



Ministry of Education
SINGAPORE

Preparing our Students for the Future: The Singapore Journey

**School University (HKU) Partnership Symposium
June 2018**

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and Executive Director, Academy of Singapore Teachers

Ministry of Education Singapore



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OUTLINE OF PRESENTATION

- **CALLING WITH PLANNING**
- **CONTINUING EDUCATION WITH PASSION**
- **COURAGE WITH PURPOSE**

Individual Work

Describe your work in a few sentences

Apple

We make great computers.

They are beautifully designed, simple to use and user-friendly. Wanna buy one?

AST

Our vision is Lead, Care, and Inspire. We provide quality in-service PD for all our 33,000 teachers.

Teacher

I teach Character and Citizenship Education and I am also involved in overseeing Values in Action programmes

NorthLight School

We provide a post-primary education for students who did not clear their PSLE. Want to join us?



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CALLING WITH PLANNING

- The Why behind the What and the How

Apple

Everything we do, we believe in challenging the status quo. We believe in thinking differently. The way we challenge the status quo is by making our products beautifully designed, simple to use and user-friendly. And we happen to make great computers. Wanna buy one?

Sinek, S. (2011). Start with why: How great leaders inspire everyone to take action. New York: Penguin Group.

AST

Teaching is about touching lives, a good education system is as good as its teachers. It is our desire to bring out the best in all our 33,000 teachers through quality in-service PD. Our teachers will in turn bring out the best in our students. We live out our vision: Lead, Care, and Inspire.

Teacher

I bring out the best in my students, help them to be upright citizens and be future ready. I do this through effective CCE and VIA programmes.

NorthLight School

Every child can learn and achieve. The corporate colours of the school are purple and white. We remind our students that the darker it gets the brighter they shine. NorthLight is about hope. Do you want to join us?

Individual Work

Describe your work in a few sentences



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CONTINUING EDUCATION WITH PASSION

- **Teacher Professional Competencies**
- **Key Stakeholders in PD**
- **Modes of PD**

A Key Role of Education is to Support our Economy...

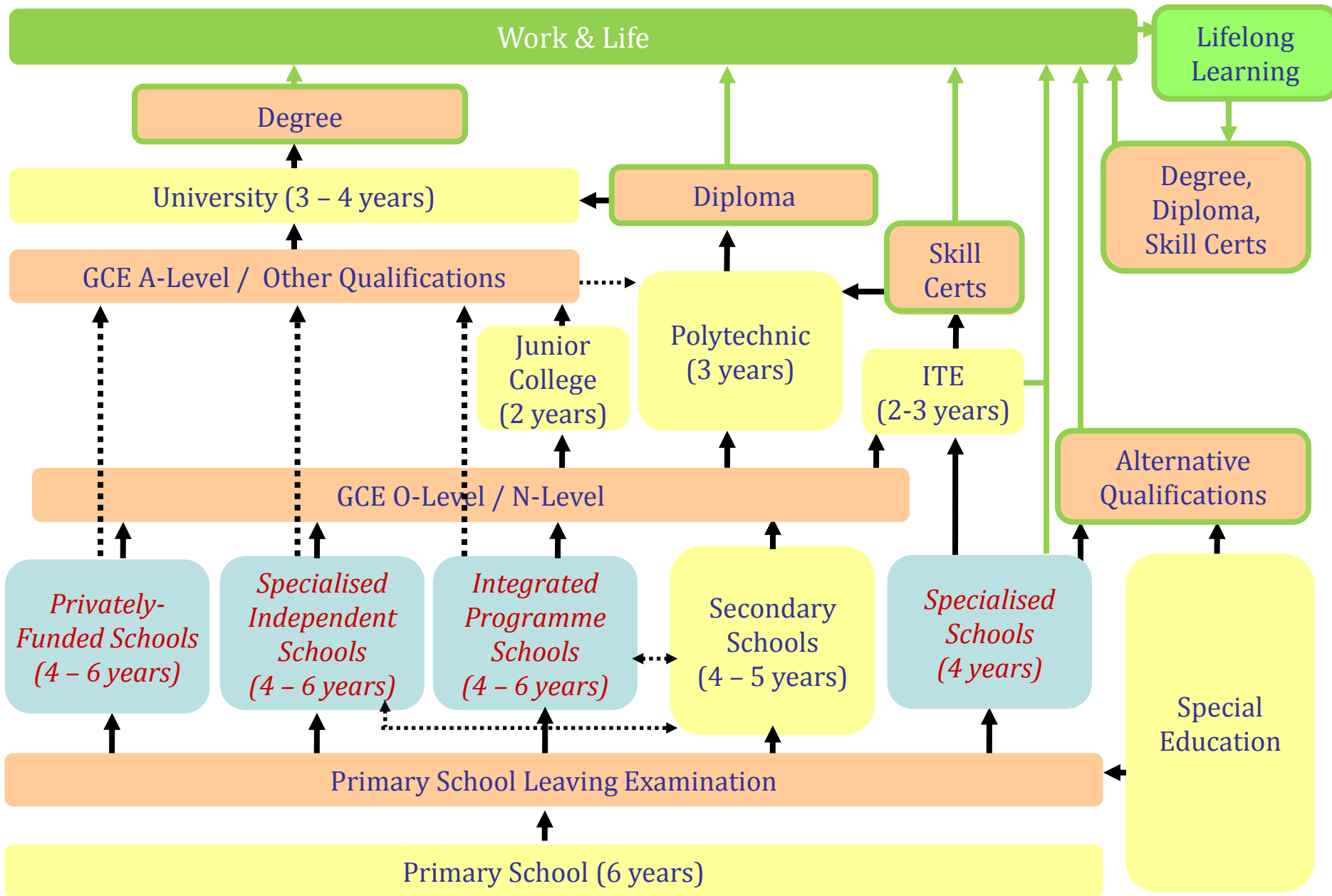
- People are Singapore's only natural resource
- Education prepares our children for an increasingly uncertain and globalised world
- Close coordination to develop these connections



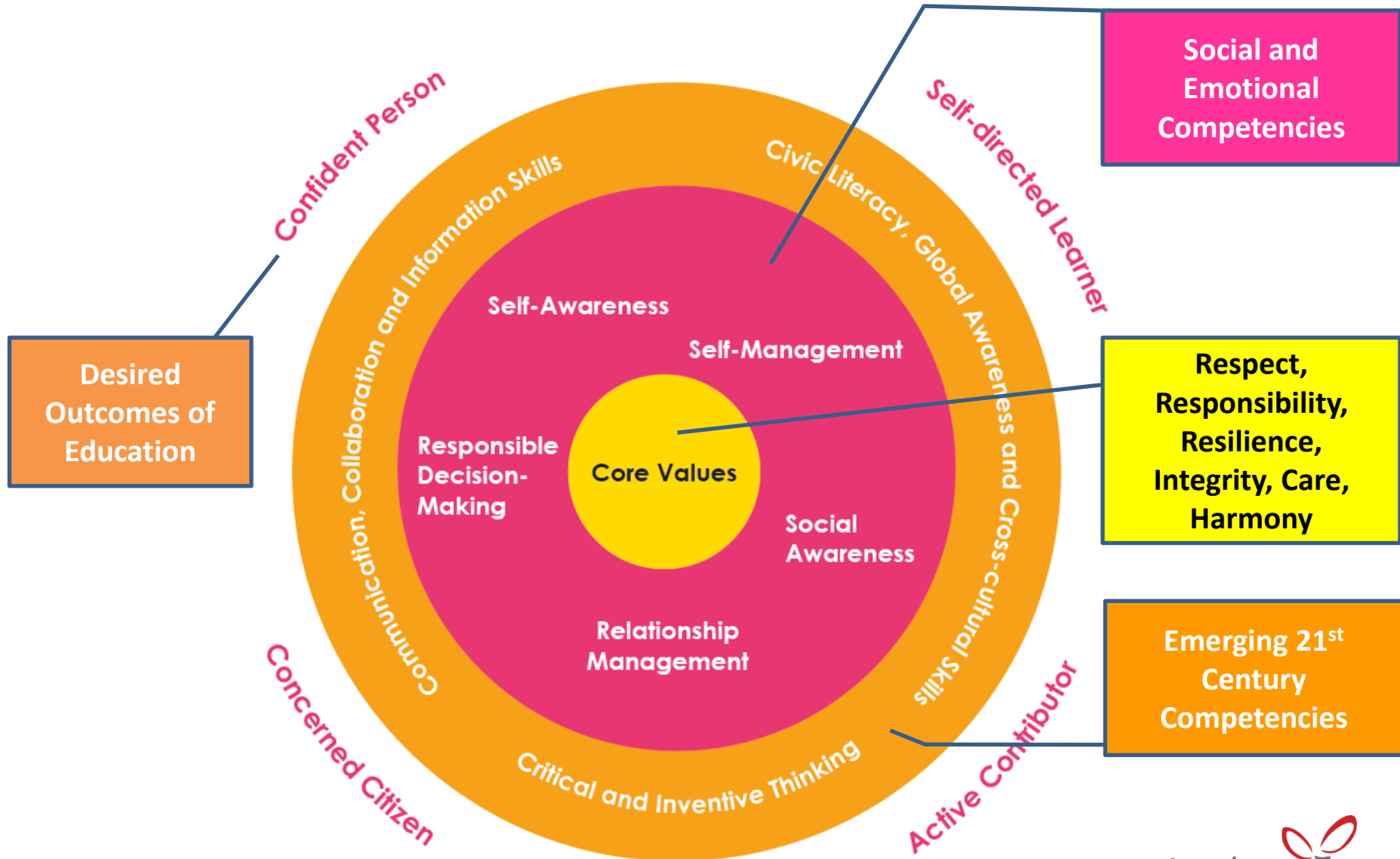
... While also Fulfilling the Aspirations of our Children

