Teacher Education for the 21st Century: A Singapore Model

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4 KEY DRIVERS

21st century Learners call for 21st century Teachers

**FOR STUDENTS -
21st century
literacies & skill
sets anchored on
values**

**FOR TEACHERS
- 21st century
developmental
needs**

**Research findings
on classroom
practices in
Singapore**

**NIE needs to model
best practices in
teaching & learning
to improve quality
of teaching in the
classrooms**

21st century Teachers call for 21st century Teacher Educators

Moving Ahead in the 21st Century

21st Century Skill Sets & Key Development Areas for Students

Nurturing the **whole child** morally, intellectually, physically, socially and aesthetically

Equipping students with requisite skills, knowledge, values and attitudes

Learning & Innovation Skills
- Critical thinking & problem solving
- Creativity & innovation
- Oral & written communications

Information, Media & Technology Literacy Skills
- Content Mastery
- Information literacy
- Media literacy
- ICT literacy

Life Skills
- Flexibility & adaptability
- Initiative & self-direction
- Teamwork & collaboration
- Social & cross-cultural skills
- Productivity & accountability
- Leadership & responsibility

Citizenship Skills
- Valuing of diversity
- Global awareness
- Ecological & environmental awareness
- Values , Ethics and Professionalism

21ˢᵗ Century Developmental Needs for Teachers

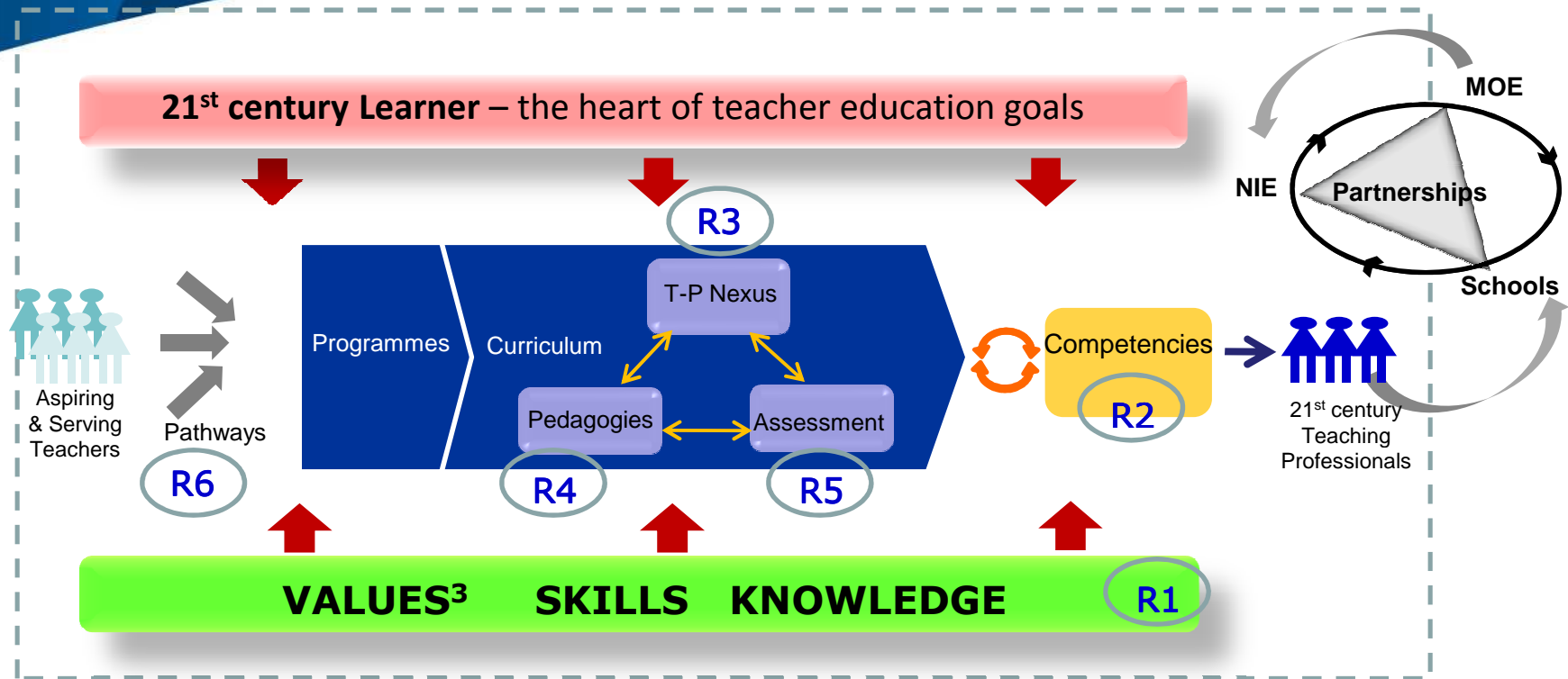| 21ˢᵗ Century Literacies	• Information literacies & knowledge building • Adept in using multi media • Knowledge of cultures, languages, subject matter and visual content
21ˢᵗ Century Learning Environment	• Ability to support learning communities that enable students to collaborate, share best practices and integrate 21ˢᵗ century skills into classroom practice • Provide access to quality learning tools, technologies and resources, face to face and online
21ˢᵗ Century Curriculum & Instruction	• Integrated approach to help students understand how to access, evaluate, synthesize and contribute to information • Provide opportunities to apply these skills across content areas and for a competency-based approach to learning

