



Conceptualizations & Dilemmas in Measuring Teacher Effectiveness

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Keynote Speech
at the Asia-Pacific Education Research Association Conference
19-21 November, 2014



Challenges to Teacher Effectiveness & Its Measurement... ?

Challenges:

- Globalization
- IT & High T
- Economic Transformation
- International Competitions
- Marketization
- Local demands for development

Changes in Ed:

- Policy Concerns
- Aims & Content
- Learning Process
- Teaching & Curriculum
- Ed T & Facilities
- Student Composition

Challenges to TE?

- Relevant to Paradigm Shift in Ed Reforms?
- Implications for Future Practice ?

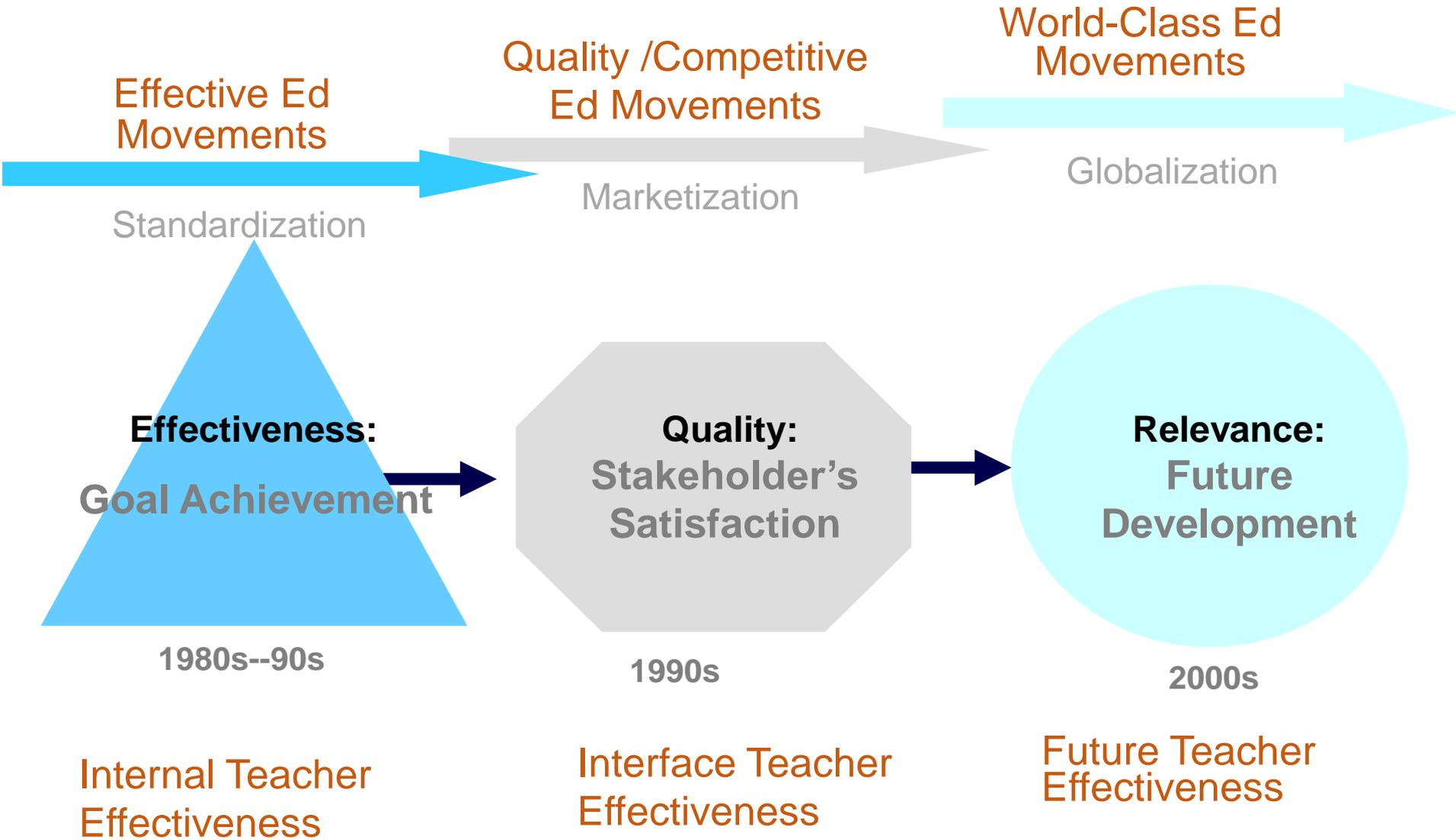


■ 3 Major Concerns in Ed Reform

1. **Effectiveness** in Teaching & Learning ?
2. **Quality** of Education to Satisfy the Multiple & Diverse Needs of stakeholders in the Society ?
3. **Relevance** to the Future in an era of IT and Globalization ?