- Helping children be the best that they can be
- Multiple pathways for success, customised programmes from schools

Multiple Pathways to Success



21st Century Competencies and Student Outcomes



21st Century Learning and Teacher Education

The demands on student learning in the 21st century have profound implications for teachers and teaching... teacher and teaching quality are key to the success of an education system

Schleicher, 2016



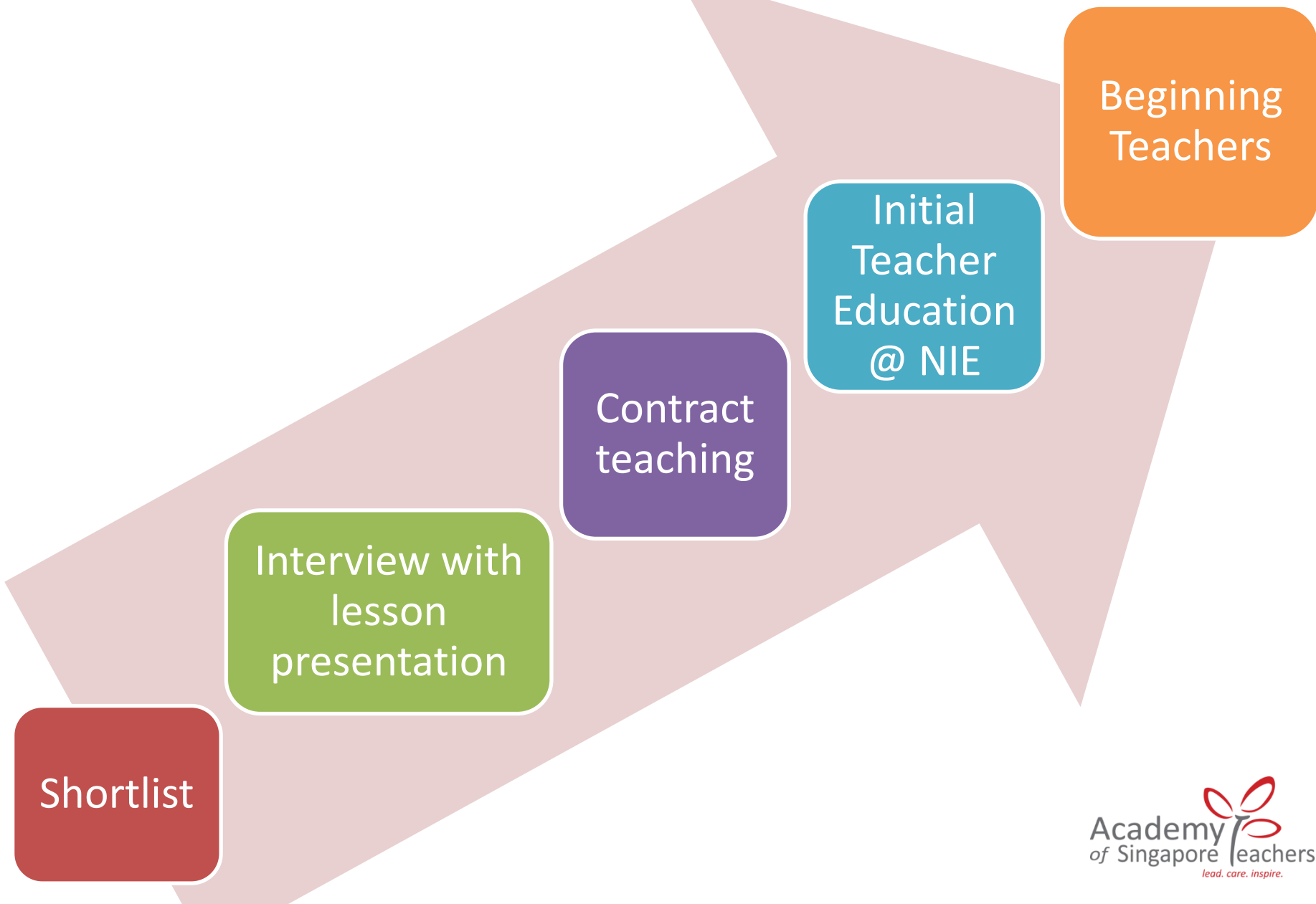


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Teacher Professional Competencies

- **Teacher Growth Model**

Teacher Recruitment



Enhancing Teacher Competencies through PD

What matters
most?

30% of
achievement
variance can be
attributed to
teachers

***When we focus
on teachers,
our students
succeed.***

Hattie's 8 Mind Frames for
Teachers (Hattie, 2012)

Teacher Growth Model



21st Century Teacher Outcomes

- **The Ethical Educator**
- **The Competent Professional**
- **The Collaborative Learner**
- **The Transformational Leader**
- **The Community Builder**

| The Ethical Educator | | The Competent Professional | | The Collaborative Learner | The Transformational Leader | The Community Builder |
|--|-----------------------|--|---|-----------------------------|---|---|
| Living Out Ethos of the Teaching Profession | Mastering Self | Deepening Knowledge and Practice in Academic Curriculum | Deepening Knowledge and Practice in Student Development Curriculum | Learning as a Team | Leading People Towards a Shared Vision | Understanding and Engaging Our Community |
| Professional Ethics (e.g., code and conduct) | Self-Knowledge | Curriculum | Learners and Learning | Collaborative Learning | Leader as Visionary | Understanding Local and Global Issues |
| Ethics in/across Subject Discipline | Self-Efficacy | Discipline and Subject Content | Student Development Curriculum | Teamwork and facilitation | Leader as Manager | Engaging Our Stakeholders |
| Research Ethics | Self-Management | Pedagogy | | International Collaboration | Leader as People Developer | |
| Ethical Leadership and Culture | | Assessment | | | Leader as Change Agent | |
| | | Professional Practice (e.g., critical inquiry and reflection) | | | | |

