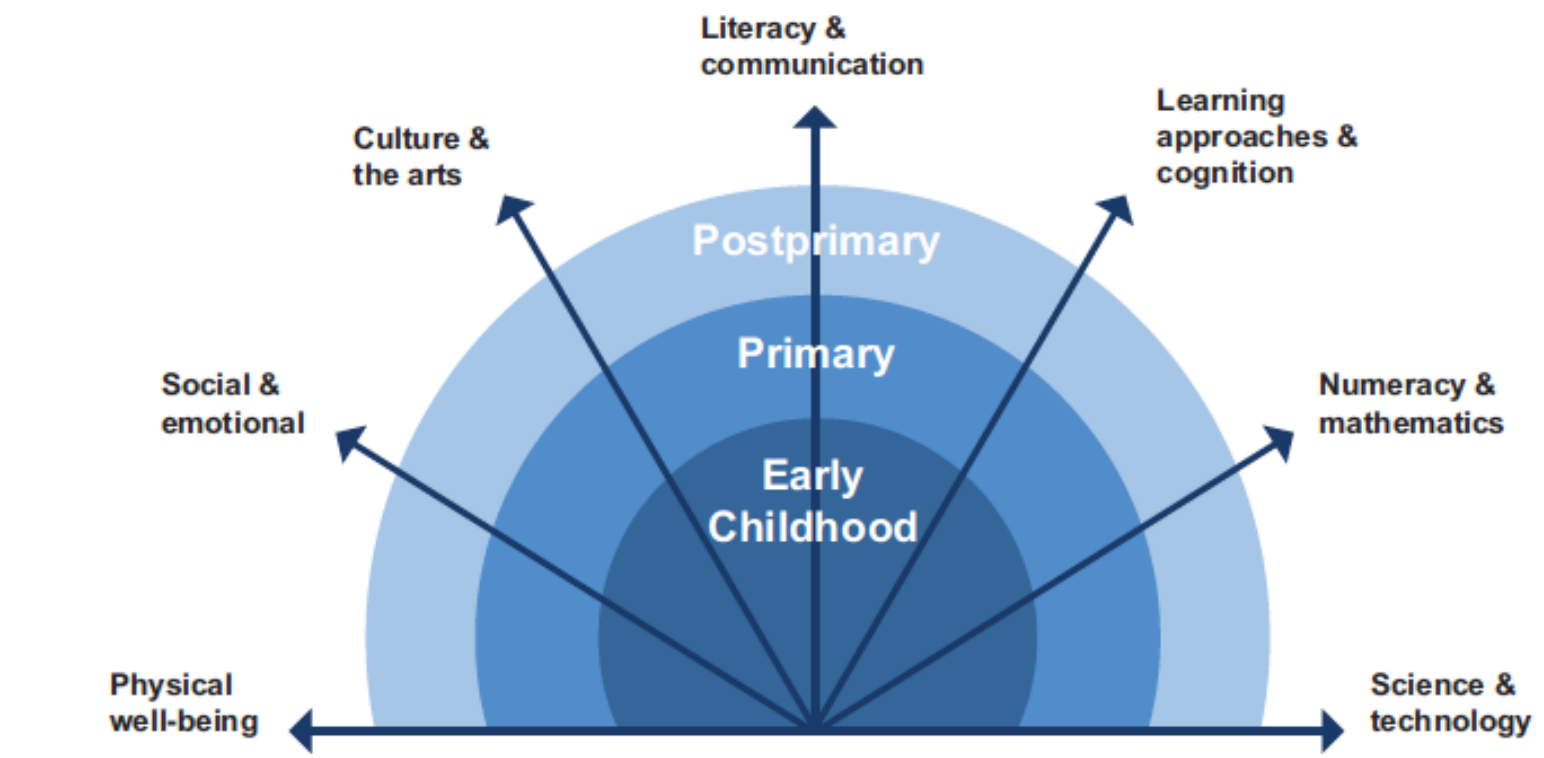
STRENGTHENED

Core subjects like Mathematics, Science, and Languages will be strengthened

LIVELIHOOD READINESS

Specializations are offered through *Tracks* with Immersion. Students can also earn *National Certificates*.

