ASEAN Deep Learning Policy Series

Challenges and approaches to prepare young people in global economy

Baldev Singh

Director of Education

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Bridging the Gap:

From Policy to Practice

Brunei Experience

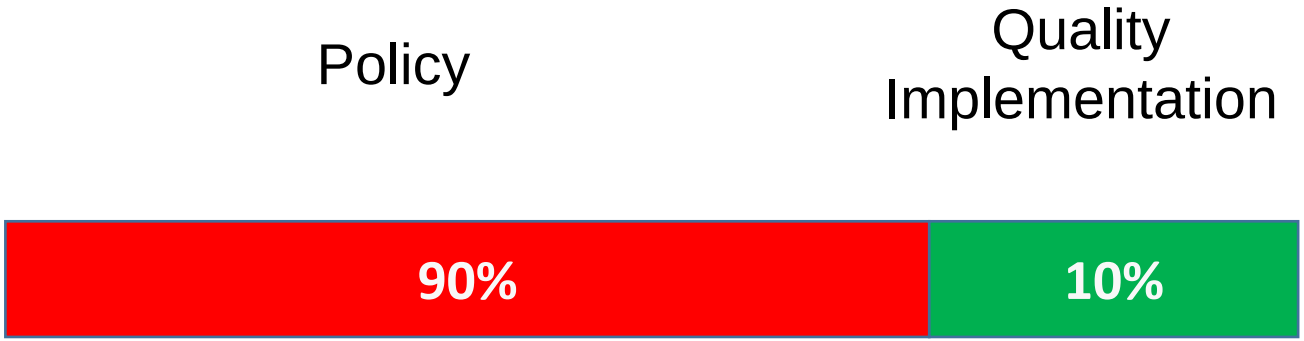
The Facts!

- All time high unemployment among young people globally
- Poor employer satisfaction of new graduates hired
- Classroom boredom seen globally- *“students are more asleep during lectures than they are in bed”*
- Poor return on investment (policy to impact in the classroom)

?

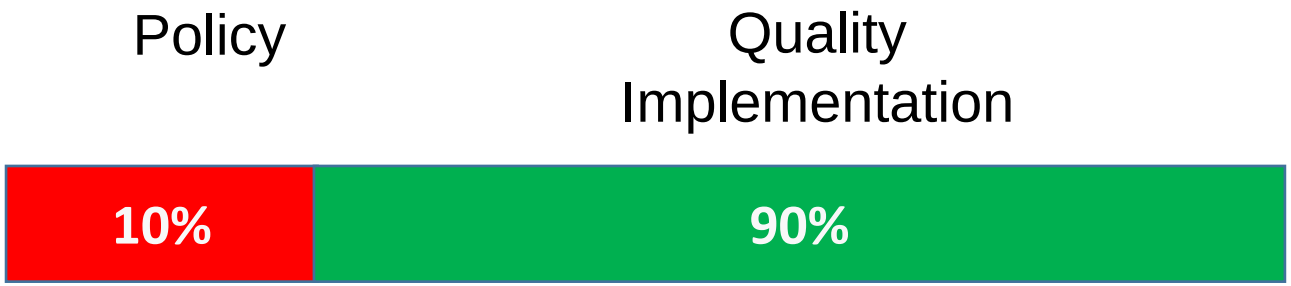
Getting the Balance Right?

Unsuccessful reform spend 90% effort on policy and 10% on implementation



Powerful Impact

For reforms to be successful, we need to change the balance



New Pedagogies for Deep Learning: A Global Partnership

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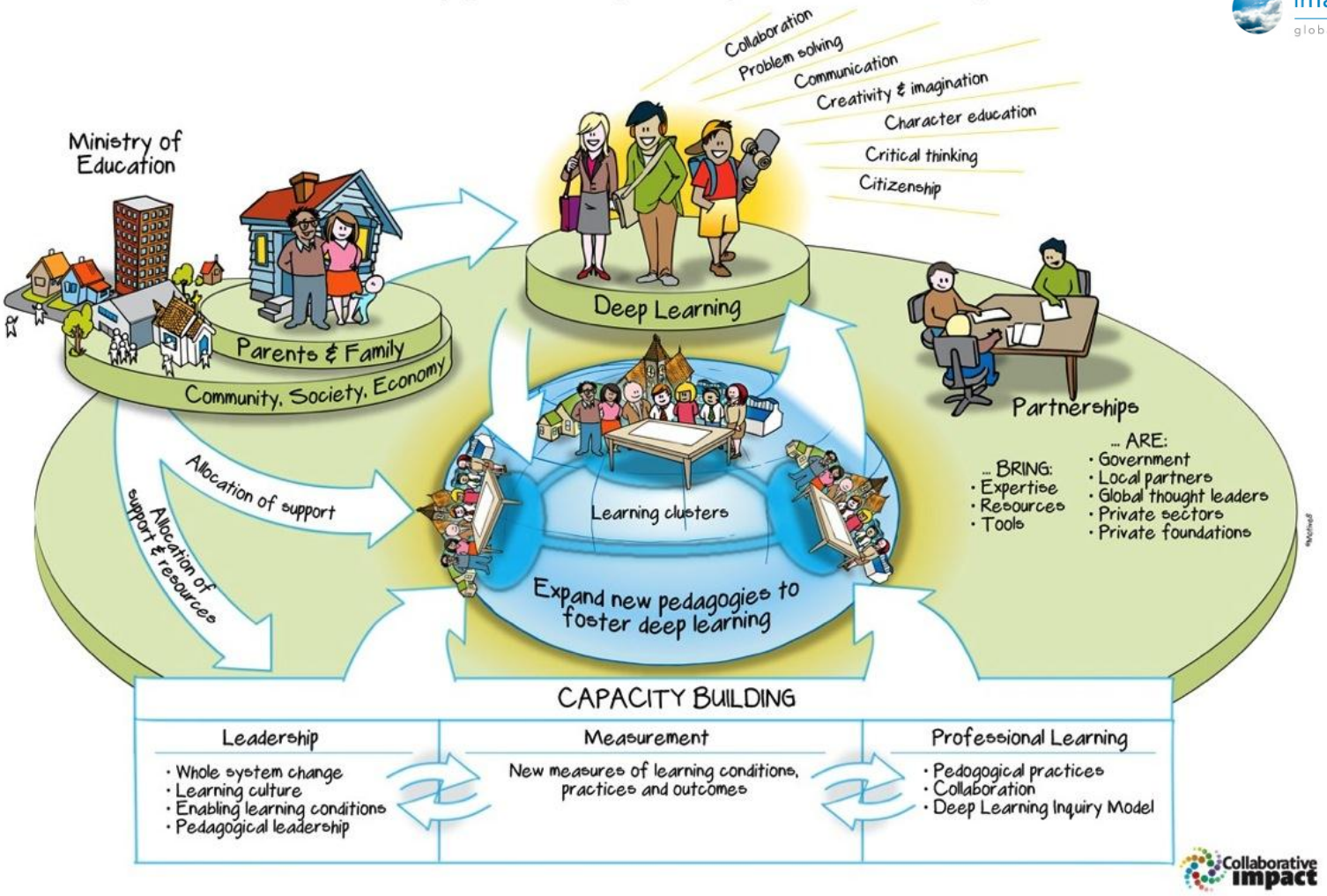
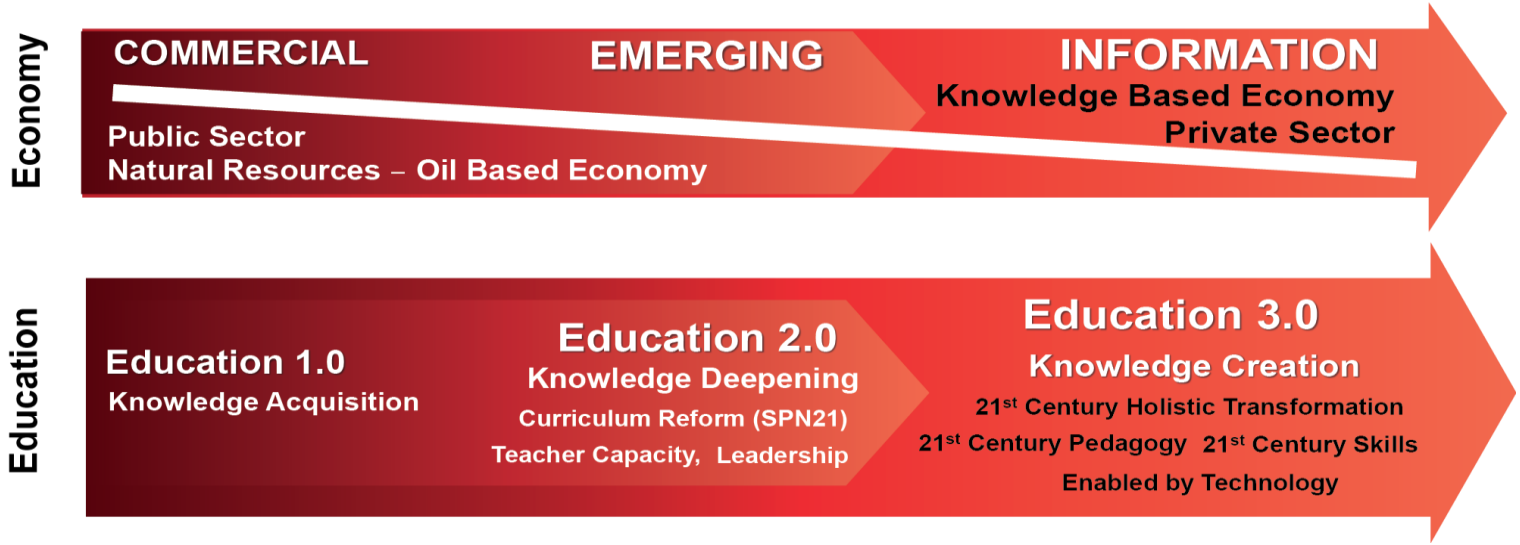


Collaborative impact

The Rationale for Change – example from Brunei

THE VISION - WAWASAN 2035

1. A well Educated and highly Skilled People
2. Dynamic Economy
3. Quality of Life



WSID provides an approach to achieving continual school improvement and sustained adaptive change in the adoption and use of ICT, digital age literacy and 21st century pedagogies, in all schools.