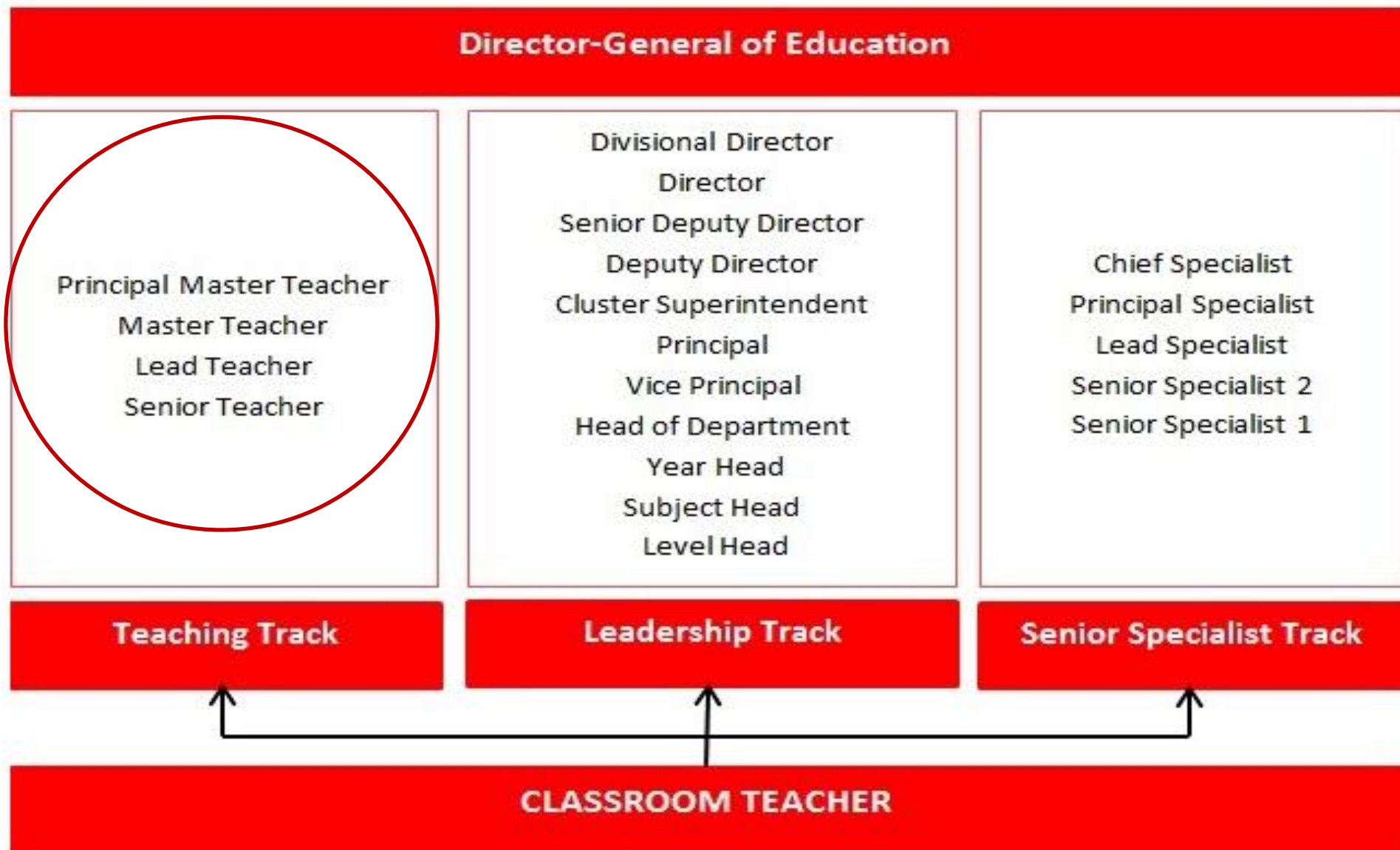


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Key Stakeholders in PD

- **3-Track Career Structure**
- **Roles of Various Leaders in PD**
- **Seven Academies and Language Centres**
- **Strong Tripartite Relationship among MOE, NIE, & Schools**

3-Track Career Structure in MOE



A career progression that takes into account officers' aspirations.

Teacher Leaders

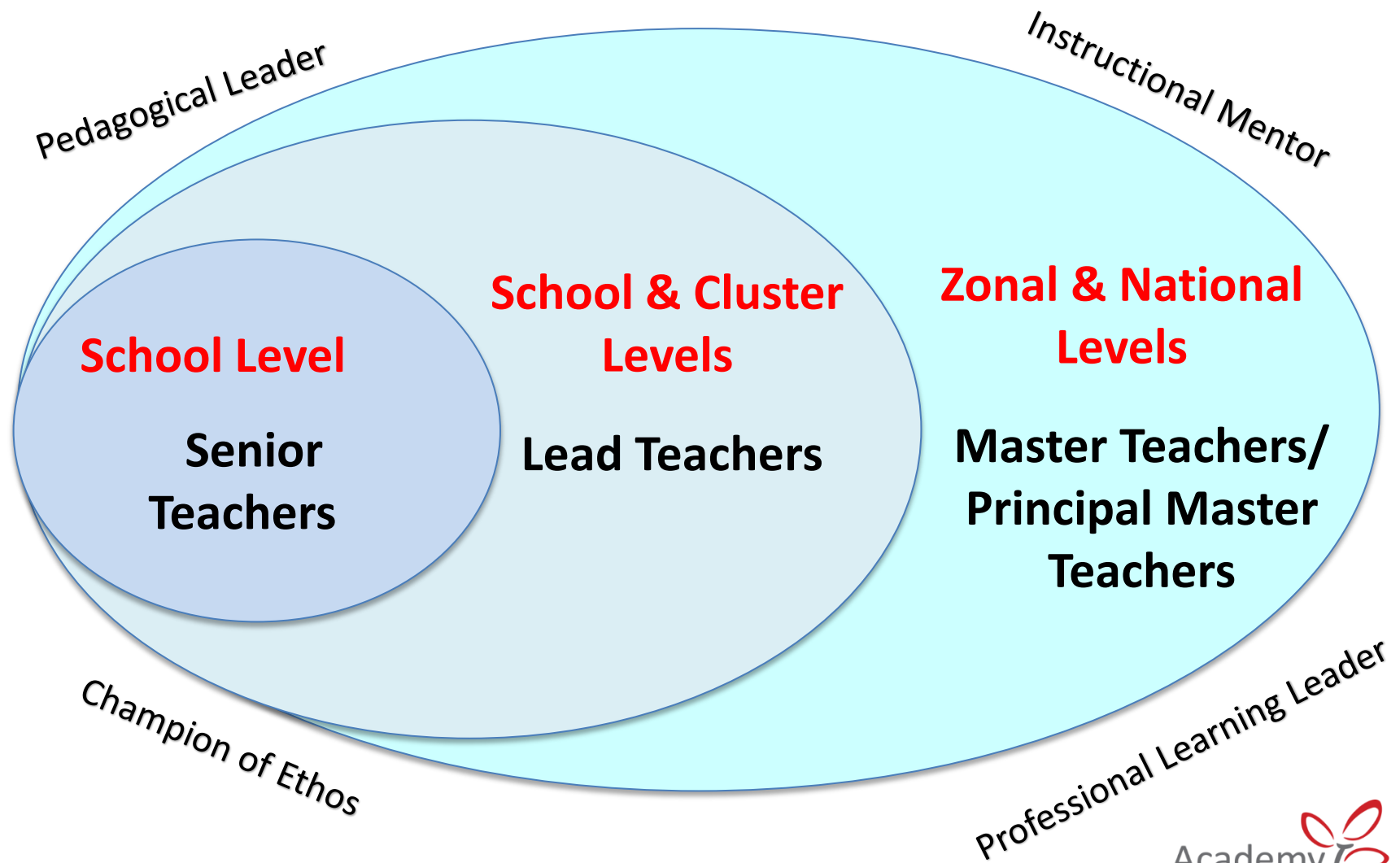


The Teacher Leader is a **role model** for teacher leadership and high professional standards in living out the *Ethos of the Teaching Profession*.

“Teachers do not only have a central role to play in improving educational outcomes, they are also at the centre of the improvement efforts themselves.”

OECD (2011). *Building a high-quality teaching profession: Lessons from around the world*. Paris: OECD Publishing.

Impact of Teacher Leaders



Teacher Ownership, Teacher Leadership

Our PD Philosophy

Teacher ownership, teacher leadership is about teachers, driven by a sense of mission, exerting intentional influence to achieve an enhanced state of professional excellence within a climate of trusting and supportive relationships.

Key Personnel and Teacher Leaders Support PD

SCHOOL LEADERS AND MIDDLE MANAGERS



Create structures and conditions for PD

Plan and role-model PD expected of leaders

SCHOOL STAFF DEVELOPERS (SSDs)



Champion PD

Design and plan PD for teachers

Coach and mentor teachers

SENIOR/LEAD TEACHERS



Focus on mentoring programmes for teachers

Lead PD as content & pedagogical experts

Lead PLC teams in schools to improve student learning

Seven Academies and Language Centres

The academies and language centres drive and support the professional learning of teachers to enhance professionalism and pedagogical excellence.