Desirable Student Outcomes

Evidence Based Research Findings by NIE

Research data on Singapore schools suggested that teachers need:

■a stronger dose of Pedagogical-Content-Knowledge (PCK)

■a deeper understanding for the nature of the disciplines they teach

■to develop capacity to initiate their students into the knowledge and practice of the discipline

■a sophisticated understanding of the fundamentals of lesson planning , questioning and feedback, capacity for differentiated instruction, strategies for effective peer work and inquiry approaches

PRE Recommendations

21st century Learner – the heart of teacher education goals

R3

Programmes | Curriculum

T-P Nexus

Pedagogies | Assessment

R4 | R5

Competencies

R2

Aspiring & Serving Teachers

Pathways

R6

21st century Teaching Professionals

MOE

NIE | Partnerships

Schools

VALUES³ SKILLS KNOWLEDGE

R1

Strengthening the NIE TE Model – Mapping the Recommendations

R1 New V³SK

R2 Graduand Teacher Competency Framework

R3 Strengthening Theory-Practice Nexus

R4 Extended Pedagogical Repertoire

R5 Assessment Framework for 21st century Teaching & Learning

R6 Enhancing Pathways for PD

The Enhanced Partnership Model

- Transforming teacher education is a task NIE cannot achieve in isolation

- It requires a single-minded commitment and promotes a solidarity of intentions and efforts from all key stakeholders – NIE, MOE, and schools

- The EPM leverages on the proven strengths of NIE's university-based approach, while emphasizing much closer collaboration with MOE and schools than what currently exists
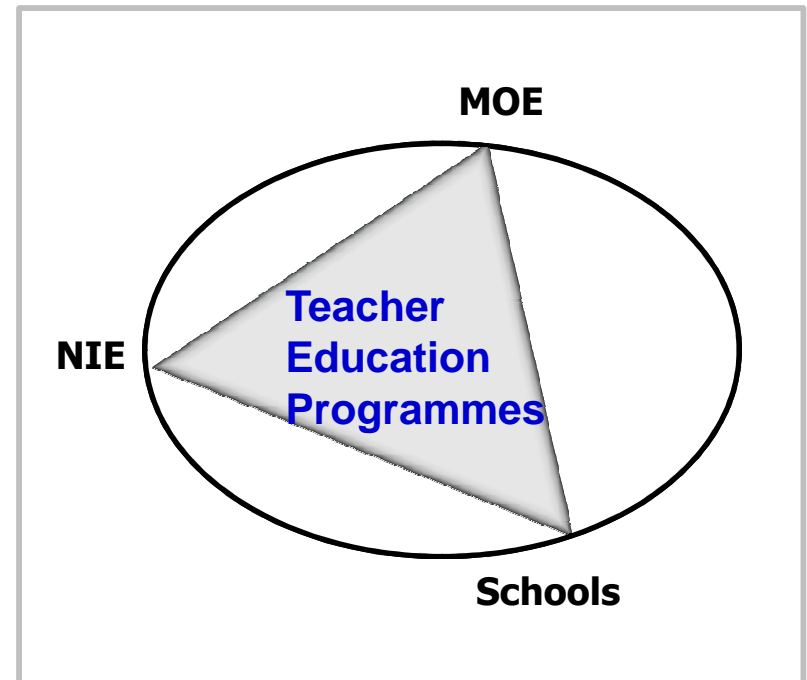
Attributes of the 21st Century Teaching Professional