Why is urine yellow?
because of the pigment called
byproduct of
metabolism.
brown?
from a
and
bilirubin.

?

How are our systems

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1. **Accelerating the Productivity of Learning**

   How are we supporting schools to significantly increase the effective use of all available resources to deliver World Class 21st C Teaching and Learning experiences.

2. **Accelerating the drive to Excellence**

   How are we developing state of the art **processes, practices and capabilities** for the entire school ecosystem in order to design, build and manage an iterative culture of innovation which supports and drives school improvement.

Vison for Deep Pedagogies

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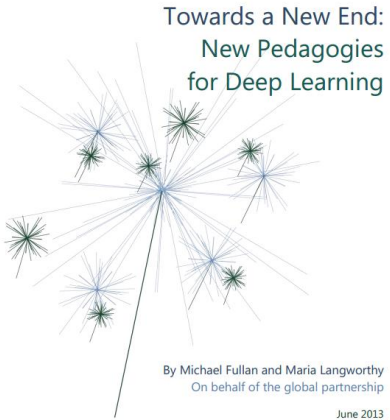
"Global education stakeholders are working together in partnership to address a key education challenge: how **educators can design** and **practice teaching and learning** that leads to more **successful futures** for all students…."

http://bit.ly/1prcAVz



Are we becoming more efficient at preparing students for a future that no longer exists?

What might these jobs be?

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Productivity Counsellor
Personal Digital Curator
Microbial Balancer
Corporate Disorganizer
Curiosity Tutor
Alternative Currency Speculator
Digital Death Manager
Digital Detox Therapist
Drone Driver
Garbage Miner
Weather Coordinator

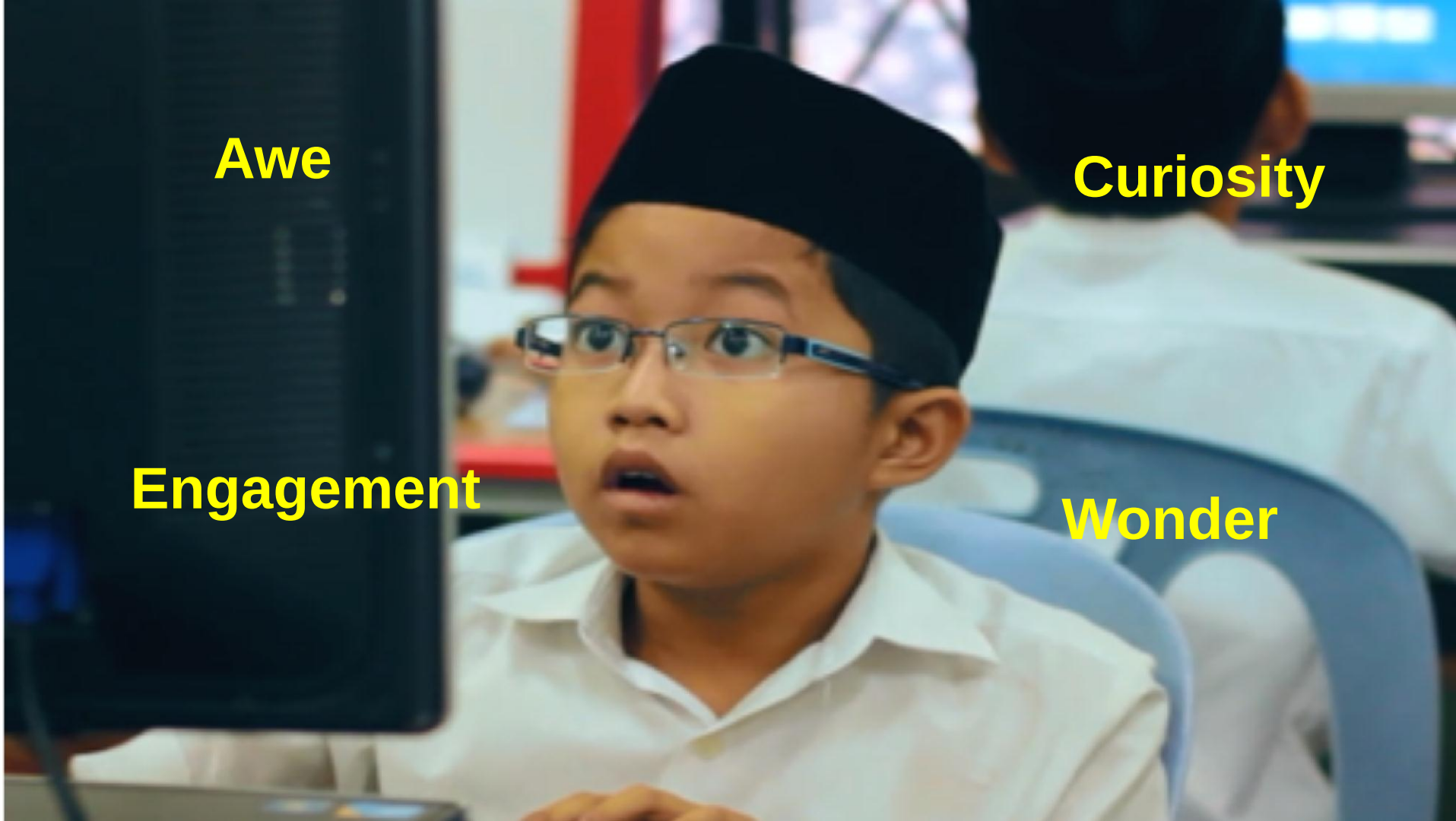
Can we pull students into learning rather than push?

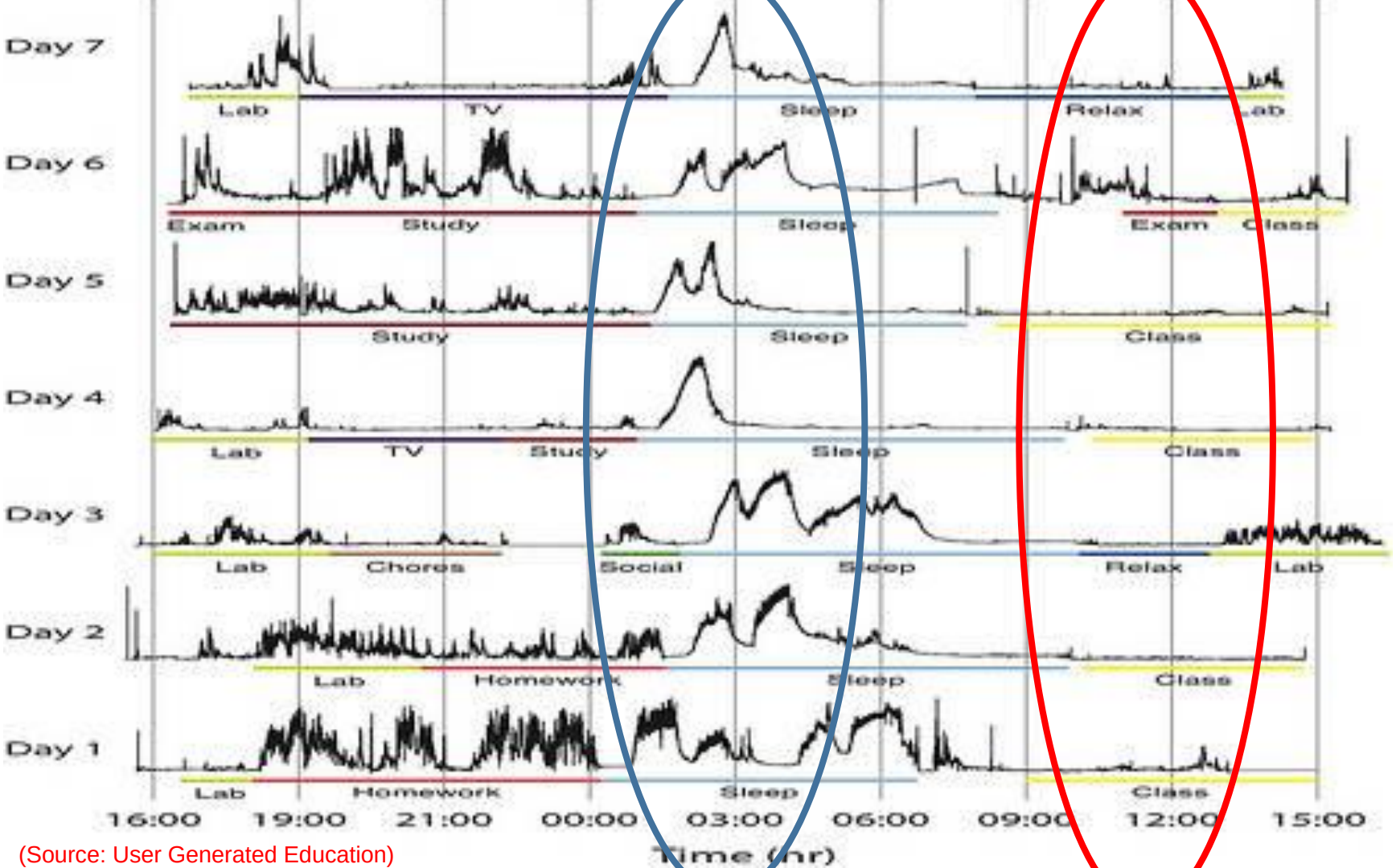
BETTER LEARNING

BETTER PRODUCTIVITY

NEW PEDAGOGIES?