Singapore
Teachers'
Academy
for the
aRts

Academy
of Singapore Teachers
lead. care. inspire.

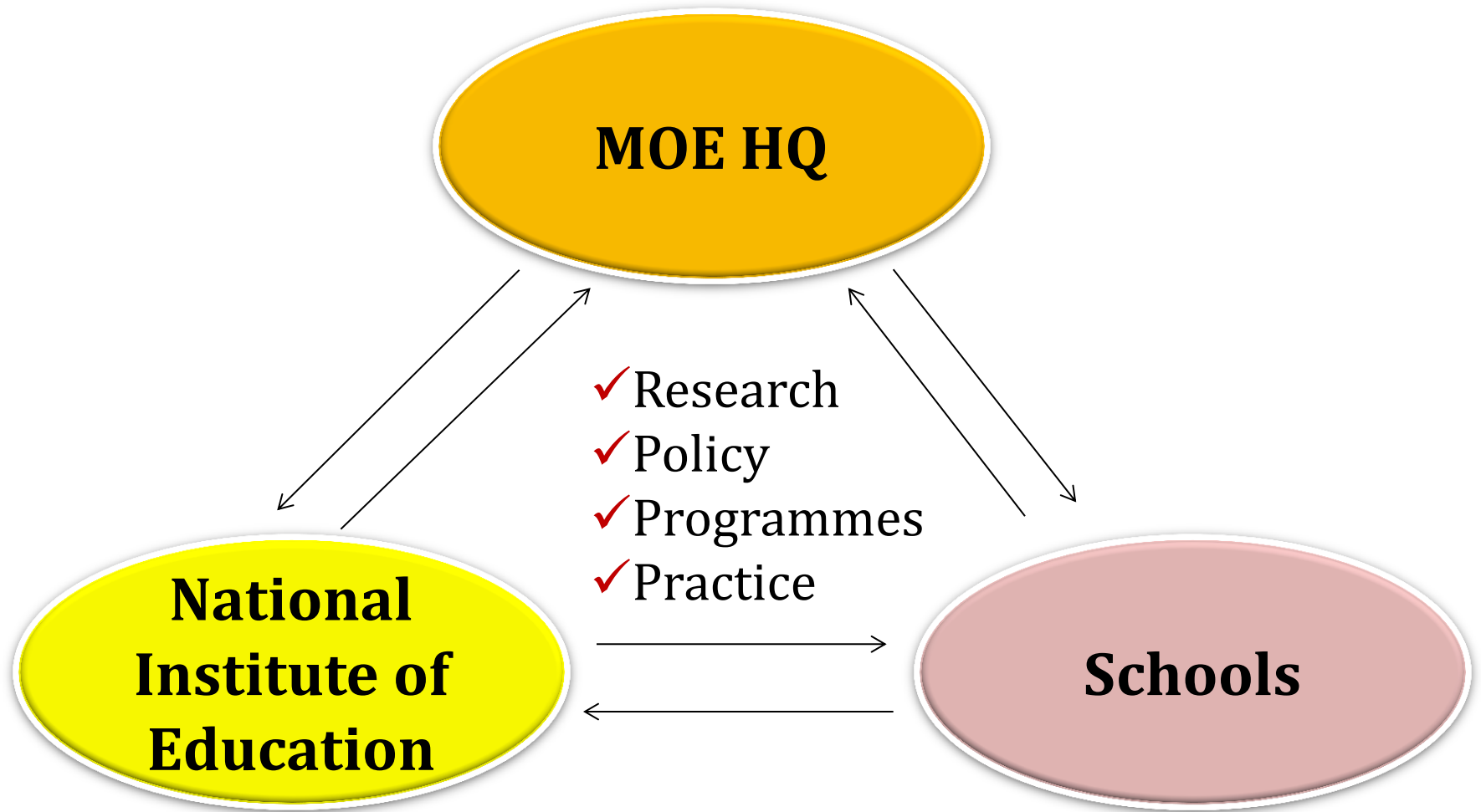


PESTA

ELIS
ENGLISH LANGUAGE INSTITUTE
OF SINGAPORE



Strong Tripartite Relationship among MOE, NIE, and Schools



Poon, C. L. (2011). Translation of research into policy and practice. In E. L. Low (ed.) *Paving the Fourth Way – the Singapore Story*. Singapore: NIE.

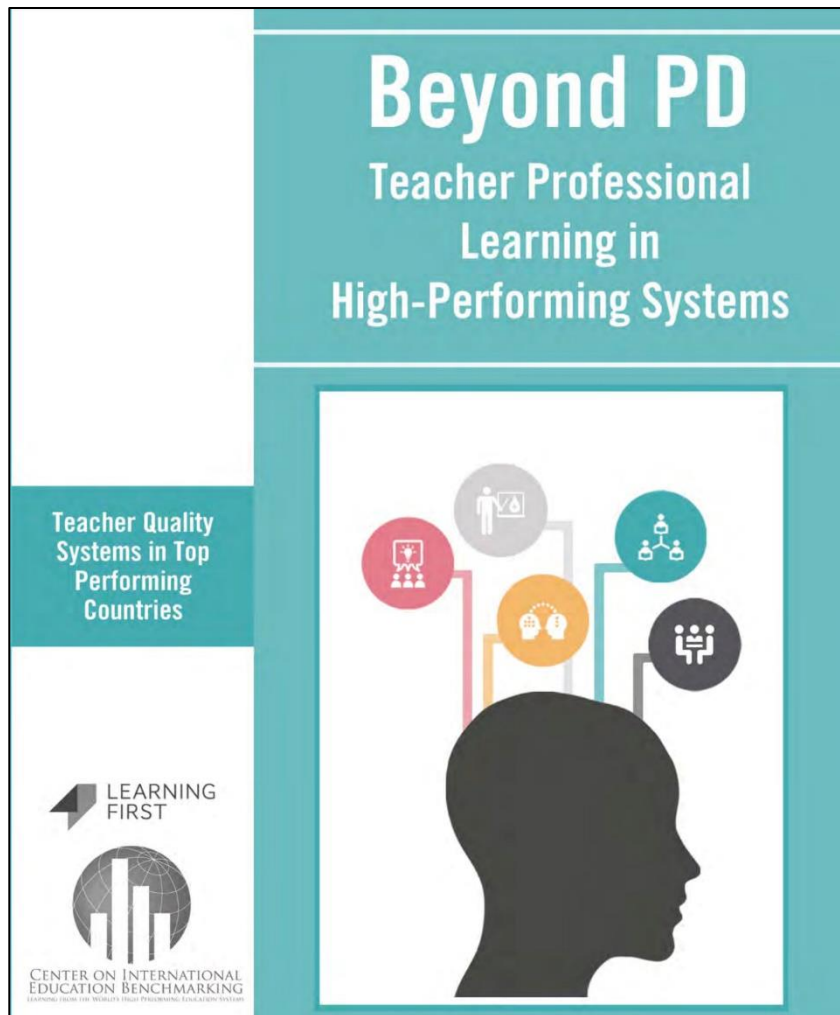


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Modes of PD – What Works and How

- **Attributes of Effective PD**
- **Instructional Mentoring**
- **Teacher Induction Framework**
- **Learning Communities**

PD is Embedded in the Daily Practice of Teaching



1. PD is “*central to teachers’ jobs... about improving student learning... schools*”.
2. Structure PD around a three-stage improvement cycle of “*assess, develop, evaluate*”.
3. Develop PD leaders to plan for and facilitate learning of others and ensure teachers have adequate time for PD.

Jensen, B., Sonnemann, J., Roberts-Hull, K., & Hunter, A. (2016). *Beyond PD: Teacher Professional Learning in High-Performing Systems*. Washington, DC: National Center on Education and the Economy.

Findings on PD in Singapore

Building a teacher-led culture of professional excellence centred on the holistic development of the child

Key Modes

Mentoring

Learning
Communities

Courses

Supporting Policies

Developing and articulating the roles of PL leaders

Evaluation and accountability of PL

Time created for PL

Jensen, B., Sonnemann, J., Roberts-Hull, K., & Hunter, A. (2016). *Beyond PD: Teacher Professional Learning in High-Performing Systems*. Washington, DC: National Center on Education and the Economy.