Global Framework of Learning Domains

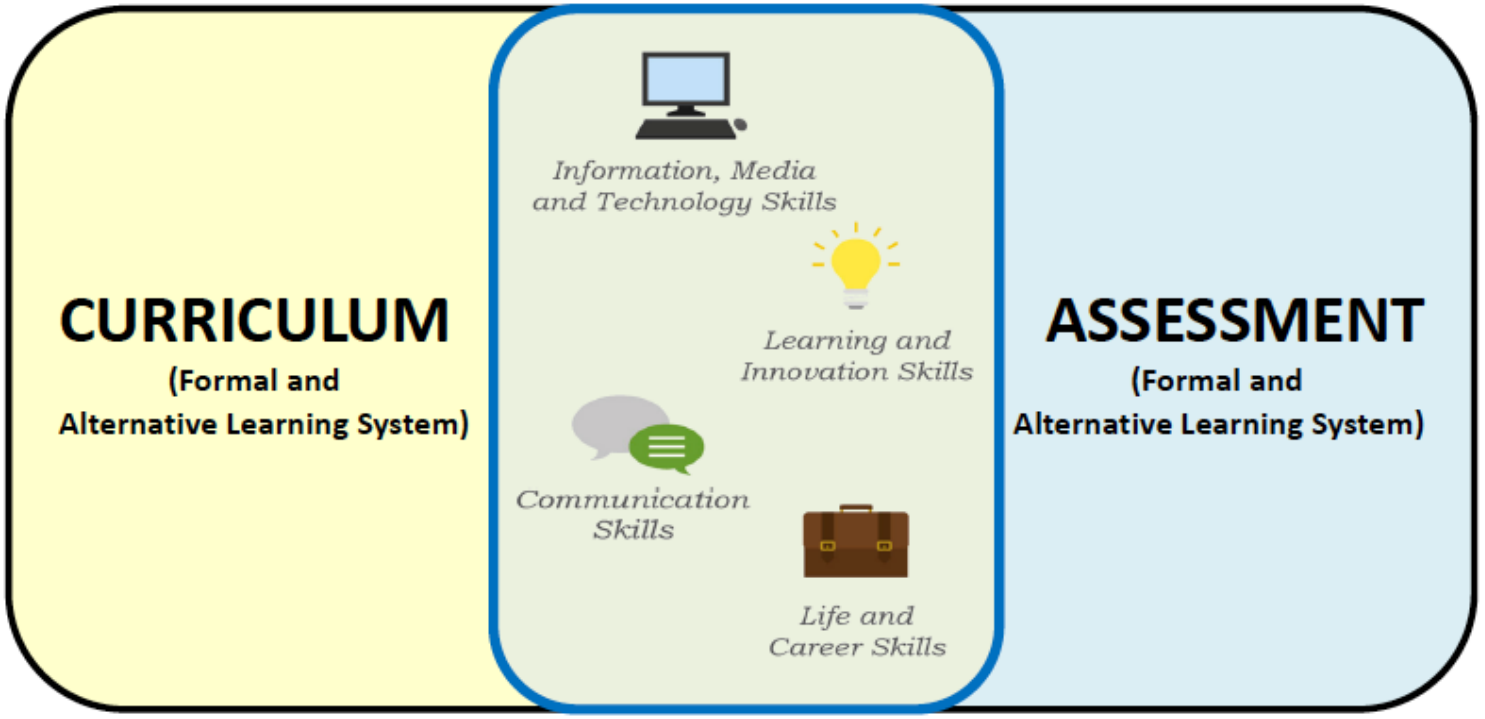


Note: This framework is intended for the purpose of the Learning Metrics Task Force to identify areas in which to measure learning outcomes. It is not intended to be used as a framework for policymaking, curriculum or instruction.