DRIVEN BY TECHNOLOGY?


Awe
Curiosity
Engagement
Wonder



(Source: User Generated Education)

The Hyper-Connected Learner

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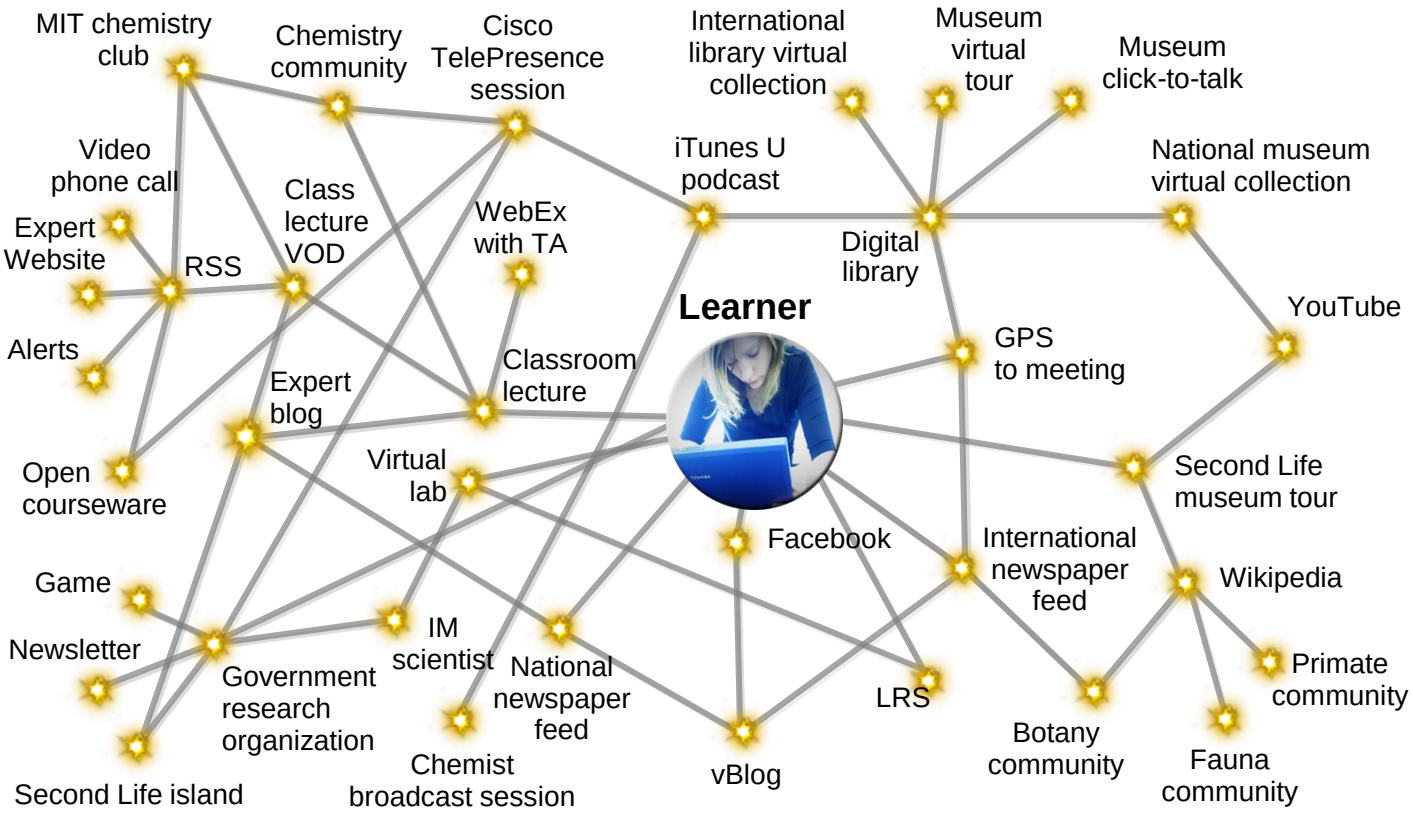

Systemic, Scalable and Sustainable

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BIG DATA

SMALL DATA

Systemic, Scalable and Sustainable

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GRAND INITITIAVES

Quality of learning, strategic planning…

Productivity of Learning

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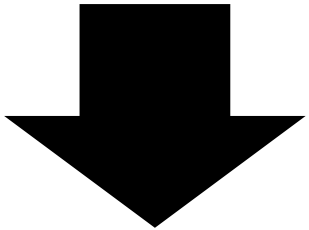
Today's lessons

Teacher Input	Student Thinking	Student Output



Tomorrow's lessons

Teacher Input	Student Thinking and feedback	Student Output

How do we accelerate the productivity of learning?

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$$L = T \times Q$$

L	T	Q
Student Learning	Teaching Time	Quality of Teaching

How do we accelerate the productivity of learning?

$$L = T \times Q$$

Student Learning

Teaching Time the curriculum includes:

- Curriculum planning
- Core subject time
- School Attendance
- Home revision

Quality of Teaching includes:

- Teacher qualifications and training
- Teacher attitudes and ambition
- Leadership and teaching
- Parents support and involvement

How do we accelerate the productivity of learning?

L = T x Q

Student Learning

Developing teacher capacity to become Designers of Learning Experiences

How do we accelerate the productivity of learning?

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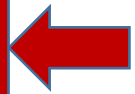
Student Learning

Developing teacher capacity to become Designers of Learning Experiences

Metrics to measure student achievement



Metrics to measure the quality of learning design

The **New** Pedagogy Agenda

"When pedagogy is the focus, a lot of other things fall into place including strong use of ICT and improving the learning of 21st century skills on the part of students."

('Whole System Reform for Innovative Teaching and Learning' p31-39 Michael Fullan)

Whole School ICT Development Project

ICT Leadership

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Rationale	To ensure e-Hijrah successfully contributes to enhanced student achievement, school leaders need the capability to effectively lead and manage the change to an ICT culture in schools.
Description and Purpose	**Develop school leaders' capability to provide strategic leadership of the transformational integration of ICT in schools.** prepare them to lead the successful implementation of e-Hijrah. This will involve development opportunities, on-going support and access to extra resources.
Outcomes and Indicators	• School leaders with the knowledge, skills and understandings to effectively lead the implementation of e-Hijrah using a Whole School Approach. • An assessment of leadership capability using profiling tools (i.e. PEAKS). • A comprehensive and up-to date ICT strategic plan for their school and community is developed. • The use of ICT enabled learning is supported by strategies that are in the ICT Strategic Plan.

Digital-Age Literacy

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Clear, standardised, nationally accepted and internationally referenced definitions of what is meant by the SPN21 Digital-Age Literacy

	meant by the SPN21 Digital-Age Literacy, will provide focus for teachers planning and for learners as they use ICT.
	Develop a shared and common set of standards-based Digital-Age Literacies (SPN21).
Description and Purpose	programmes. This will include clear descriptions of what each Digital-Age Literacy will look like for a range of developmental stages and processes for how they can be assessed.
Outcomes and Indicators	• A defined set of Digital-Age Literacies exist. • Developmentally aligned standards for each Digital-Age Literacy are in place. • Assessment processes for measuring proficiency against the Digital-Age Literacy standards are established and used by teachers.

21st Century Pedagogical Approach

	ICT can have a transformative role in education when the central focus/emphasis is on supporting and enhancing new desired pedagogical approaches rather than solely on the
Description	This initiative will clearly define the 21st century pedagogies required for the successful
Outcomes and Indicators	• A rich description, framework and model for 21st century pedagogical practices with new and existing technologies (affordances) mapped to the model. • A suite of web-based materials to support training, understanding and use of the model

To develop a common and shared understanding of 21st century pedagogies and to link these to ICT in order to maximise the contribution of ICT to learning.

This initiative will clearly define the 21st century pedagogies required for the successful implementation of SPN21.