3 Waves of Ed Reforms: Paradigm Shifts



3 Waves of Ed Reforms: Paradigm Shifts

■ Given paradigm shifts in education reform,

How should we define and measure **teacher effectiveness** across these 3 waves?

1980s–2000s

Internal Teacher Effectiveness

1990s

Interface Teacher Effectiveness

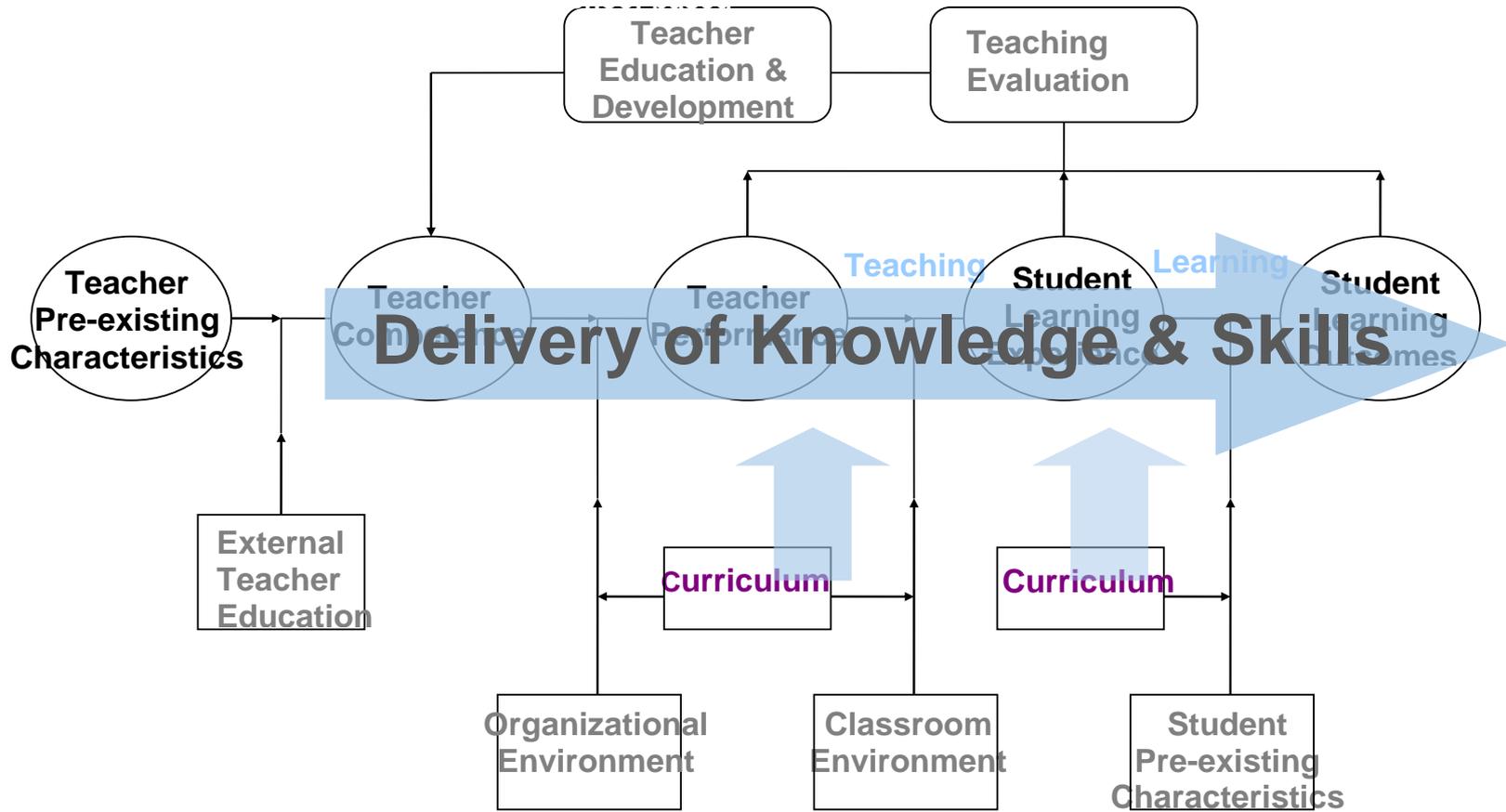


1st Wave Education

- **Teaching** as Teacher's Delivery of Knowledge, Skills & Attitudes
- **Learning** as Student Receiving & Achieving Knowledge, Skills & Attitudes



1st Wave: Internal Teacher Effectiveness



(from Cheng, 1998)