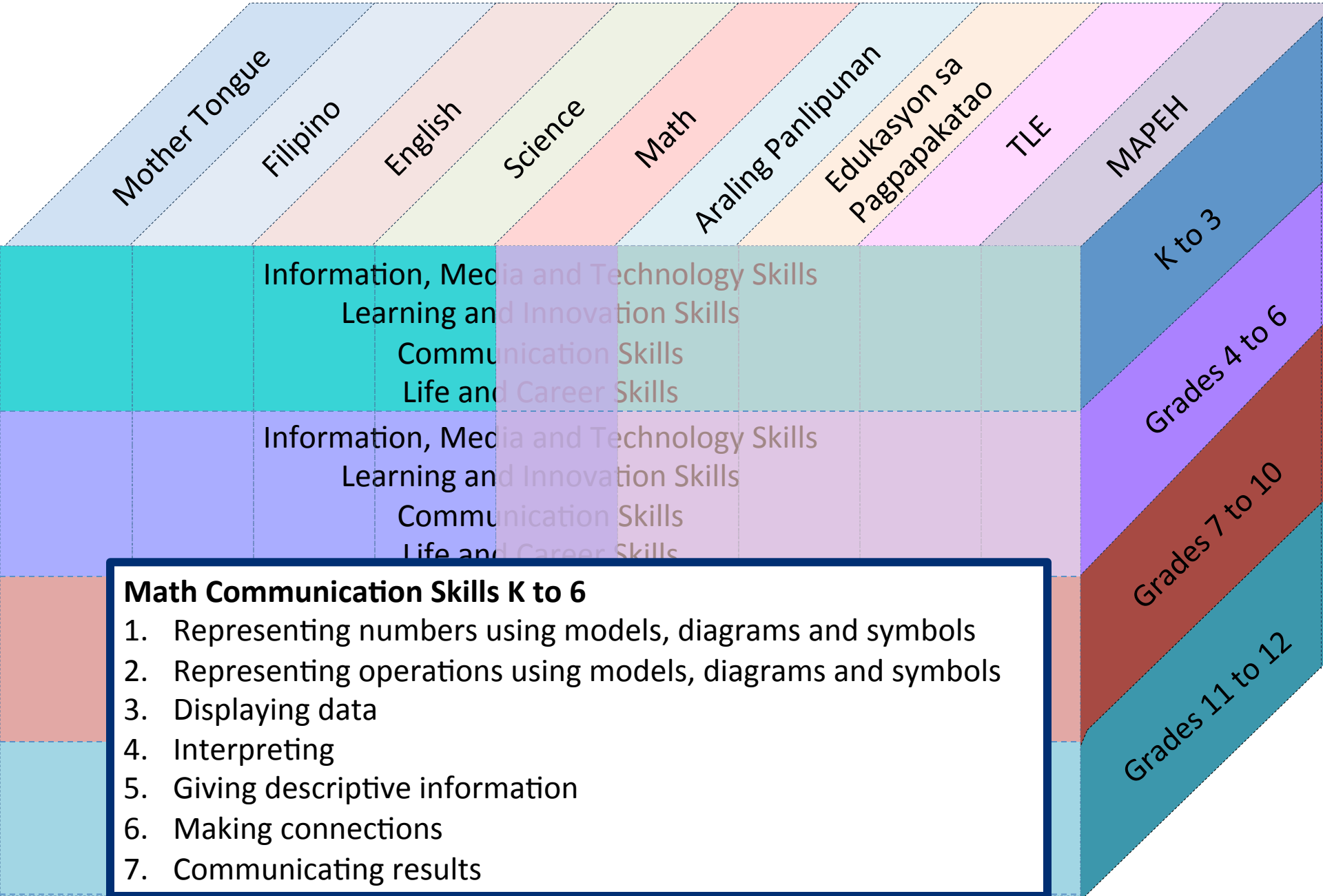
From Report No 1 of the Learning Metrics Task Force, p. 4

“change the way we assess so that we change the way we teach”

Essential Skills connect curriculum and assessment in both Formal and Alternative Learning Systems