Teacher ICT Competencies

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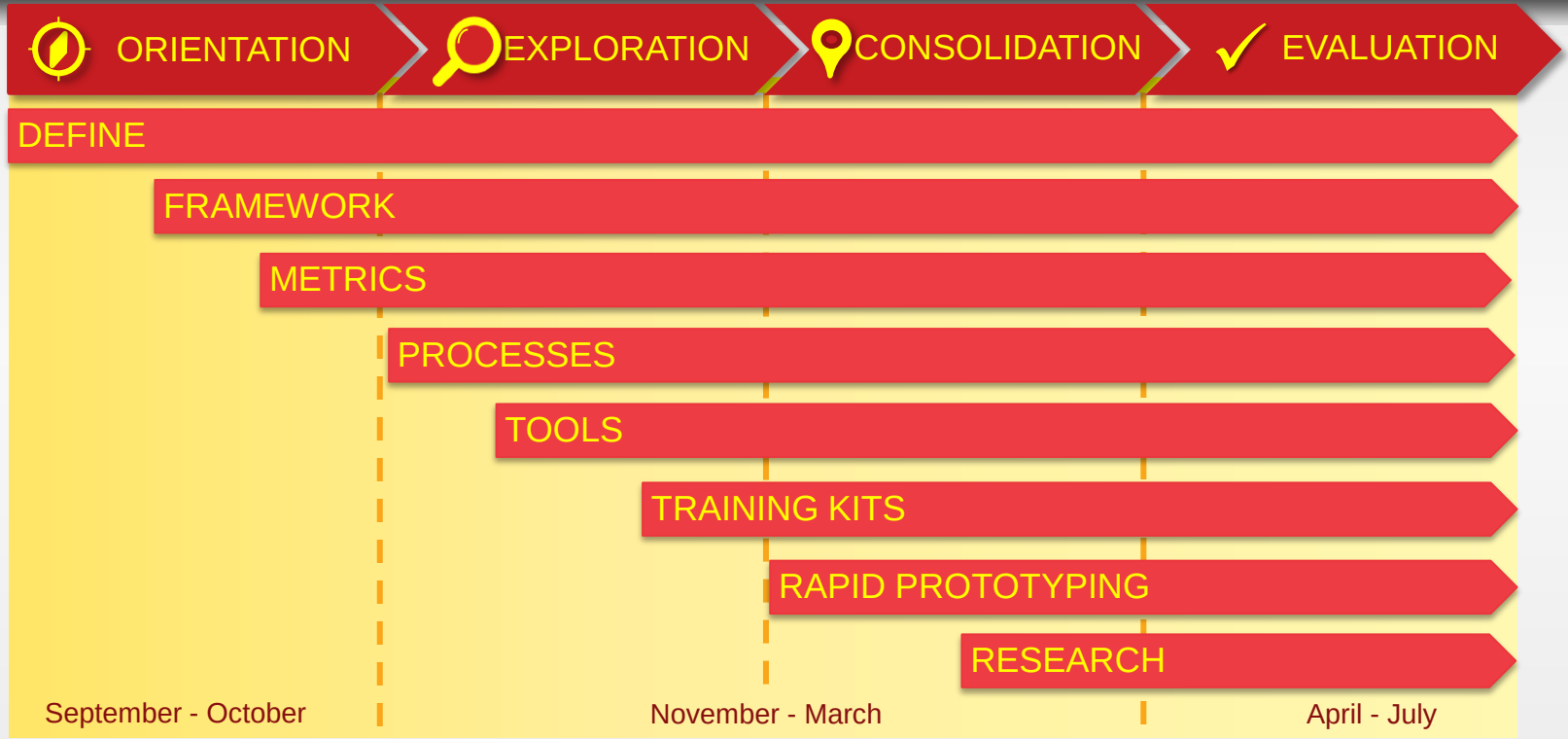
Rationale	A world-class education system requires clarity over what are the essential elements in teacher professional practice for ICT. The competencies need to be assessed, support developed and good practice nurtured and sustained.
G	**Develop an ICT Competency Standard Framework for teachers so that ICT confident and capable teachers purposefully use ICT to support learning based on 21st century pedagogies and digital literacy.**
D a	Monitor the expression of these capabilities in learning programmes.
Outcomes and Indicators	• ICT teacher competency standards, linked to 21st century pedagogical practice and digital literacy, are in use. • Professional learning and development programmes support the development and ongoing

Teachers are effectively using ICT to support learning based on 21st century pedagogies and digital age literacy.

Ministry of Education, Brunei Darussalam

Scope and Timeline

HIJRAH Whole School ICT Development



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Principles

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1. Holistic
2. Integrated and tightly aligned
3. Learner-centred but pedagogically driven
4. Global best practice
5. Relevant to the Brunei Context
6. Formative over summative
7. Aligned to Ministry of Education priorities
8. Comprehensive but simple to understand and can be interpreted and used by schools

Process

How do 21st Century Skills described in SPN21 compare with other recognized frameworks?

Can the SPN21 Essential Skills and other recognized frameworks be mapped to the OECD Domains?

Findings

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The OECD Domains are a useful way of organizing and consolidating 21st Century Skills areas.

Using the OECD Domains in this manner would help meet the principle of "global best practice".

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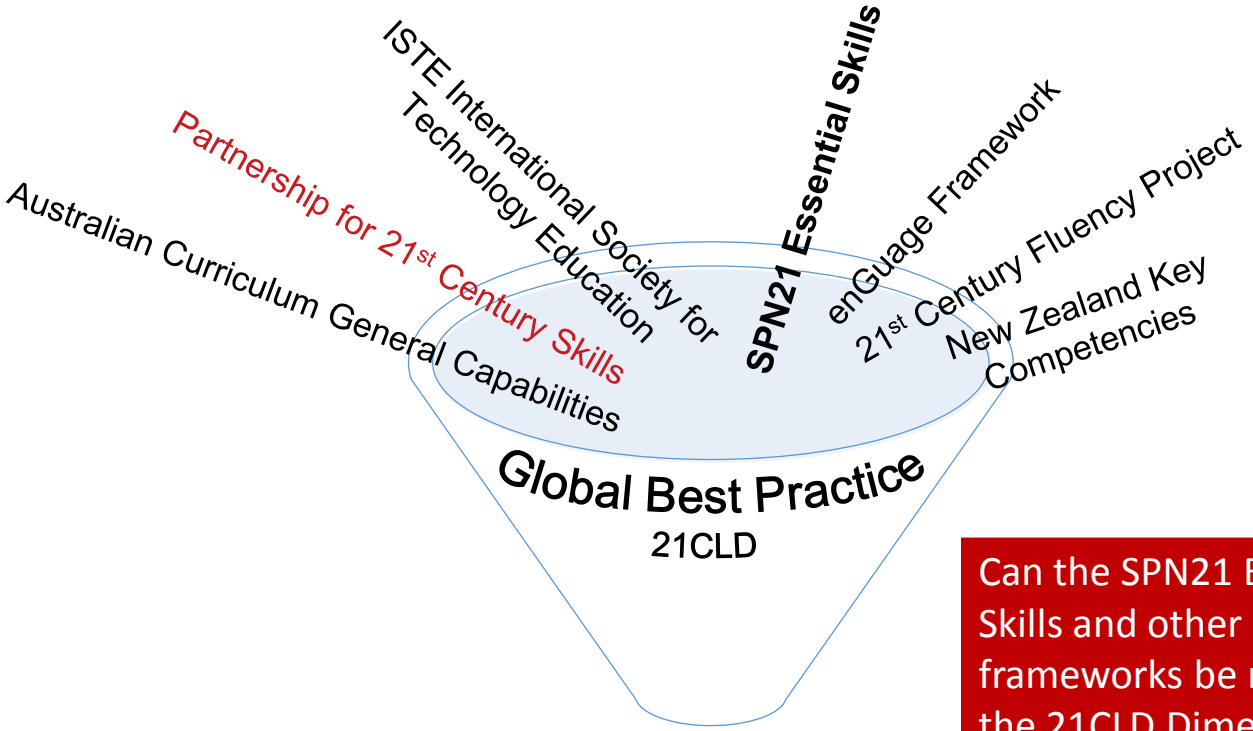
WSID Integrated Framework - Dimensions

Domains

- Ways of Thinking
- Ways of Working
- Tools for Working
- Skills for Living in the World

Process



Can the SPN21 Essential Skills and other recognized frameworks be mapped to the 21CLD Dimensions?

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Dimensions

Ways of Thinking

- *Real World Problem Solving and Innovation*
- *Knowledge Construction*

Ways of Working

- *Collaboration*
- *Skilled Communication*

Tools for Working

- *Use of ICT for Learning*

Skills for Living in the World

- *Self-Regulation*
- *Brunei Global Citizenship*

Meets the principles of, “Holistic” and “Relevant to the Brunei Context.”

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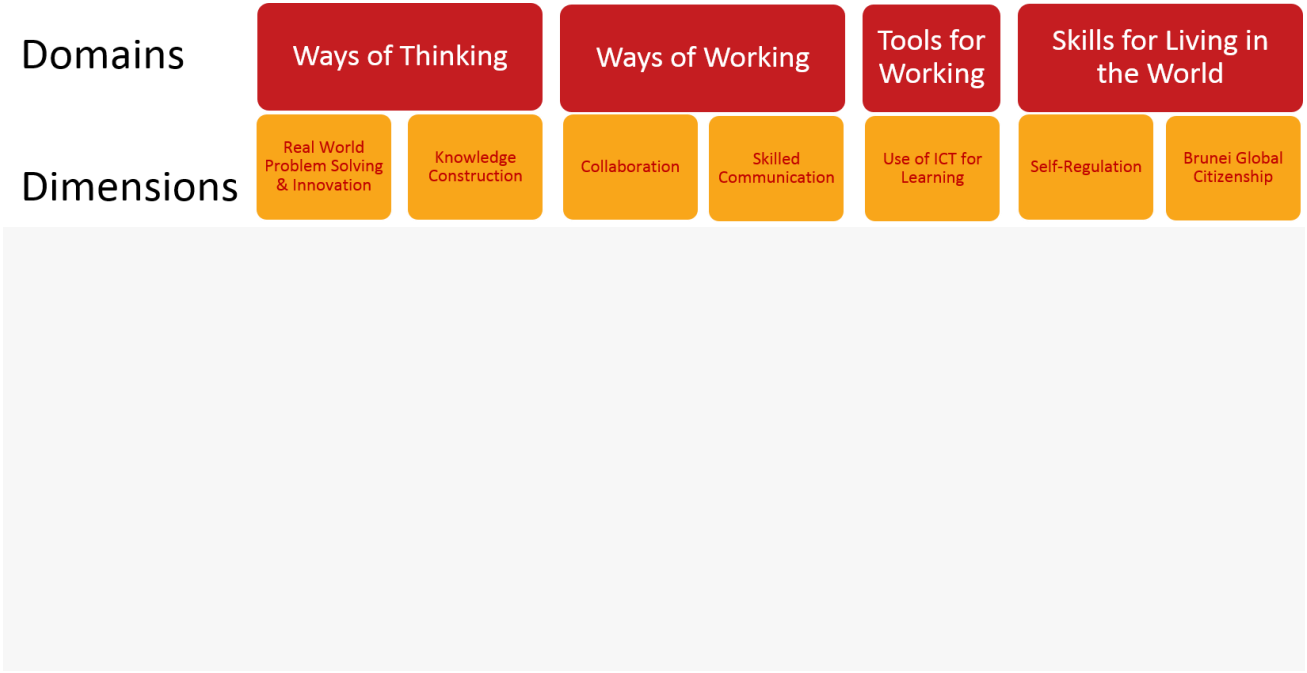
WSID Integrated Framework - Dimensions