Mentoring as an Effective Mode of PD

TALIS 2013 Singapore has the youngest teaching force among TALIS countries

Beginning and less-experienced teachers

- Deepen the knowledge and practice of **beginning and less-experienced teachers**, and develop them to be **Competent Professionals**
- Create a **positive, supportive teaching experience** for the mentees

High standards of teaching

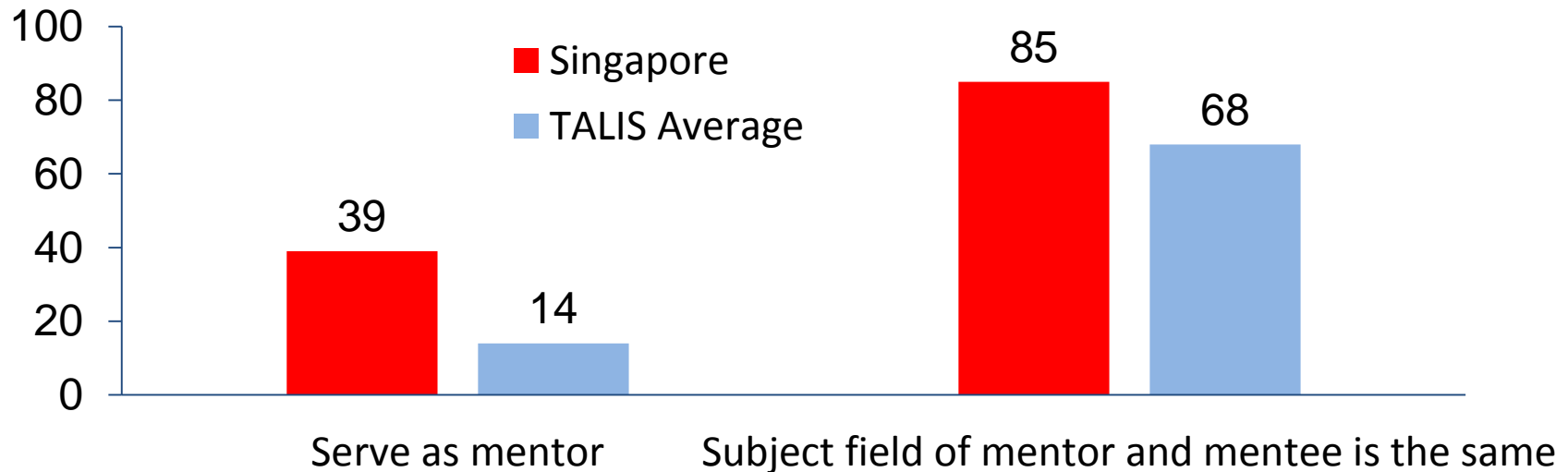
- Establish **high** standards of teaching practice in our school system

Growing Effective Mentoring in schools

Strong mentoring culture in Singapore schools

- Create supportive structures to support mentor-mentee lesson observations and regular conversations.
- Promote same-subject alignment between mentor and mentee, increasing effectiveness of mentorship

% of teachers who serve as mentors and % of teachers in schools where subject field of mentor and mentee is the same



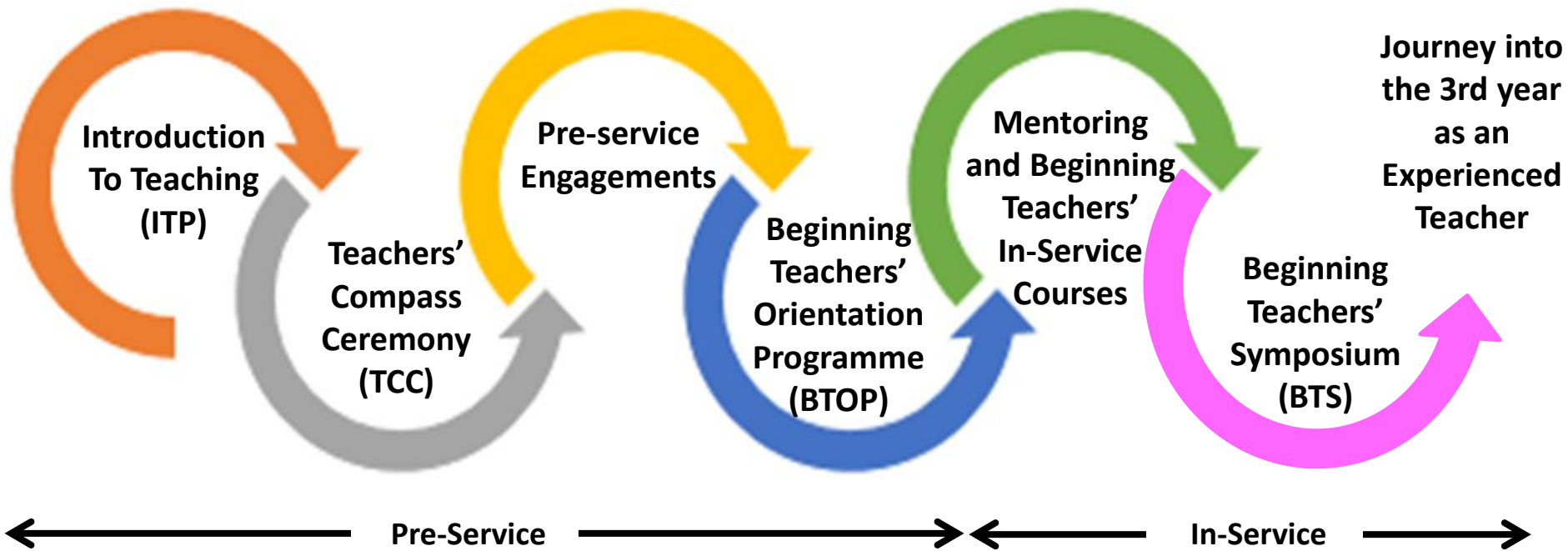
Instructional Mentoring Programme

An exploratory study of mentoring practices in Singapore (OER 06/16 LEL)

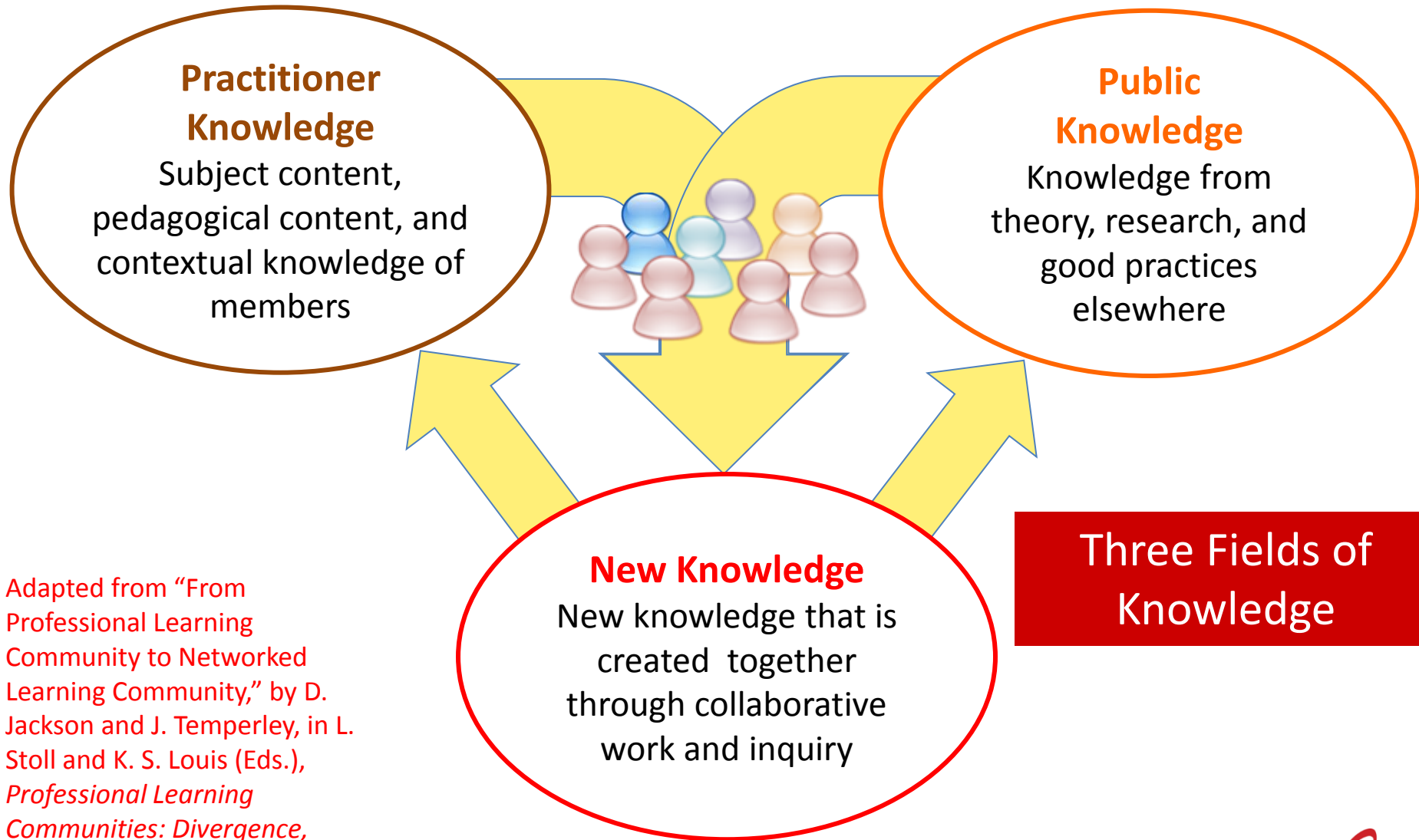
- To understand mentoring practices in Singapore schools