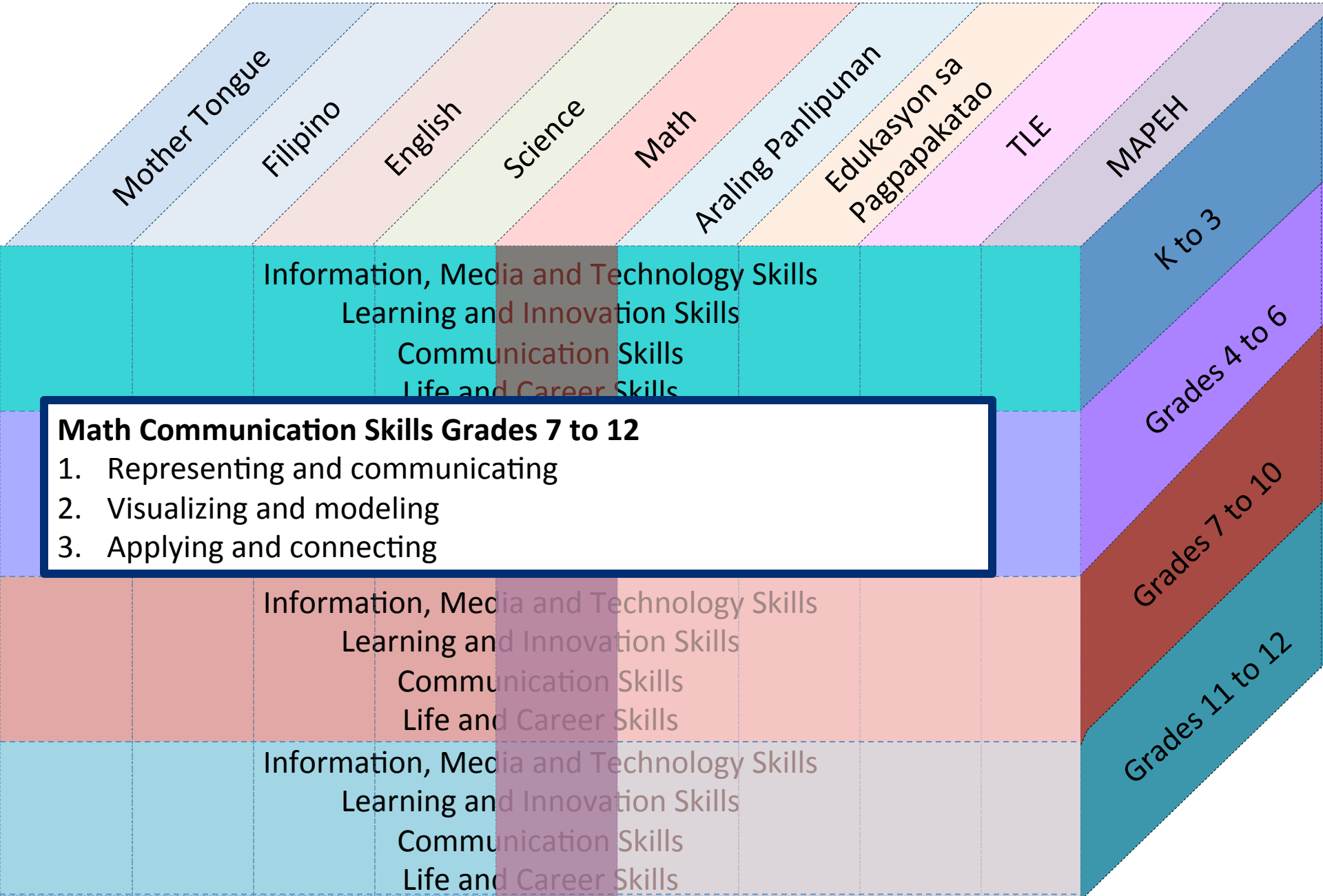
ASSESSMENT CUBE



Math Communication Skills K to 6

1. Representing numbers using models, diagrams and symbols
2. Representing operations using models, diagrams and symbols
3. Displaying data
4. Interpreting
5. Giving descriptive information
6. Making connections
7. Communicating results