Developing Education Professionals

VALUES
KNOWLEDGE
SKILLS

V1 – Learner-Centered Values	V2 – Teacher Identity	V3 – Service to the Profession and Community
• Empathy • Belief that all children can learn • Commitment to nurturing the potential in each child • Valuing of diversity	• Aims for high standards • Enquiring nature • Quest for learning • Strive to Improve • Passion • Adaptive & Resilient • Ethical • Professionalism	• Collaborative learning and practice • Building apprenticeship and mentorship • Social responsibility and engagement • Stewardship

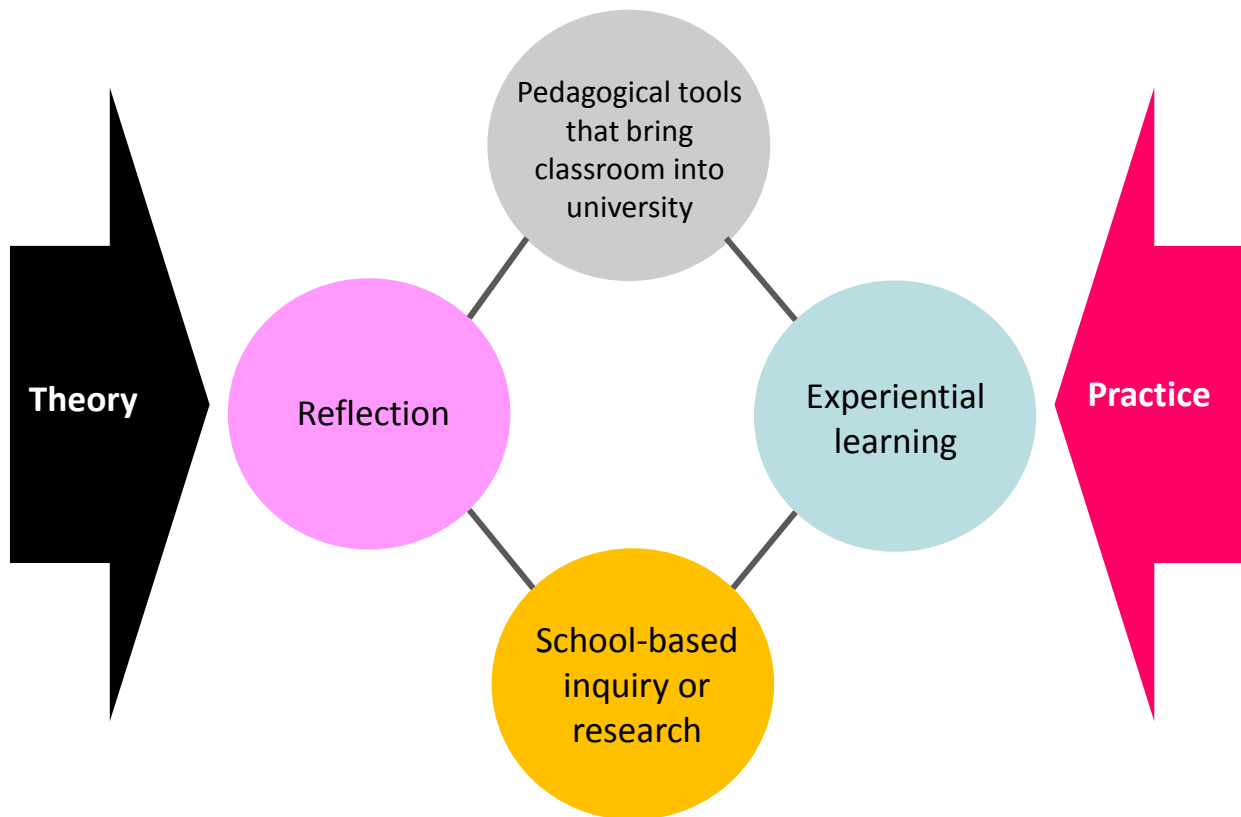| SKILLS	KNOWLEDGE
• Reflective skills & thinking dispositions • Pedagogical skills • People management skills • Self-management skills • Administrative & management skills • Communication skills • Facilitative skills • Technological skills • Innovation and Entrepreneurship skills • Social and emotional intelligence	• Self • Pupil • Community • Subject content • Pedagogy • Educational Foundation & Policies • Curriculum • Multicultural literacy • Global awareness • Environmental awareness