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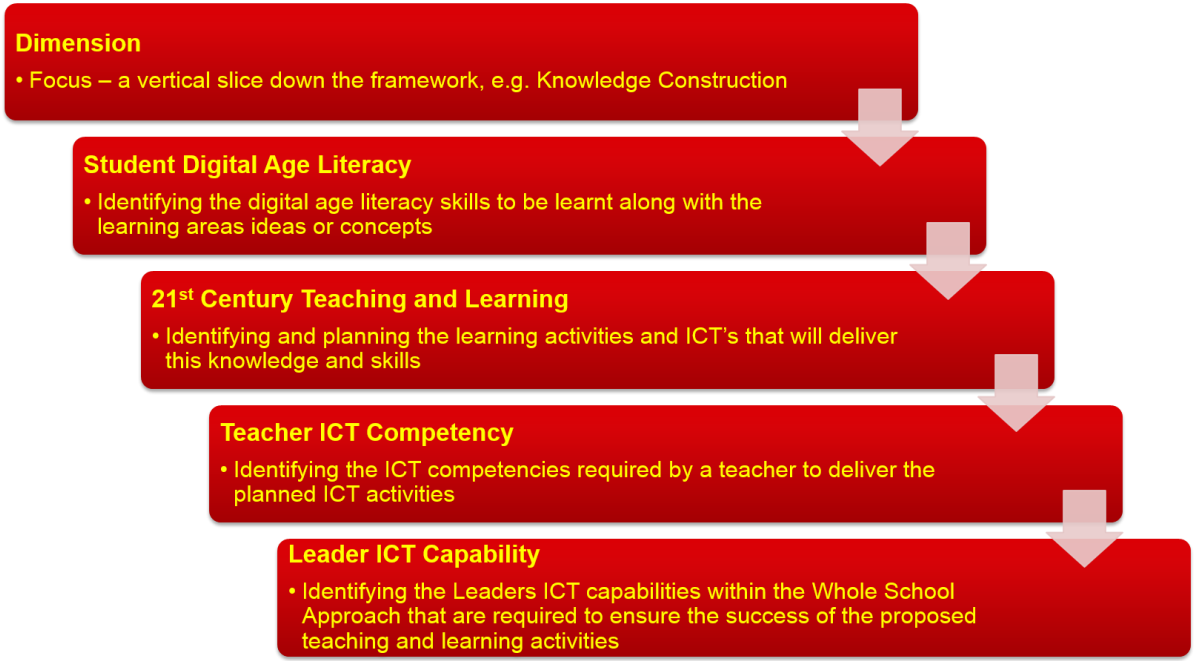
WSID Integrated Framework - Strands

Using the Framework – A Vertical Slice



Ministry of Education, Brunei Darussalam

WHOLE SCHOOL ICT DEVELOPMENT INTEGRATED FRAMEWORK

HIJRAH

	Ways of Thinking		Ways of Working		Tools for Working	Skills for Living in the World	
	Real World Problem Solving and Innovation	Knowledge Construction	Collaboration	Skilled Communication	Use of ICT for Learning	Self-Regulation	Brunei Global Citizenship
Student Digital-Age Literacies	Student Digital-Age Literacies are the competencies people have, and need to develop, to live and learn today and in the future. They provide the basis for ways of thinking, ways of working, and tools for working and skills for living in a progressive and challenging world.	The ability to think creatively to develop and implement innovative solutions to real world problems. • **Solve problems** • **Real world settings** • **Innovative and entrepreneurial**	The ability to construct knowledge through the generation of new ideas and conceptual understandings and apply this knowledge in different contexts • **Knowledge construction the main effort** • **Conceptual understanding** • **Applied**	The ability to work together with one or more people, sharing responsibility fairly and making substantive decisions together to discuss an issue, solve a problem, or create a product. • **Working together** in pairs or groups • **Sharing responsibility fairly** • **Making substantive decisions** • **Interdependent results**	The ability to communicate to a target audience over an extended period and/or using multi-modal communication supported by sufficient evidence. • **Extended Communication** • **Multi-modal** • **Supporting Evidence** • **Target Audience**	The ability to actively use ICT to support knowledge construction and the design and development of solutions and products. • **Student use of ICT** • **Knowledge Construction using ICT** • **Designers of ICT products**	The ability to successfully plan and monitor their work to achieve learning goals and meet success criteria, they are aware of in advance, and to improve their product by incorporating feedback. • **Learning Goals and Success Criteria** • **Planning** • **Improved Quality**	The ability to participate and contribute as knowledgeable, ethical, skilled, creative and globally aware citizens of Brunei Darussalam. • **Self-Responsibility** • **Responsibility to family, neighbours, and community** • **Responsibility to nation and the environment**
21st Century Learning and Teaching	21st Century Learning and Teaching pedagogy is student centred and actively involves students often working collaboratively and supported by the integration of ICT to construct new knowledge, solve problems and take action for real purpose in authentic and meaningful contexts. It is central to the development of digital-age literacies, the capacity to learn and learning to be a life-long learner in an increasing global world.	The ability to design learning activities that: • ask students to complete tasks for which they **do NOT already know a response** or solution • require students to work on solving **real problems** • represent **innovation** by requiring students to implement their ideas, designs or solutions for audiences outside the classroom. • Innovative and **entrepreneurial**	The ability to design learning activities that ask students to **interpret, analyse, synthesize, or evaluate** information or ideas.	The ability to design learning activities where students are **working with others**, and have **shared responsibility** for their work. The learning activity is designed in a way that requires students to **make substantive decisions together.**	The ability to design learning activities where students are asked to produce **extended** or **multi-modal communication** that is **substantiated**, with a logical explanation or examples or evidence that supports a central thesis. The students must craft their communication for a **particular audience.**	The ability to design learning activities where **students use of ICT directly** to complete all or part of the learning activity. The educator's use of ICT to present materials to students does not count as student use:	The ability to design learning activities where students are self-regulated thinkers and learners who can **take responsibility** for their lives, their work, and their ongoing learning. It requires individuals to **monitor** their own work and to **incorporate feedback** to develop and improve their work products.	The ability to design learning activities that enable students to develop the **skills required to participate and contribute** as knowledgeable, ethical, skilled, creative and **globally aware citizens of Brunei Darussalam.** These would include self-responsibility, a responsibility to family, neighbours, and community and a responsibility to nation and the environment
Teacher ICT Competency	Teacher ICT competencies are the key skills and abilities that teachers require to make the most effective use of ICT in their teaching and to develop pedagogy and practice capable of supporting the development of 21st Century Skills and Digital Age Literacies.	The ability to create flexible classroom learning environments. Within these environments, teachers must be able to integrate student-centred activities and flexibly apply technology to support Problem Solving and Innovation. • **Investigate** • **Create** • **Communicate** • **Manage**	The ability to create flexible classroom learning environments. Within these environments, teachers must be able to integrate student-centred activities and flexibly apply technology to support Knowledge Construction. • **Investigate** • **Create** • **Communicate** • **Manage**	The ability to create flexible classroom learning environments. Within these environments, teachers must be able to integrate student-centred activities and flexibly apply technology to support Collaboration. • **Investigate** • **Create** • **Communicate** • **Manage**	The ability to create flexible classroom learning environments. Within these environments, teachers must be able to integrate student-centred activities and flexibly apply technology to support Skilled Communication. • **Investigate** • **Create** • **Communicate** • **Manage**	The ability to flexibly use a variety of subject-specific tools and applications to support students learning. They must have the skills to manage complex projects, work with others to support their own professional learning, play a leadership role in training and supporting their colleagues, and be able to articulate how their classroom practices align to their school's policy & vision for a culture of ICT.	Teachers must be able to create flexible classroom learning environments. Within these environments, teachers must be able to integrate student-centred activities and flexibly apply technology to support Self-regulation. • **Investigate** • **Create** • **Communicate** • **Manage**	Teachers must be able to create flexible classroom learning environments. Within these environments, teachers must be able to integrate student-centred activities and flexibly apply technology to support the development of Brunei Global Citizenship. • **Investigate** • **Create** • **Communicate** • **Manage**
Leaders ICT Capability	Leader ICT capability is the effective **use of ICT** to create a school culture where ICT is used to support: • Student Centred learning • Effective professional learning and development • The creation of conducive learning environment • The involvement of parents in school programmes and activities; • Community-related programmes that develop a caring and sharing community	The ability to apply problem solving tools and to arrive at innovative solutions in real world settings. • **Solve problems** • **Apply in authentic settings** • **Being Innovative**	The ability to construct knowledge through the generation of ideas and conceptual understanding and apply this: • **Knowledge Construction** • **Conceptual Understanding** • **Application of Knowledge** • **Interdisciplinary Application**	The ability to work together with one or more people, sharing responsibility fairly and making substantive decisions together to discuss an issue, solve a problem, or create a programme. • **Working together** in pairs or groups • **Sharing responsibility fairly** • **Making substantive decisions** • **Interdependent results**	The ability to communicate to a target audience over an extended period and/or using multiple modes, supported by sufficient evidence. • **Extended Communication** • **Supporting Evidence** • **Target Audience** • **Multi-modal**	The ability to use ICT to build knowledge to develop authentic solutions. • **Knowledge building using ICT** • **Authenticity**	The ability to successfully plan, execute and monitor their work to achieve goals and to meet predetermined success criteria. • **Goals Development** • **Planning** • **Improved Quality**	The ability to participate and contribute as knowledgeable, ethical, skilled, creative and globally aware citizens of Brunei Darussalam • **Safe and Responsible Use** • **Active Citizenship and Participation** • **Digital Literacy** • **Social Networking** • **MIB**