| <i>Examples from mentees' survey</i> | IMP (n=45) | Non-IMP (n=218) | Asympmp. Sig. Value (2-tailed) |
|---|------------|-----------------|--------------------------------|
| | Mean Rank | | |
| Willing to listen to my rationale | 152.16 | 127.84 | .038** |
| Able to make time to drop by | 152.01 | 127.87 | .042** |
| Reviews goals with me | 163.20 | 125.56 | .002** |
| Conversation focuses on lesson planning | 153.64 | 127.53 | .029** |
| Conversation focuses on actual lesson implementation | 153.70 | 127.52 | .027** |
| A willingness to learn is essential in ensuring professional growth | 153.90 | 127.48 | .024** |

Teacher Induction Framework



Learning Communities



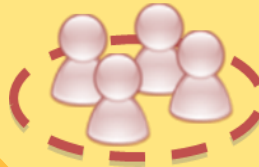
Adapted from "From Professional Learning Community to Networked Learning Community," by D. Jackson and J. Temperley, in L. Stoll and K. S. Louis (Eds.), *Professional Learning Communities: Divergence, Depth and Dilemma* (p. 48), 2007, Maidenhead: Open University Press.

Learning Communities

Examples:

- Geography Chapter
- Primary Math Chapter
- Primary Learners
- Low Progress Learners

By subjects & learner profiles



Examples:

- Assessment Literacy
- Learning Study
- Science Practical Skills

By Professional Roles



By Professional Interests



Professional Learning Communities (School-based)

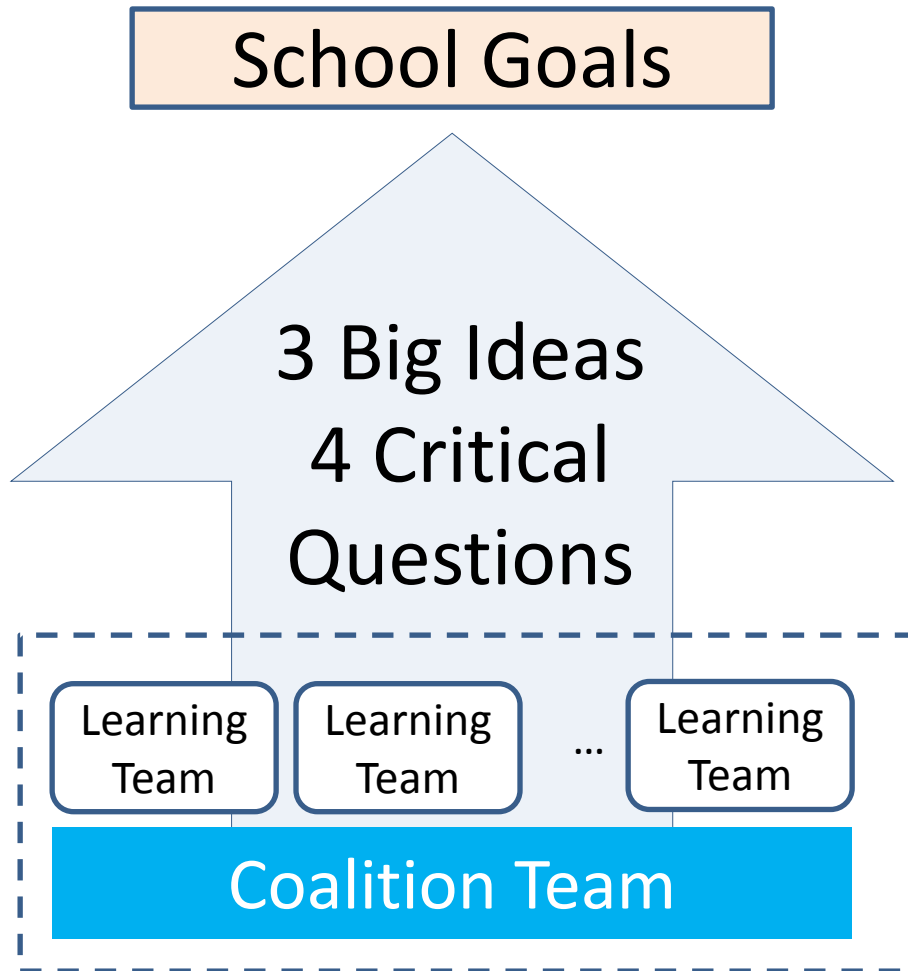


Professional Learning Teams within schools

Examples:

- Lead Teachers-Senior Teachers Networks
- Master Teachers Network
- School Staff Developers Network

Professional Learning Communities (PLCs) in Schools



- **PD for PLC Facilitators**
Typically teacher leaders facilitate and lead the learning of PLCs. PD in facilitation, data-driven conversations and teacher inquiry are provided to help PLC facilitators
- **Time-tabled Time**
Collective engagement in lesson planning, reflection, and professional learning

DuFour, R. (2004). What is a professional learning community? *Educational Leadership*, 61(8), 6-11.

Professional Learning Communities (PLCs) in Schools

Study on PLCs in Singapore schools (AFR02/16TLS)

- examined PLC practices and developed tools to help schools in the self-assessment of their PLCs
- 1777 teachers in 20 randomly-selected schools were surveyed (some were interviewed); data analysed against Hipp & Huffman's five dimensions of PLCs