R2 : Graduand Teacher Competencies Framework

Performance Dimensions	Core Competencies

Professional Practice	1. Nurturing the child **CB**
	2. Providing quality learning of child **CB**
	3. Providing quality learning of child in CCA **CB**
	4. Cultivating knowledge:
	   i. with subject mastery **CB**
	   ii. with reflective thinking **CB**
	   iii. with analytic thinking **CB**
	   iv. with initiative **A**
	   v. with creative teaching **A**
	   vi. with a future focus **A**

Leadership & Management	1. Winning hearts & minds
	   i. Understanding the environment **A**
	   ii. Developing others **A**
	2. Working with others
	   i. Partnering parents **A**
	   ii. Working in teams **CB**

Personal Effectiveness	1. Knowing self and others
	   i. Tuning into self **CB**
	   ii. Exercising personal integrity **A**
	   iii. Understanding and respecting others **CB**
	   iv. Resilience and adaptability **CB**

R3 : Strengthening the Theory-Practice Nexus

Approach #1 : Structured Mentorship Preparation Programme

- NIE will design a customised mentor training programme to quip SCMs and prepare them for their enhanced roles and responsibilities
- The programme will take a developmental approach with Basic, Intermediate and Advanced levels

Approach #2 : Strengthening Mentorship before, during and after Practicum

- Current role of SCM should be enhanced to ensure a continuum of mentorship from before practicum to during practicum, all the way to beginning teacher induction period
- One of the key tasks of SCMs will be to hold the Professional Learning Inquiry Sessions (PLIS)

Approach #3 : Greater infusion of NIE-School Interactions

- Include interweaving short stints (e.g. 1 day in a week) of school-based practice for on-campus courses

Delta Statement: Depth and Engagement

- Articulation of a clear framework to be translated into the curriculum
- Creation of sharing platforms for best practices
- Scaling up of pedagogical practices institute-wide
- Transformation of the learning environment

R4 : Extended Pedagogical Repertoire

Facilities design and technology are integrated to simulate school learning environments which facilitate innovative pedagogies

Student Teacher Notebook Scheme

Facilitates immersion in a culture of pervasive and effective IT use early in their teaching careers. Ideal for gaining familiarity and experimentation with pedagogies that leverage on IT

Collaborative Tutorial Room *new*

Design of classroom facilitates a collaborative learning environment. Features include cluster seating, 1-to-1 computing facilities and collaborative spaces – both virtual and physical writing space

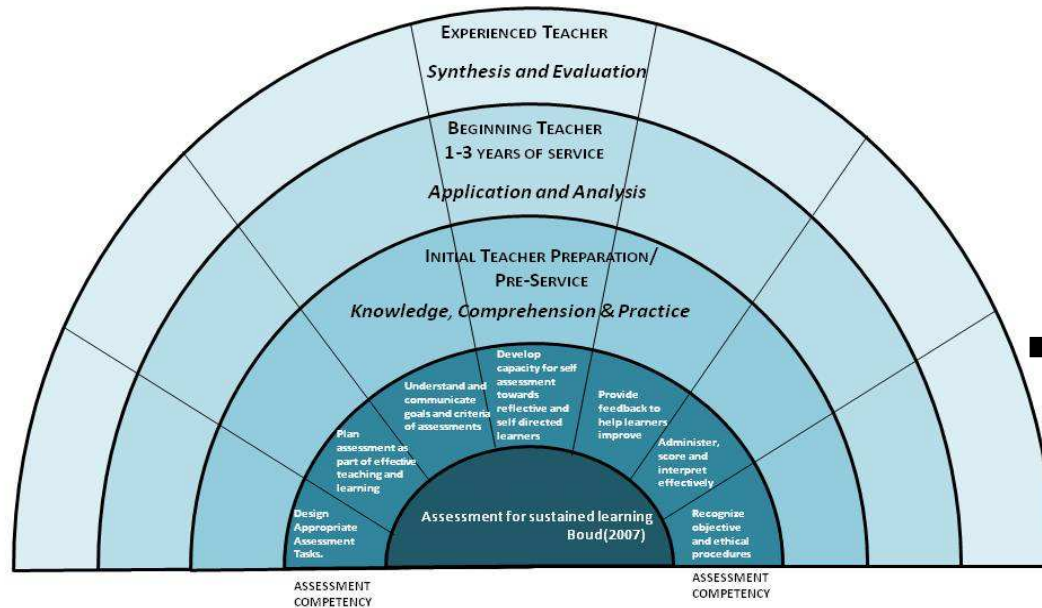## Primary English Language (PEL) Classroom