WSID Knowledge Construction Planning Guide

PEDAGOGY REQUIREMENTS

1. Knowledge is **new** to the student
2. Requires **Interpretation, analysis or evaluation** by the student
3. The constructed knowledge shows **conceptual understanding**
4. New knowledge is **applied**
5. **Inter-disciplinary**

SEQUENCE of LEARNING ACTIVITIES

TUNING IN
Time to:
- engage students,
- determine prior knowledge, and
- prepare them

FINDING OUT
Time to locate and gather information

SORTING OUT
Students organise and process ideas

MAKING CONNECTIONS
Students draw conclusions, articulate and validate new understandings

GOING FURTHER
Provide other activities to apply the new knowledge

TAKING ACTION
Provide opportunity for students to consider the bigger picture and make cross-subject links

The pedagogical requirements to be met for it to be "Knowledge Construction"

STUDENT DIGITAL-AGE

- Demonstrate current knowledge and understanding
- Organise, analyse, synthesise, evaluate and use information and ideas
- Identify, describe, and interpret different points of view, and distinguish fact from opinion
- Identify trends and relationships

…pply new knowledge in other …arning or knowledge …onstruction

construction

TEACHER ACTIVITIES

Knowledge	Skills	Attitudes/Values/Ethics
Design learning activities that require some knowledge construction	• Design appropriate learning activities including a variety of tasks and approaches • Set up appropriate conditions for learning to take place • Provide opportunities for monitoring, feedback and evaluation (including peer to peer) • Provide multiple assessment opportunities including assessment for learning and assessment of learning • Select and provide appropriate ICT for the completion of the task or tasks	• Be aware of individual student backgrounds including: • Prior knowledge • Learning preferences • Background and interests • Social circumstances • Provide multiple opportunities for students to show their understanding • Encourage and ensure the safe and ethical use of ICT
Design learning activities where the main requirement is knowledge construction		
Design learning activities where students are required to apply their knowledge in a new context		
Design learning activities that are inter-disciplinary		

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Select and incorporate appropriate ICT for the completion of any or all tasks.

STUDENT DIGITAL-AGE SKILLS

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...pply new knowledge in other ...arning or knowledge ...nstruction

TEACHER ACTIVITIE

Knowledge		
Design learning activities that re... construction	• Set up appropriate conditions for learning to take place • Provide opportunities for monitoring, feedback and evaluation (including peer to peer) • Provide multiple assessment opportunities including assessment for learning and assessment of learning • Select and provide appropriate ICT for the completion of the task or tasks	...tudent backgrounds including: • Learning preferences • Background and interests • Social circumstances • Provide multiple opportunities for students to show their understanding • Encourage and ensure the safe and ethical use of ICT
Design learning activities where the main requirement is knowledge construction		
Design learning activities where students are required to apply their knowledge in a new context		
Design learning activities that are inter-disciplinary		

The goal is to design a lesson sequence that meets the pedagogical requirements of Knowledge Construction and help students develop the digital-age literacy of Knowledge Construction

WSID Knowledge Construction Planning Guide

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Select and incorporate appropriate ICT for the completion of any or all tasks.

STUDENT DIGITAL-AGE SKILLS

- Demonstrate current knowledge and unders
- Identify, describe, and interpret different points of view, and distinguish fact from opinion
- Identify trends and relationships
- Apply new knowledge in other learning or knowledge construction

The selection of appropriate ICT for the completion of any or all tasks

TEACHER ACTIVITIES

Knowledge	Skills	Attitudes/Values/Ethics
Design learning activities that require some knowledge construction Design learning activities where the main requirement is knowledge construction Design learning activities where students are required to apply their knowledge in a new context Design learning activities that are inter-disciplinary	• Design appropriate learning activities including a variety of tasks and approaches • Set up appropriate conditions for learning to take place • Provide opportunities for monitoring, feedback and evaluation (including peer to peer) • Provide multiple assessment opportunities including assessment for learning and assessment of learning • Select and provide appropriate ICT for the completion of the task or tasks	• Be aware of individual student backgrounds including: • Prior knowledge • Learning preferences • Background and interests • Social circumstances • Provide multiple opportunities for students to show their understanding • Encourage and ensure the safe and ethical use of ICT

WSID Knowledge Construction Planning Guide

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STUDENT DIGITAL-AGE SKILLS

- Demonstrate current knowledge and unders
- Apply new knowledge in other learning or knowledge construction

The teacher activities required to design a sequence of learning activities that meet the pedagogical requirements for "Knowledge Construction"

TEACHER ACTIVI

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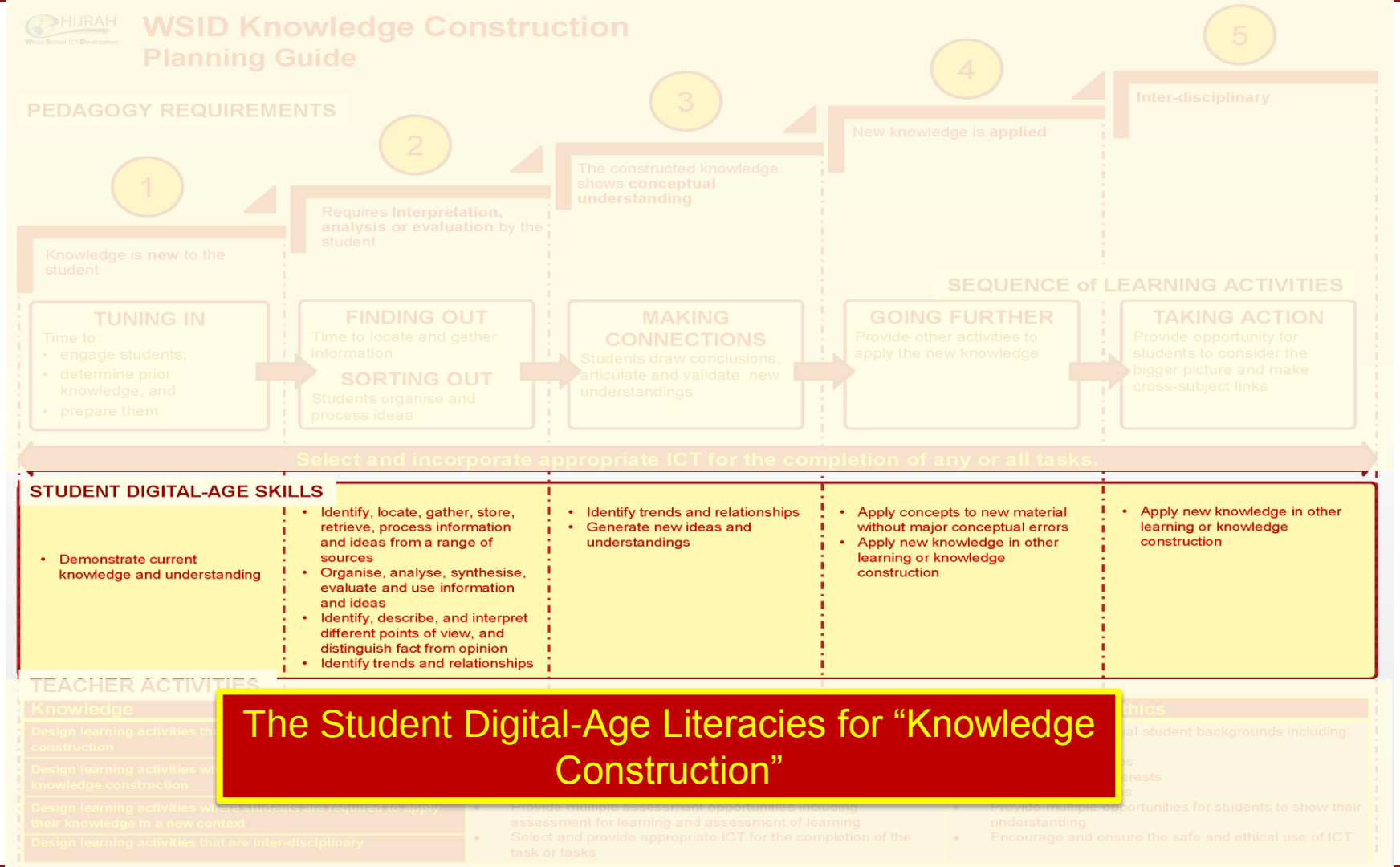
Design learning activities that require some knowledge construction Design learning activities where the main requirement is knowledge construction Design learning activities where students are required to apply their knowledge in a new context Design learning activities that are inter-disciplinary	• Design appropriate learning activities including a variety of tasks and approaches • Set up appropriate conditions for learning to take place • Provide opportunities for monitoring, feedback and evaluation (including peer to peer) • Provide multiple assessment opportunities including assessment for learning and assessment of learning • Select and provide appropriate ICT for the completion of the task or tasks	• Be aware of individual student backgrounds including: • Prior knowledge • Learning preferences • Background and interests • Social circumstances • Provide multiple opportunities for students to show their understanding • Encourage and ensure the safe and ethical use of ICT



The Student Digital-Age Literacies for "Knowledge Construction"

WSID Knowledge Construction Planning Guide

PEDAGOGY REQUIREMENTS

1. Knowledge is **new** to the student
2. Requires **Interpretation, analysis or evaluation** by the student
3. The constructed knowledge shows **conceptual understanding**
4. New knowledge is **applied**
5. **Inter-disciplinary**

SEQUENCE of LEARNING ACTIVITIES

TUNING IN
Time to:
- engage students,
- determine prior knowledge, and
- prepare them

FINDING OUT
Time to locate and gather information

SORTING OUT
Students organise and process ideas

MAKING CONNECTIONS
Students draw conclusions, articulate and validate new understandings

GOING FURTHER
Provide other activities to apply the new knowledge

TAKING ACTION
Provide opportunity for students to consider the bigger picture and make cross-subject links

Select and incorporate appropriate ICT for the completion of any or all tasks.