Shared and supportive leadership

Shared values and vision

Collective learning and application

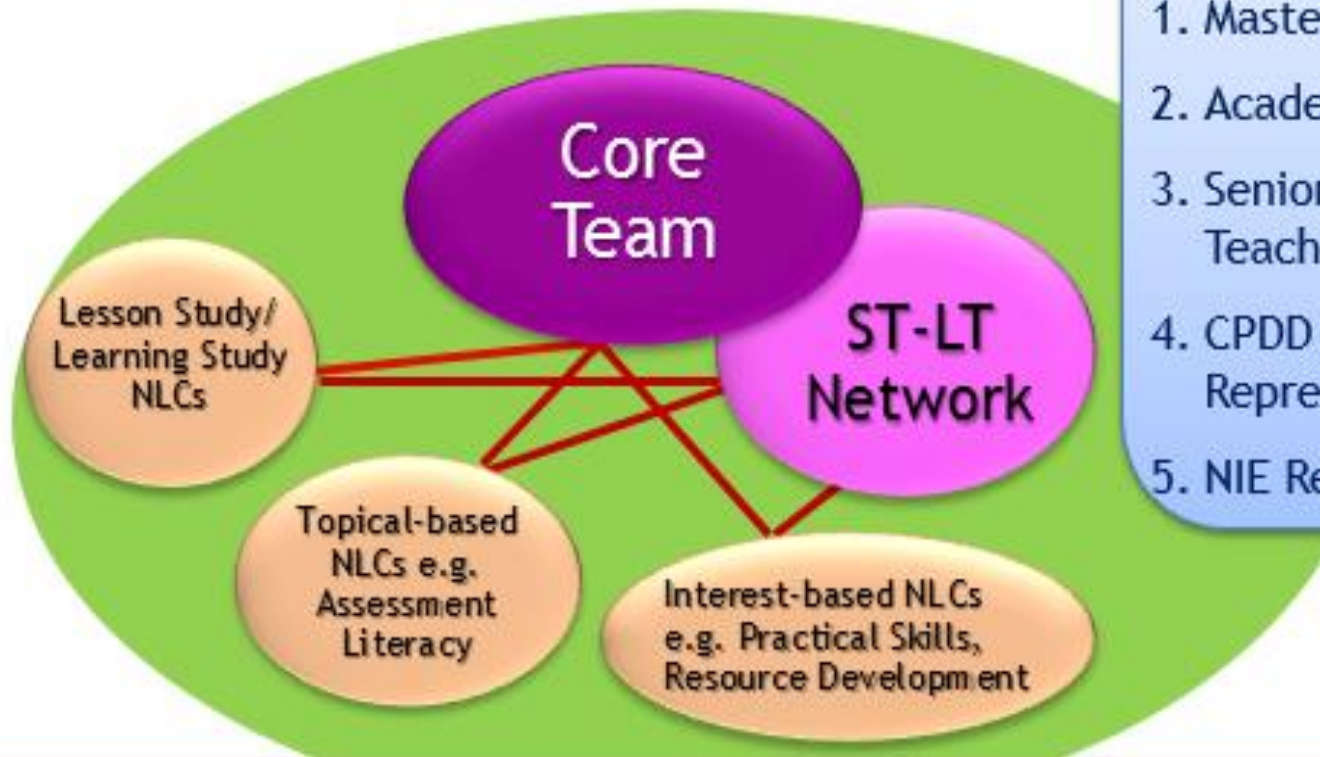
Shared personal practice

Supportive conditions

Hipp, K., & Huffman, J. (2003). *Reculturing schools as professional learning communities*. Lanham, MD: Scarecrow Education.

Structure of Subject Chapters in AST

Example: Chemistry Chapter

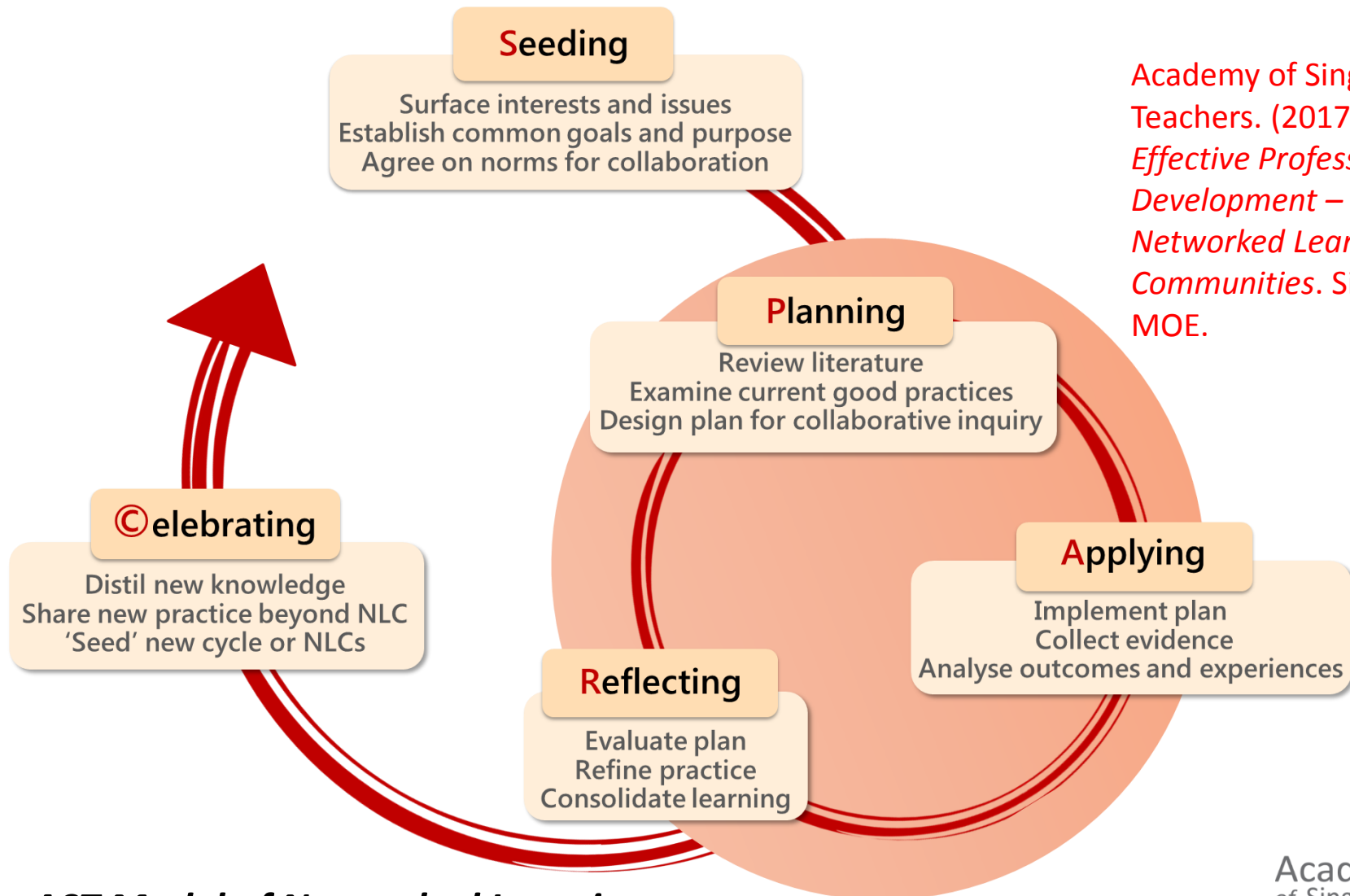


The core team consists of

1. Master Teacher
2. Academy Officer
3. Senior and Lead Teachers
4. CPDD & ETD Representatives
5. NIE Representative

Networked Learning Communities (NLCs)

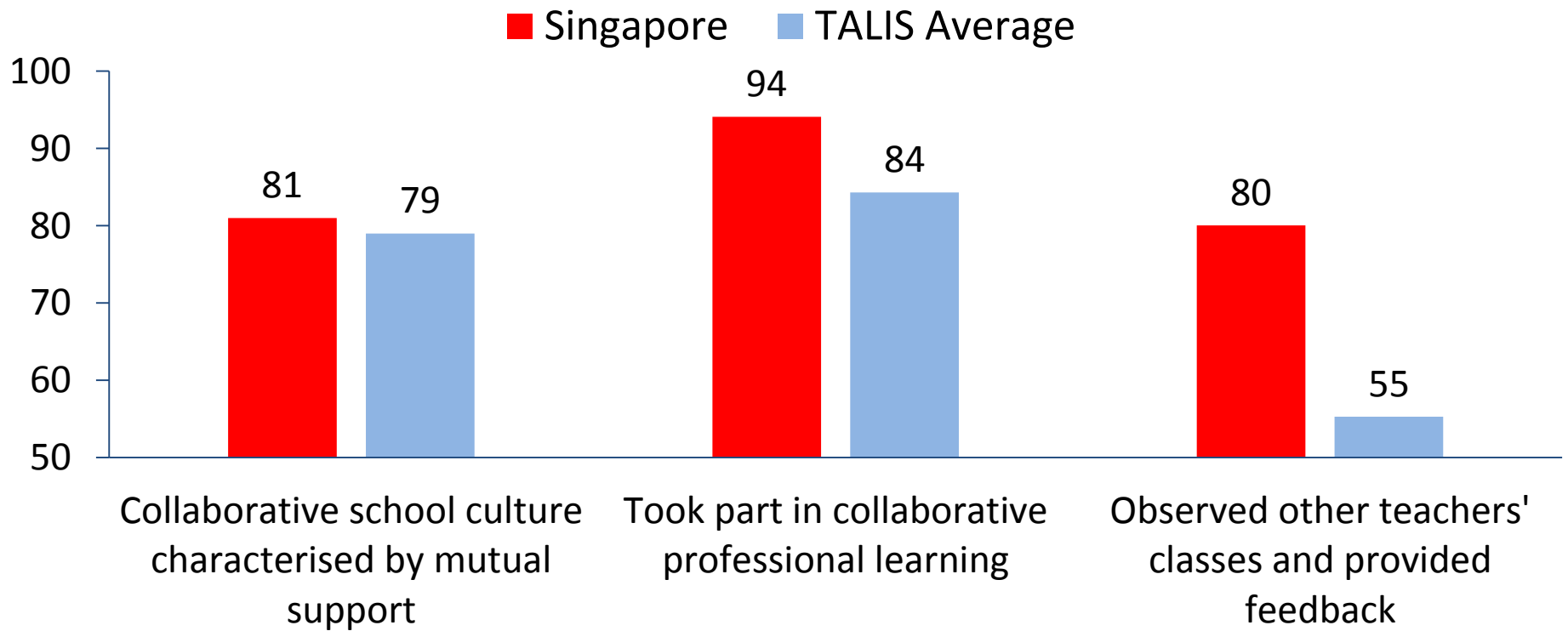
Networked Learning Communities (NLCs) across Schools