ASSESSMENT CUBE



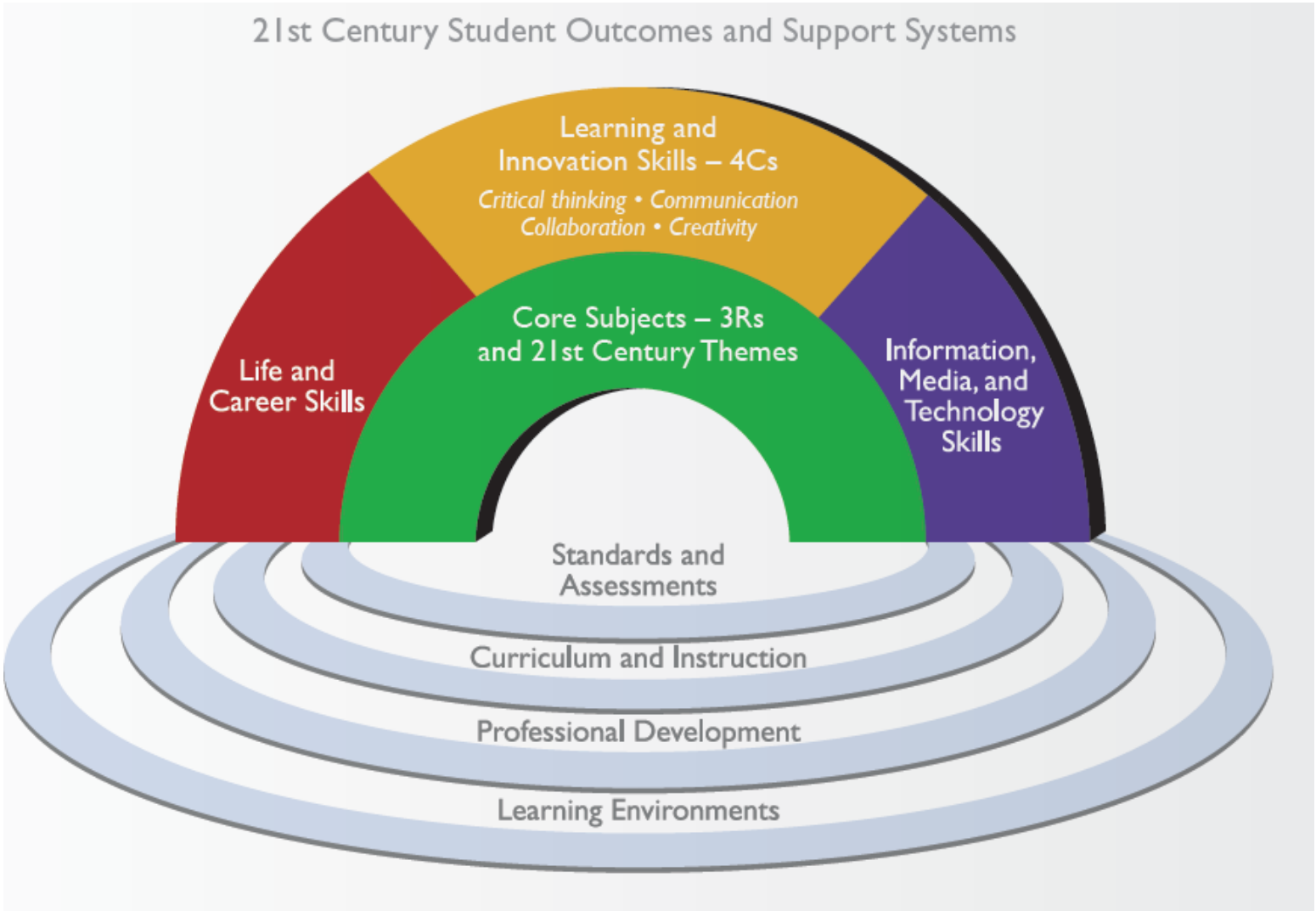
The process

- Review of 21st century frameworks
- Review of national framework
- Identification of common themes
- Alignment with the Philippines core educational goals

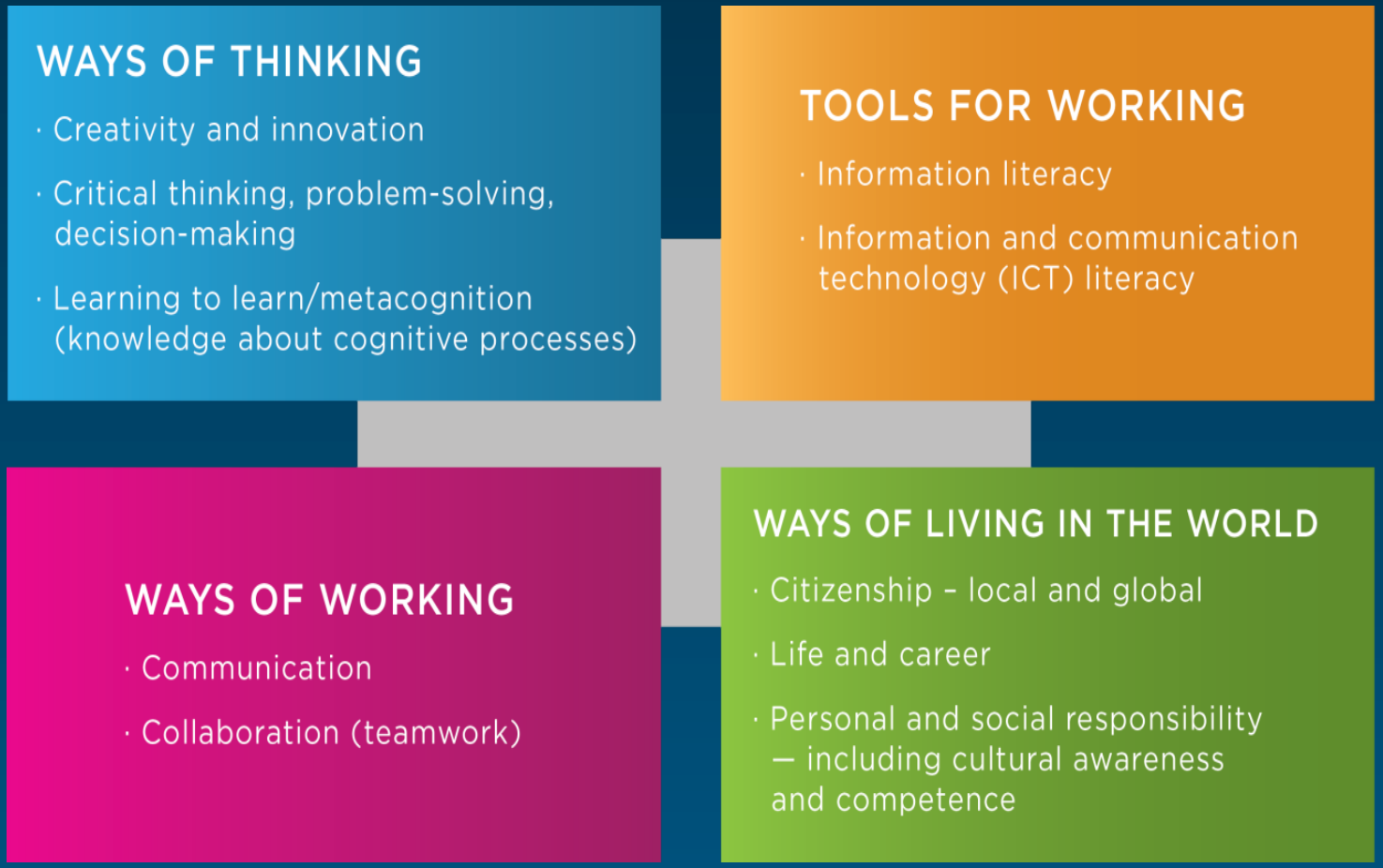
Examples

- Learning to know
- Learning to do
- Learning to be
- Learning to live together

P21 PARTNERSHIP FOR 21ST CENTURY LEARNING



ATC21S: Defining 21st Century Skills



Criteria for selection of skills

① Are the skills teachable and learnable?