STUDENT DIGITAL-AGE SKILLS

• Demonstrate current knowledge and understanding	• Identify, locate, gather, store, retrieve, process information and ideas from a range of sources • Organise, analyse, synthesise, evaluate and use information and ideas • Identify, describe, and interpret different points of view, and distinguish fact from opinion • Identify trends and relationships	• Identify trends and relationships • Generate new ideas and understandings	• Apply concepts to new material without major conceptual errors • Apply new knowledge in other learning or knowledge construction	• Apply new knowledge in other learning or knowledge construction

TEACHER ACTIVITIES

Knowledge	Skills	Attitudes/Values/Ethics
Design learning activities that require some knowledge construction Design learning activities where the main requirement is knowledge construction Design learning activities where students are required to apply their knowledge in a new context Design learning activities that are inter-disciplinary	• Design appropriate learning activities including a variety of tasks and approaches • Set up appropriate conditions for learning to take place • Provide opportunities for monitoring, feedback and evaluation (including peer to peer) • Provide multiple assessment opportunities including assessment for learning and assessment of learning • Select and provide appropriate ICT for the completion of the task or tasks	• Be aware of individual student backgrounds including: • Prior knowledge • Learning preferences • Background and interests • Social circumstances • Provide multiple opportunities for students to show their understanding • Encourage and ensure the safe and ethical use of ICT

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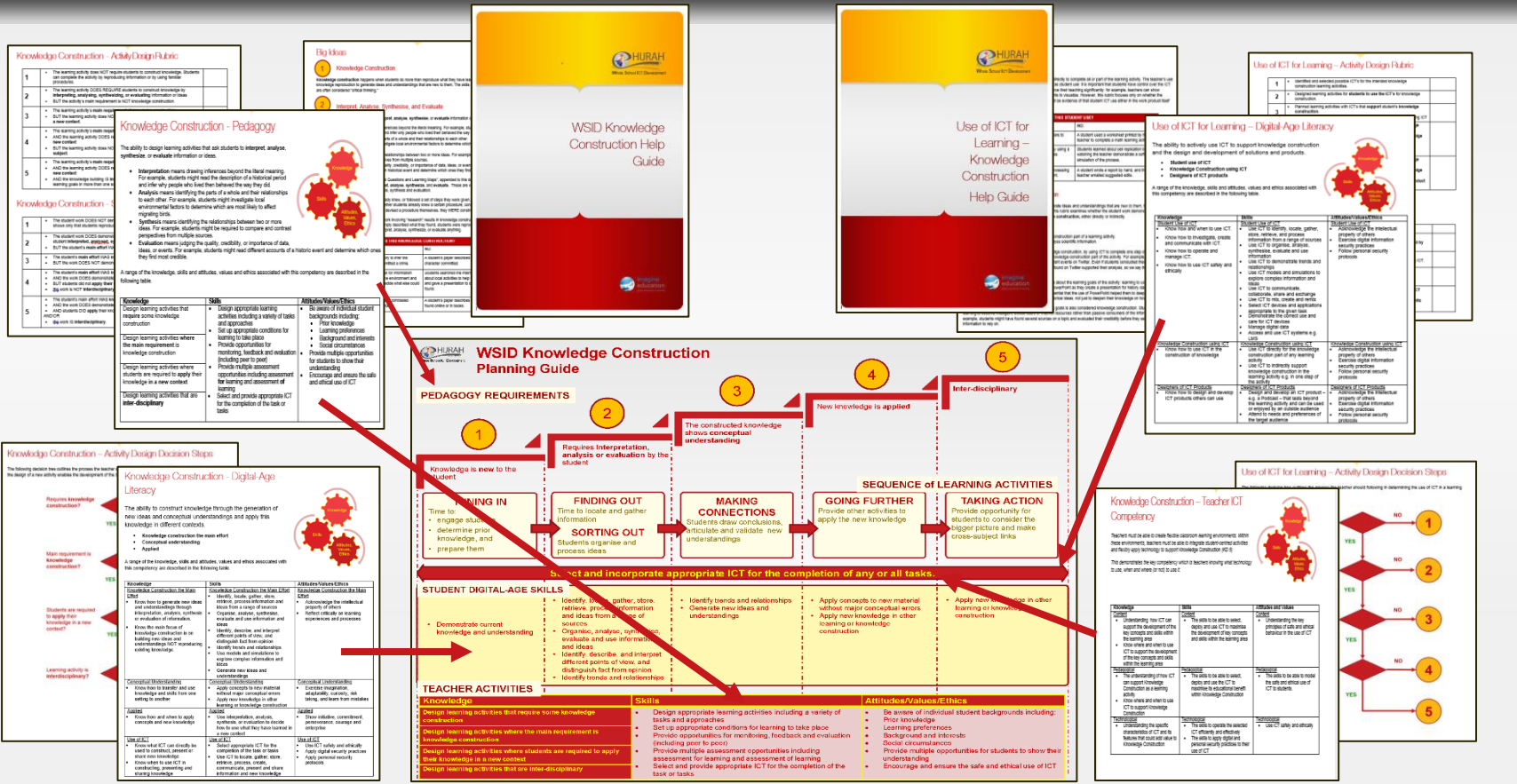
Resource Kit

HIJRAH Whole School ICT Development



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Lesson Planning Template

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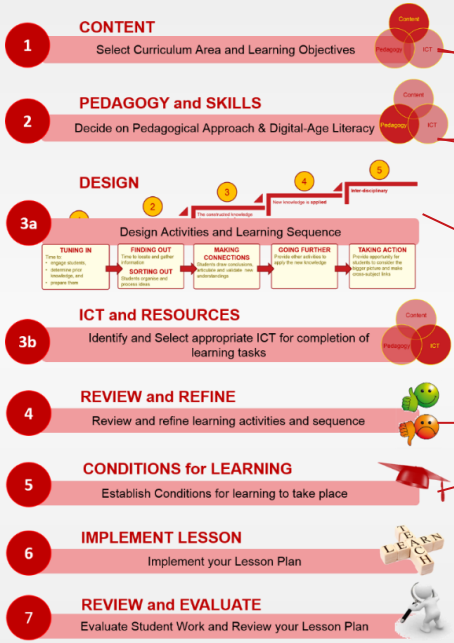

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Knowledge Construction Lesson Plan

Topic:		**Duration:**	
Content Learning Objectives		**Pedagogical Approach(es):** (Highlight or circle)	Real World Problem Solving and Innovation Knowledge Construction Collaboration Skilled Communication Use of ICT for Learning Self-Regulation Brunei Global Citizenship
Digital-Age Literacy Skills:			

Learning Activities	Teacher Activity Considerations	ICT and Other Resources
Tuning in:		
Finding out:		

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Lesson Planning Template

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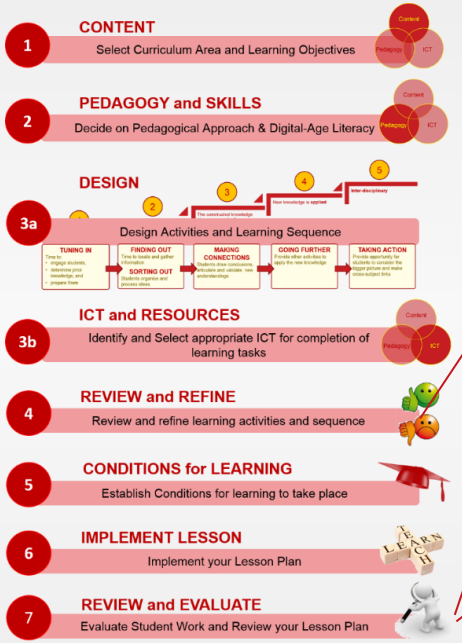

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Knowledge Construction Lesson Plan

Knowledge Construction Activity Design Rubric		Teacher	Peer
1	• The learning activity does NOT require students to construct knowledge. Students can complete the activity by reproducing information or by using familiar procedures.		
2	• The learning activity DOES REQUIRE students to construct knowledge by **interpreting, analysing, synthesizing, or evaluating** information or ideas • BUT the activity's main requirement is NOT knowledge construction.		
3	• The learning activity's **main requirement** IS knowledge construction • BUT the learning activity does NOT require students to **apply their knowledge in a new context**.		
4	• The learning activity's **main requirement** IS knowledge construction • AND the learning activity DOES require students to **apply their knowledge in a new context** • BUT the learning activity does NOT have **learning goals in more than one subject**.		
5	• The learning activity's **main requirement** IS knowledge building • AND the learning activity DOES require students to **apply their knowledge in a new context** • AND the knowledge building IS **interdisciplinary**. The activity DOES have learning goals in more than one subject.		

Peer Review Comments:

Knowledge Construction Student Work Rubric		Teacher
1	• The student work DOES NOT demonstrate knowledge construction. The work shows only that students reproduced information or used familiar procedures.	
2	• The student work DOES demonstrate knowledge construction. It shows that the student **interpreted, analysed, synthesised,** or **evaluated** information or ideas. • BUT the student's **main effort** WAS NOT knowledge construction.	
3	• The student's **main effort** WAS knowledge construction • BUT the work DOES NOT demonstrate **conceptual understanding.**	
4	• The student's **main effort** WAS knowledge construction • AND the work DOES demonstrate **conceptual understanding** • BUT students did not **apply their knowledge** AND • the work is NOT **interdisciplinary**.	
5	• The student's main effort WAS **knowledge construction** • AND the work DOES demonstrate **conceptual understanding** • AND students DID **apply** their knowledge OR • The work IS **interdisciplinary**.	