Academy of Singapore Teachers. (2017). *Guide to Effective Professional Development – Networked Learning Communities*. Singapore: MOE.

Singapore's TALIS 2013 Findings

A relatively large proportion of teachers participate in collaborative professional learning practices.



% of teachers who agree to the following statements

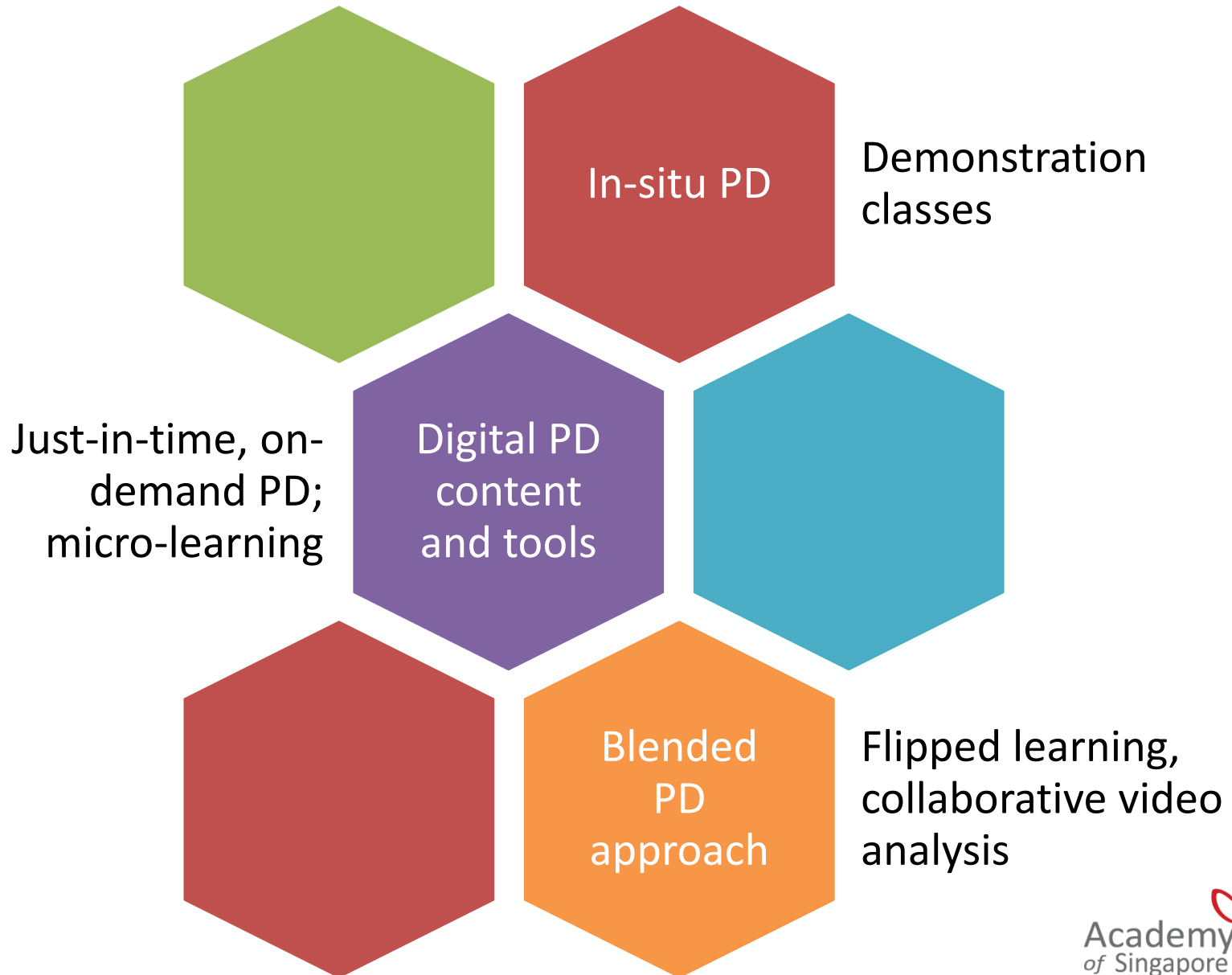


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COURAGE WITH PURPOSE

- Reimagining Teacher PD
- SkillsFuture

Future-Ready PD for Future-Ready Teachers



Digital Learning/ Blended Learning

- 2014 – 28% of teachers were involved in blended learning and this % has increased to 51% in 2017

Enhanced One Portal all Learners

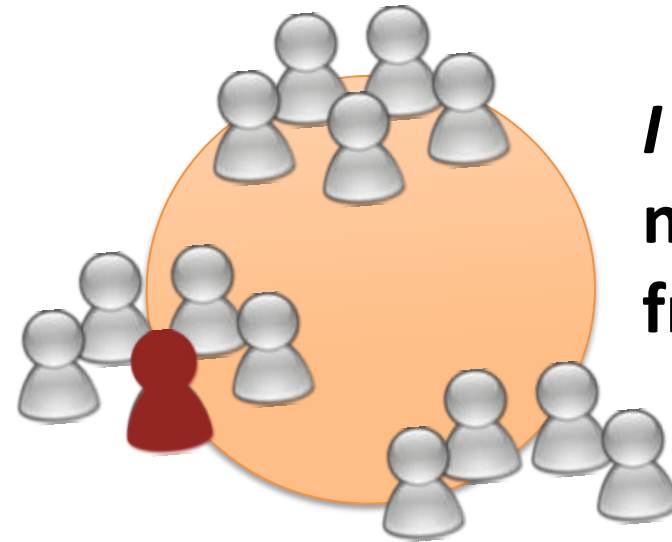
- Learning on the go

Transformation of Our Teaching Profession

- **Professional Identity:**
“I in my classroom”
- **Organisational Culture:**
Ministry-driven system
of excellence


/ in my
classroom


/ in professional
collaboration



/ in a
networked-
fraternity

- **Professional Identity:**
“/ in a community”
- **Organisational Culture:**
Teacher-driven culture
of professional
excellence

A national movement to provide Singaporeans with the opportunities to develop their fullest potential throughout life, regardless of their starting points.

Four Key Thrusts



Winnie Chua
Polytechnic Student

Help individuals make well-informed choices in education, training, and careers



Imman Su
Senior Singing Coach
The EdgeMaze Co.

Develop an integrated high-quality system of education and training that responds to constantly evolving needs



Dr Jonathan
Education Director
Pioneer Poly Tech

Promote employer recognition and career development based on skills and mastery



Ran
Lecturer
NTU S

Foster a culture that supports and celebrates lifelong learning

Towards a Nation of Lifelong Learners

- Support upskilling and reskilling of workforce through SkillsFuture
 - Future economy will see frequent technological disruptions and continual need for job redesign
 - To keep pace and sustain Singapore's economic growth, skills development efforts must continue throughout life



Integrated Lifelong Learning Ecosystem

- Develop an integrated high-quality system of education and training that responds to industry needs
 - Design and deliver industry-relevant training through closer industry collaborations
 - Help working adults choose their learning pathways





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SUMMARY

- **CALLING WITH PLANNING**
- **CONTINUING EDUCATION WITH PASSION**
- **COURAGE WITH PURPOSE**