② Can the skills be embedded through the subject studies to demonstrate generalisability?

③ Will enhancement of these skills enhance student learning outcomes in subject studies?

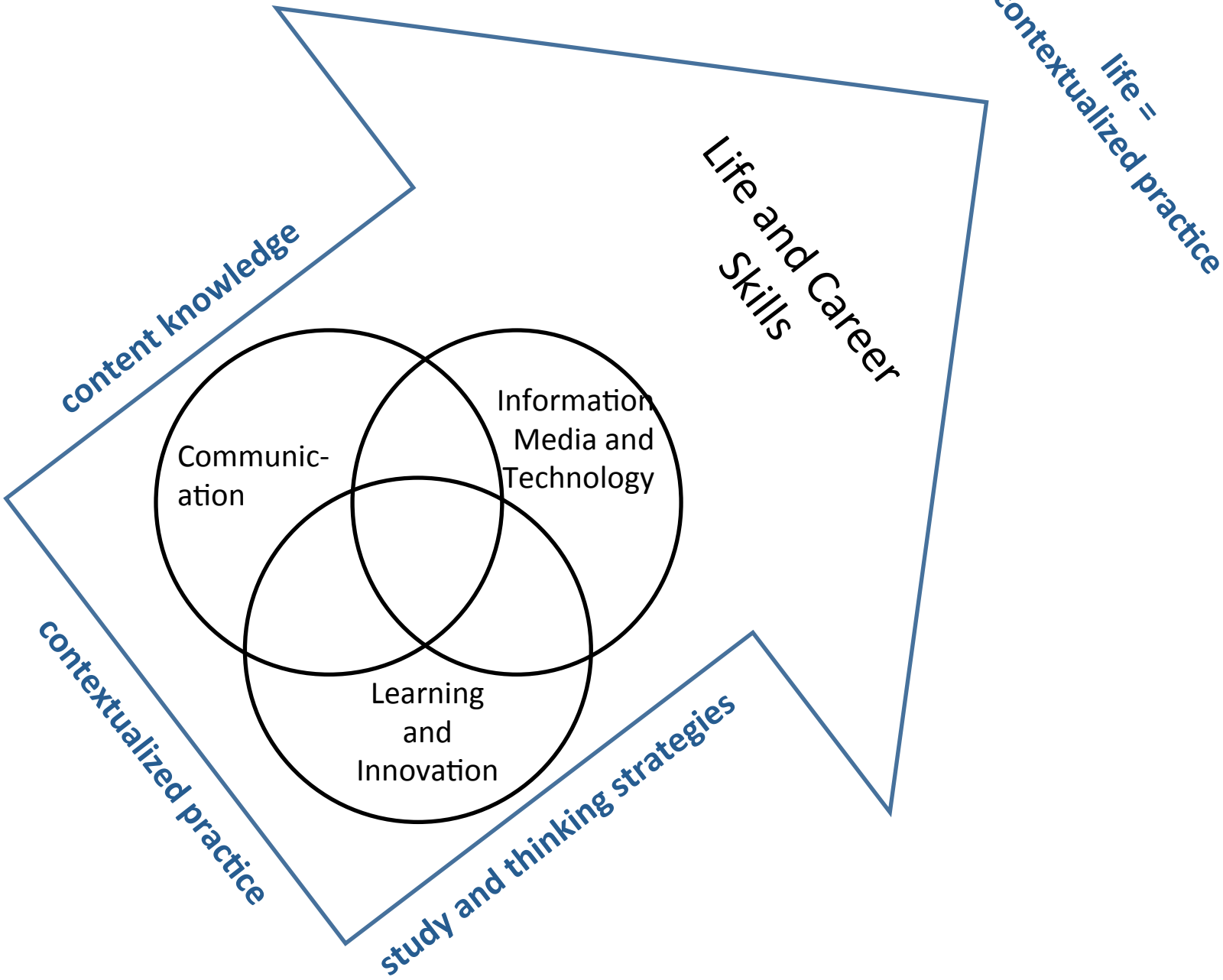
Selection and consideration

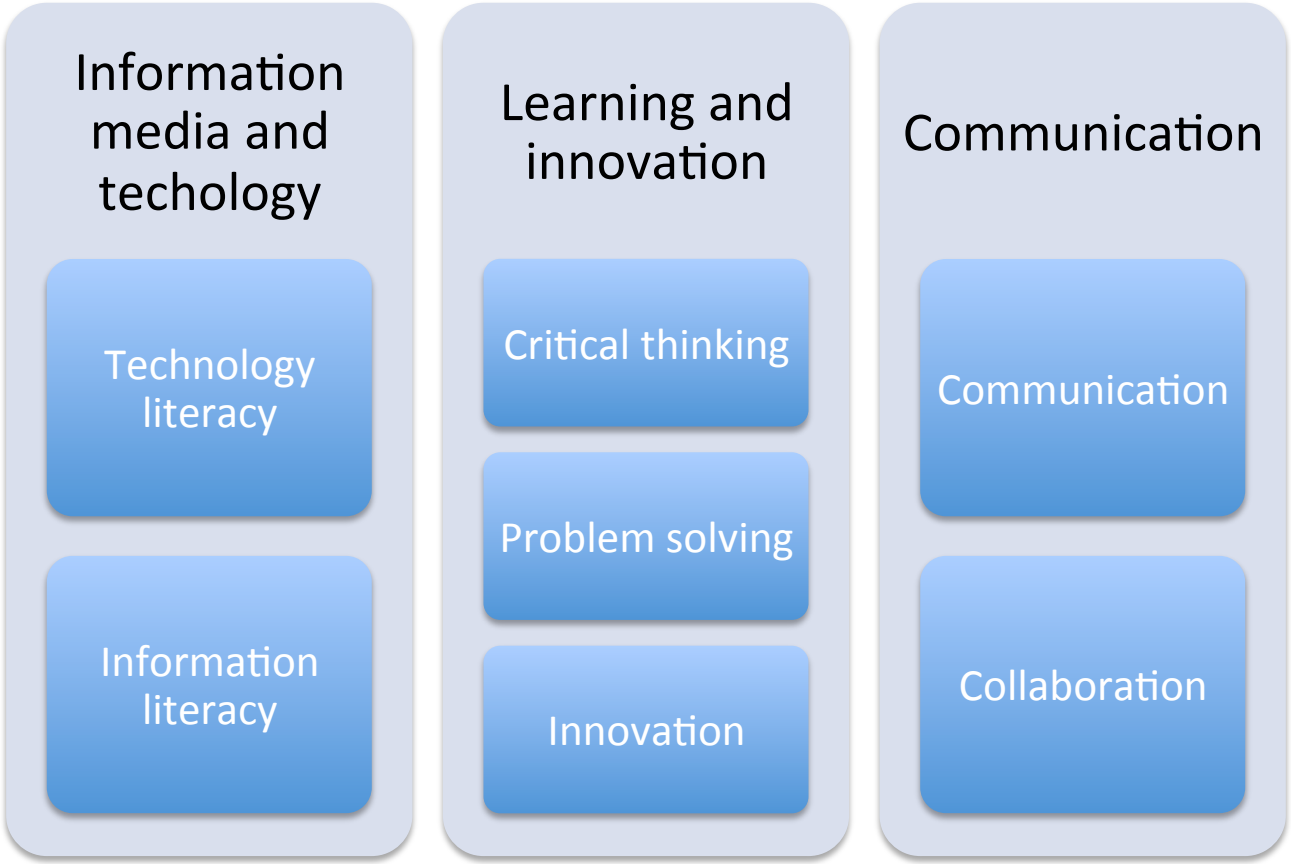
Selected skills

- Information literacy
- Critical thinking
- Problem solving
- Innovation
- Communication
- Collaboration
- Technology literacy

Issues considered

- Skills versus ‘not skills’
- Discrete skills versus embedded skills


life =
decontextualized practice
Life and Career
Skills
content knowledge
Communic-
ation
Information
Media and
Technology
Learning
and
Innovation
contextualized practice
study and thinking strategies


Information media and techology
Technology literacy
Information literacy
Learning and innovation
Critical thinking
Problem solving
Innovation
Communication
Communication
Collaboration

Process

Construct

- Concept definition
- Description
- Hypothetical progression

Curriculum

- Audit across subjects

Assessment

- Assessment cube
- Item development
- Panel and pilot
- Build empirical progression
- Develop teacher materials

Technology Literacy

- Technological Literacy is the ability to use, manage, assess and understand technology. (ITEA Standards for Technological Literacy, 2007)

- ICT Literacy is using digital technology, communications tools, and/or networks to access, manage, integrate, evaluate and create information in order to function in a knowledge society. (Int'l ICT Literacy Panel, 2002)

Information Literacy

- Information literacy should be conceived more broadly as a new liberal art that extends from knowing how to use computers and access information to critical reflection on the nature of information itself, its technical infrastructure, and its social, cultural and even philosophical context and impact. (Shapiro and Hughes, 1996)

- Information literacy is the ability to gather, use, manage, synthesise and create information and data in an ethical manner and the information skills to do so effectively. (SCONUL, 2011).