Comments:

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Lesson Planning Template

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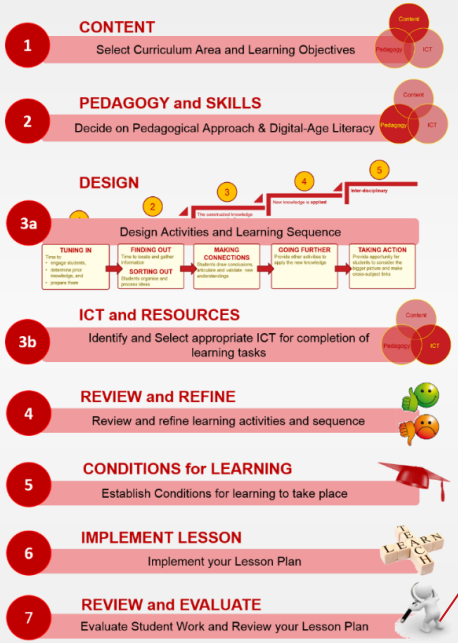

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Knowledge Construction Lesson Plan

What worked well?	What would make it better next time?
What didn't work well? and why?	What would be required in the future to increase your use of ICT with your students in knowledge construction?

Name of Teacher: _____

Name of Peer Reviewer: _____

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Whole School Approach Framework

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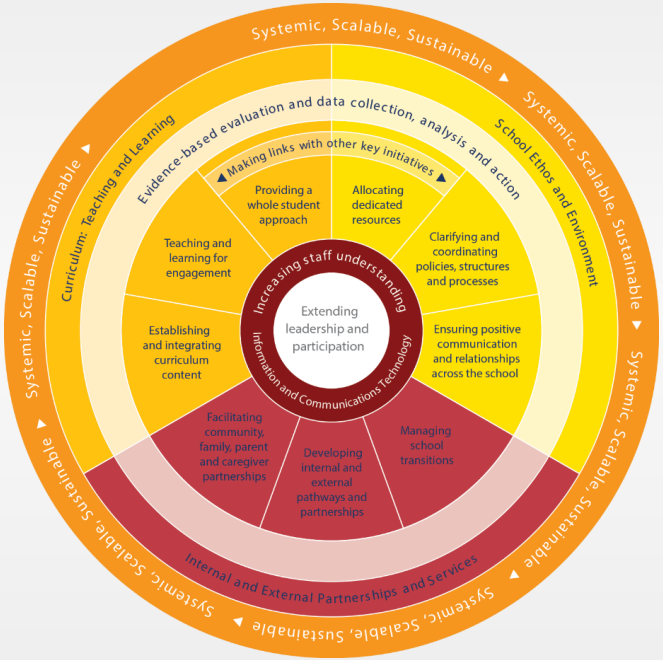

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Four Enablers

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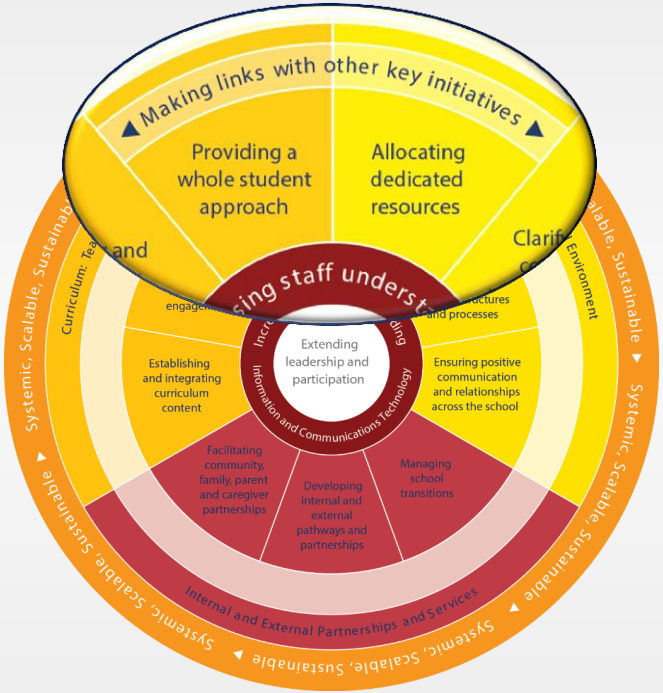
1st Enabler


Systemic, Scalable, Sustainable
Systemic, Scalable, Sustainable
Systemic, Scalable, Sustainable
Systemic, Scalable, Sustainable
Systemic, Scalable, Sustainable
Systemic, Scalable, Sustainable
Extending Leadership and Participation

2nd Enabler


Systemic, Scalable, Sustainable
Systemic, Scalable, Sustainable
Systemic, Scalable, Sustainable
Systemic, Scalable, Sustainable
Systemic, Scalable, Sustainable
Increasing staff understanding
Information and Communications Technology

3rd Enabler


Making links with other key initiatives
Providing a whole student approach
Allocating dedicated resources
Extending leadership and participation
Establishing and integrating curriculum content
Ensuring positive communication and relationships across the school
Facilitating community, family, parent and caregiver partnerships
Developing internal and external pathways and partnerships
Managing school transitions
Information and Communications Technology
Internal and External Partnerships and Services
Systemic, Scalable, Sustainable

4th Enabler


Evidence-based evaluation and data collection, analysis and action
Making links with other key initiatives
Providing a whole student approach
Allocating dedicated resources
Teaching and learning for engagement
Clarifying and coordinating policies, structures and processes
Increasing staff understanding
Extending leadership and participation
Information and Communications Technology
Establishing and integrating curriculum content
Ensuring positive communication and relationships across the school
Facilitating community, family, parent and caregiver partnerships
Developing internal and external pathways and partnerships
Managing school transitions
Internal and External Partnerships and Services
Systemic, Scalable, Sustainable

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WSA Framework Domains and Dimensions

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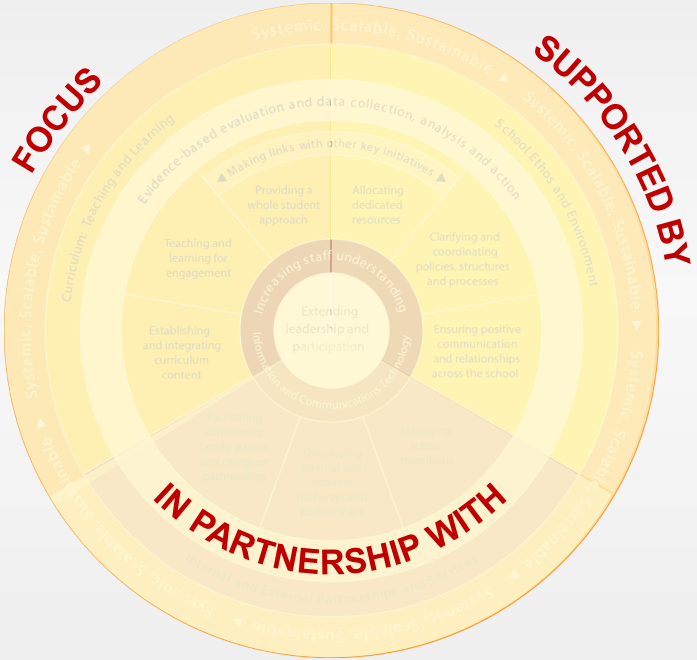

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Current Status

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Strategic Roadmap

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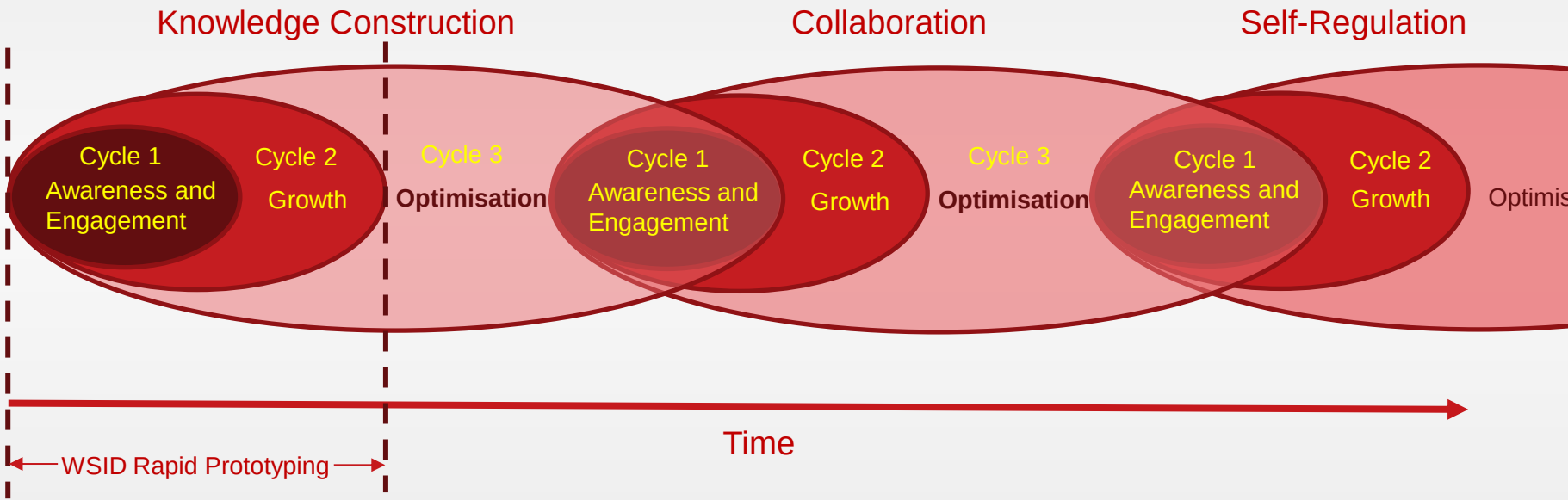

Sharing Workshops
Systemic, Scalable, Sustainable

Cluster 2

BDTA

Thank you

Baldev@imagine.education