Crescent Girls’ School

**FutureSchool@Singapore : The Crescent Journey**

Mrs Tan Chen Kee
Principal
Crescent Girls’ School
THE POLICY-PRACTICE NEXUS

Mobile devices

THE POTENTIAL OF TECHNOLOGY

eContent, eTextbooks

Learning Management Systems

Web2.0 Tools: Blogs, Quizzes, Discussion Forum
THE POLICY-PRACTICE NEXUS

POTENTIAL

POLICY

PRACTICE

POLICY MAKERS

SCHOOL LEADERS
THE CRESCENT JOURNEY
THE CRESCENT JOURNEY

Phase 1 IT demo School under ITMP1

School under ITMP1

Fasttrack School

School, Incubator School and S2 COE/ICT

(m-Learning@Crescent) BackPack.NET

Microsoft Mentor School

LEAD IT school, TLLM Wave 1 and FlexSI Scheme

Microsoft Mentor School

UNESCO – Intel School Award Gold

Microsoft World Tour School

EduLab Project/SZ/COE/ICT

UNESCO – Intel School Award Gold

HP Innovation in Education Award


Microsoft Mentor School

FS@SG
M-LEARNING@CRESCEINT

1 to 1 Tablet/Slate PC ratio (Personal Learning Device, Inking Technology)

More than 1400 users
CRESCENT AS A FUTURESCHOOL

• One of 8 schools in Singapore
• Selected in Phase 1 of the FutureSchools@Singapore programme in 2007
• Our goals as a FutureSchool:
  – to push the frontiers of teaching and learning practices at a school-wide level using technology as the key enabler
  – to share and scale our successful practices to others in the education fraternity
THE CRESCENT APPROACH

Innovations in Teaching & Learning

Innovative Use of ICT Tools

Industry Partnership

RESEARCH
THE CRESCENT MODEL:
HOLISTIC IMPLEMENTATION
THE POLICY-PRACTICE NEXUS

Mobile devices

THE POTENTIAL OF TECHNOLOGY

eContent, eTextbooks

Learning Management Systems

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HOLISTIC IMPLEMENTATION

- Leading technology-rich schools
- Professional development for staff
- Infrastructure planning & implementation
- Curriculum, Pedagogy & Assessment
- Collaboration with partners
- Research
CURRICULUM, PEDAGOGY & ASSESSMENT
5E MODEL OF ICT USAGE

LEARNING

EXCHANGE
Swop of traditional practices with ICT

ENRICH
Use of rich media and applications

ENHANCE
Learning through active learner use of ICT

COLLABORATIVE PROBLEM-SOLVING & KNOWLEDGE CREATION

EXTEND
ICT to support learning directed by learner

EMPOWER
ICT to support learner control of learning and creation of knowledge

SHALLOW

DEEP

PASSIVE
Teacher-Centred

ACTIVE
Student-Centred

LEARNER ENGAGEMENT

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Use of rich media and applications

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COLLABORATIVE PROBLEM-SOLVING & KNOWLEDGE CREATION

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PASSIVE
Teacher-Centred

ACTIV

SHALLOW

LEARNER ENGAGEMENT
“If you didn’t design for it, don’t expect it to happen”

**Curriculum Innovations**
Communicative Arts, Integrated Humanities, Integrated Curricula

**21st century pedagogies**
Flipped classroom for science, place-based learning, Model UN for SS

**21st Century Assessment**
Assessment of 21st century competencies, varied modes of assessment
PROFESSIONAL DEVELOPMENT FOR STAFF
• Student opportunities to develop 21st Century Skills vary more within a school than between schools.
HOLISTIC IMPLEMENTATION
Professional Development for Staff

Practice a new teaching method: 0.28
Conducted individual or collaborative research on a particular topic: 0.25
Planned or practiced using ICT in teaching (for example, planning a): 0.23
Reviewed and discussed student work: 0.23
Observed a demonstration of ICT use: 0.18
Developed or reviewed curriculum materials: 0.18
Received or delivered one-on-one coaching or mentoring: 0.17
Planned a lesson or a unit: 0.15
Observed a demonstration of a lesson: 0.15
Listened to a lecture: 0.03

Based on analysis by SRI International

Figure 6: More Active PD Predicts Higher Innovative Teaching
HOLISTIC IMPLEMENTATION

21st Century Learning Design Framework

6 Dimensions for 21st Century Learning:
- Collaboration
- Skilled Communication
- Self Regulation
- Real-world Problem Solving
- Knowledge Construction
- Use of ICT for Learning
- Global Awareness

(jointly developed by Crescent Girls’ School and SRI International)

21CLD Learning Activity Rubrics

Curriculum, Pedagogy & Assessment
### Professional Development for Staff

<table>
<thead>
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**Figure 6: More Active PD Predicts Higher Innovative Teaching**
SO WHAT HAS CHANGED?
21st CENTURY LEARNING DESIGN: WHAT HAS CHANGED?

1. Student engagement in knowledge building
2. Student ownership of learning
3. Student-control vs Teacher-control
4. Student empowerment
“SCALING”
FUTURESCHOOL INNOVATIONS
“SCALING”
FUTURESCHOOL INNOVATIONS

What is Scaled?
• Innovative ICT Solutions (eg TrailShuttle, DizCoverboard, HeuX)
• 21st Century Learning Design Framework
• Curriculum Innovations (eg Integrated Curriculum, Communicative Arts)
• Pedagogies for the 21st Century (eg flipped classrooms, place-based learning)
• 21st Century Student Assessment
• Processes for technology innovations in teaching and learning
SCALING FUTURESCHOOL INNOVATIONS

Leading technology-rich schools
Infrastructure planning & implementation
Consultancy
Professional development for staff
Collaboration with partners
Research

International
LOOKING AHEAD
LOOKING AHEAD

21CLD : A 21st Century Lesson Builder

Welcome to the 21CLD, where educators connect and collaborate for 21st Century Learning Design.

Lesson 2

Lesson Information
Topic: Poetry Handout
Duration: 60 mins

Lesson Objectives
1. Seek feedback from peers on the effective use of figurative language.
2. Refine the poem. Perform the poem and seek feedback based on oral communication skills.

Students' Prior Knowledge:
1. Oral Communication Rubric 2. Figurative Language - style and Metaphors

Instructional Approach
1. Facilitating Assessment for Learning 2: Unit Application

Activity Description
Students identify the use of figurative language in another student's poem and review the effectiveness of the figurative language being used. Comments should be given in the SkyDrive Word or Google Doc.

Activity Description
Students perform their short poems with focus on articulation and pronunciation. Poems to evaluate their classroom using a SkyDrive Owl Form.

Activity Description
Share with the class an exhibition that is taking place at NBL. About Hands: Gift of a Generation.

Navigate
LOOKING AHEAD

From “1-1” learning to “1-m” learning

21st century learning experience creator

- Bite-sized learning activities
- Created, experienced and assessed on the go
- Learning anytime, anywhere and with anyone
“The greatest good you can do for another is not just share your riches, but to reveal to him his own.”

Benjamin Disraeli

(British politician)
THANK YOU

Email me at ng_chen_kee@moe.gov.sg