Initial audit steps

1. Identify essential skills and essential content per subject per key stage
   a. Go through curriculum
   b. List skills per subject per key stage
   c. Group identified skills based on categories from the Defining 21st Century Skills paper
2. Group competencies according to 21st Century skill (Template 1)
   a. Go through submissions
   b. Based on categories, group similar competencies
   c. Take note of subjects where competencies occur
   d. List unique competencies

TEMPLATE 1

21st Century Skill	Competency and its occurrence across subjects						Unique competency
Communication		☐ MT ☐ Fil ☐ Eng	☐ Ma ☐ Sci	☐ AP ☐ EsP	☐ Mu ☐ Arts	☐ PE ☐ Health	☐ EPP ☐ TLE	
		☐ MT ☐ Fil ☐ Eng	☐ Ma ☐ Sci	☐ AP ☐ EsP	☐ Mu ☐ Arts	☐ PE ☐ Health	☐ EPP ☐ TLE	

21st Century Skill	Competency and its occurrence across subjects						Unique competency
Learning and Innovation		☐ MT ☐ Fil ☐ Eng	☐ Ma ☐ Sci	☐ AP ☐ EsP	☐ Mu ☐ Arts	☐ PE ☐ Health	☐ EPP ☐ TLE	
		☐ MT ☐ Fil ☐ Eng	☐ Ma ☐ Sci	☐ AP ☐ EsP	☐ Mu ☐ Arts	☐ PE ☐ Health	☐ EPP ☐ TLE	

21st Century Skill	Competency and its occurrence across subjects						Unique competency
Media, Information and Technology		☐ MT ☐ Fil ☐ Eng	☐ Ma ☐ Sci	☐ AP ☐ EsP	☐ Mu ☐ Arts	☐ PE ☐ Health	☐ EPP ☐ TLE	
		☐ MT ☐ Fil ☐ Eng	☐ Ma ☐ Sci	☐ AP ☐ EsP	☐ Mu ☐ Arts	☐ PE ☐ Health	☐ EPP ☐ TLE	

21st Century Skill	Competency and its occurrence across subjects	Unique competency

Challenges in organizing competencies

- Creates an audio-video art/animation promoting a product. [CG, Arts]
- Can (safely) use computer, internet and e-mail [CG, EPP]
- Can use computer and internet to compile, search and organize information [CG, EPP]
- Can use Online Public Access Catalogue (OPAC) [CG, F]
- Use computers for collection, summary and display of evidence [CG, S]

Similar Competencies

- Can use Online Public **Access** Catalogue (OPAC) [CG, F]
- Can use technology **to find sources** of information [CG, AP]
- Use computers for **collection,** summary and display of evidence [CG, S]

Accessing / Gathering of Information

Similar Competencies

- Can use computer and internet to **compile**, search and **organize** information [CG, EPP]
- Use computers for collection, **summary** and display of evidence [CG, S]

Similar Competencies

- Creates an audio-video art/ animation promoting a product [CG, Ar]
- Use computers for collection, summary and **display of evidence** [CG, S]
- Creates advertisement, documentary, short film or blog about a movie [CG, F]

Communicating information

Similar Competencies

- Can identify source of information [CG, AP]
- Can distinguish facts from fabrications from newspapers, radio, television programs and articles from the internet [CG, EsP]
- Synthesize overall knowledge about different information and media sources by producing and subsequently evaluating a creative multimedia form and media sources.[CG, E]

Evaluating information

Technology Literacy	obtaining information from ICT Media
	selecting appropriate ICT medium
	using technology to manage information
	using technology to communicate
	operating ICT equipment

Information Literacy	**accessing information**
	identifying relevant information
	evaluating information
	appropriate use of information
	managing information

Domain	Skill	Competency	Level of competency		Extracted Skill
Information Media and Technology (IMT)	**Information Literacy**	**Ability evaluate information**	**Low**	Ability to identify source of information	Can identify source of information [CG, AP]
			Medium	Ability to distinguishes facts from various sources of information	Can distinguish facts from fabrications from newspapers, radio, television programs and articles from the internet [CG, EsP]
			High	Ability to synthesize overall knowledge from different information and media sources to evaluate information	Synthesize overall knowledge about different information and media sources by producing and subsequently evaluating a creative multimedia form and media sources. [CG, E]

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