Model classroom which uses current technologies for teaching or reading and writing

Teachers Language Development Centre (TLDC)

Uses flexible and functional learning spaces where technology is seamlessly integrated to create a purposeful learning environment
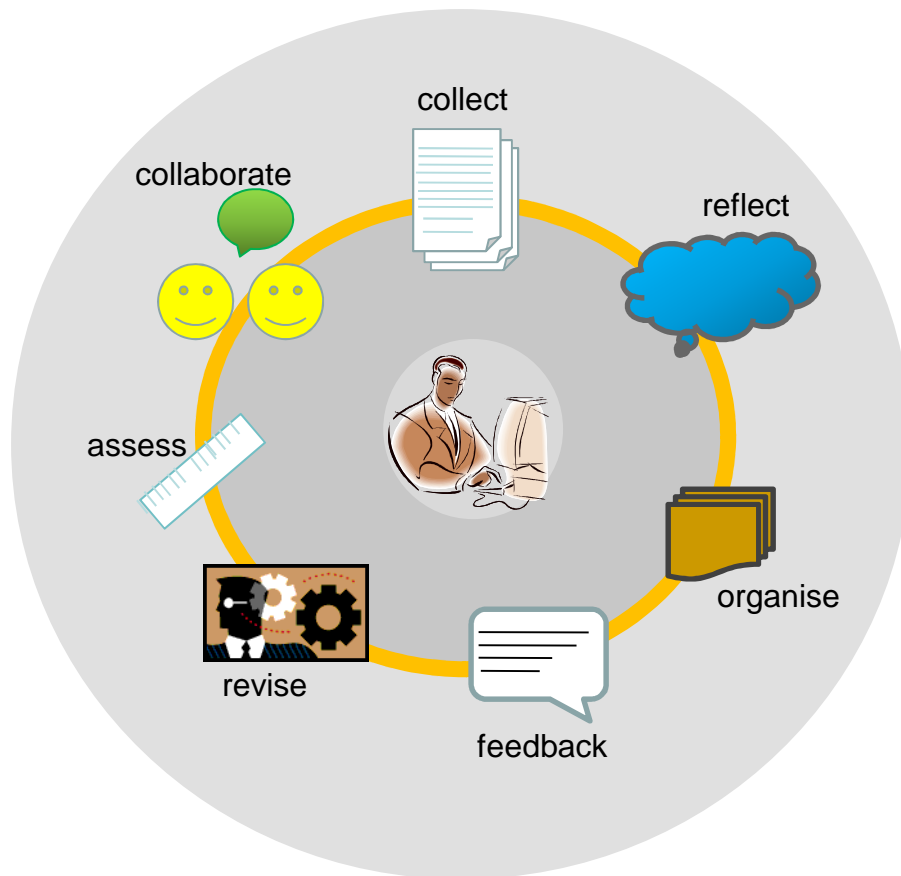
- NIE needs to produce teachers :
  - who have high assessment literacy levels
  - are able to adopt the best practices to effectively evaluate student outcomes
- Assessment Competency Framework – *a defined set of assessment literacy outcomes*

Portfolio

e-portfolio process

- E-portfolio is a new direction and approach to integrate & aggregate of a graduate's achievement of competencies, and is aimed at developing the reflective teacher.

- For *ITP*, assessment focuses on the development of student teachers from the start of their programme through to the end of the practicum.

- For *TPD*, a professional portfolio will be one of the key components of assessment for the Professional Inquiry Project, which is a graduation requirement for the new Master of Teaching degree.

Conclusion – what does success look like?

By 2012, a complete transformation of the 'NIE Teacher Education experience'

in terms of :

- **What we teach**
- **How we teach**
- **How we assess**

✓ A 21st century relevant NIE Teacher Education Model that equips both beginning and serving teachers to meet the new desired outcomes of education in Singapore

✓ NIE faculty as '*21st century teacher educators*' – able to model innovative and effective pedagogies and practices which will be adopted by teachers in the schools

Thank You