1st Wave: Internal Teacher Effectiveness

Role of
Teacher

As Knowledge
Instructor



Conception of
Teacher
Effectiveness

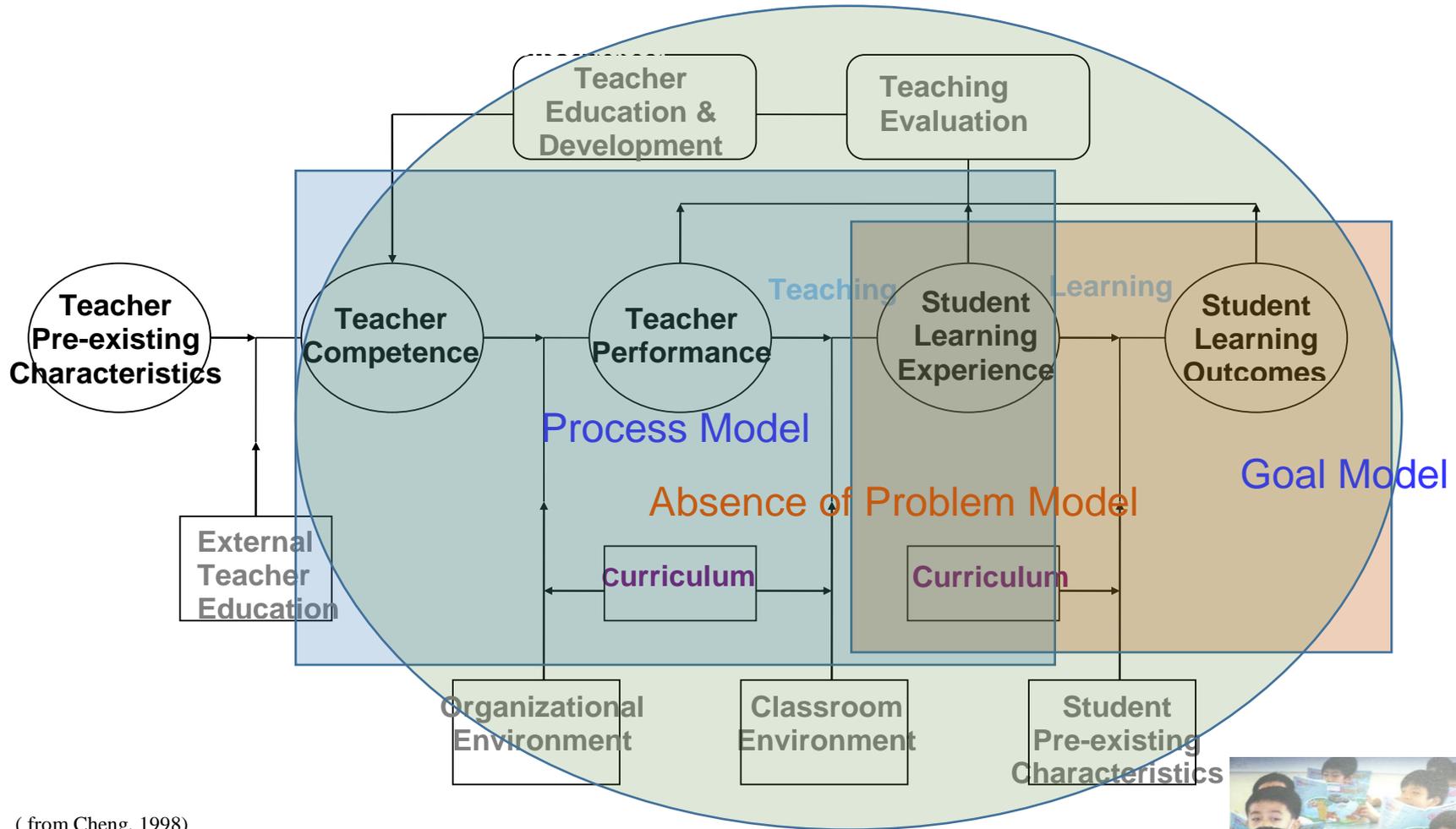
Internal Teacher Effectiveness:

As teacher's achievement of planned goals of knowledge delivery through his/her teaching and other internal activities

1st Wave Models: Measuring Internal Teacher Effectiveness

	Conceptions of Teacher Effectiveness	Conditions for Model Usefulness	Examples of KPIs for Measurement
1. Goal Model	<ul style="list-style-type: none"> ■ Achievement of planned goals and assigned tasks in line with school goals 	<ul style="list-style-type: none"> <input type="checkbox"/> The goals and tasks are clear, consensual, time-bound and measurable <input type="checkbox"/> Resources are sufficient to achieve the goals and tasks 	<ul style="list-style-type: none"> ❖ Achievements of teaching objectives, tasks, and performance standards, etc. ❖ Student performance and learning outcomes
2. Process Model	<ul style="list-style-type: none"> ■ Smooth teaching and working processes 	<ul style="list-style-type: none"> <input type="checkbox"/> There is a clear relationship between work/teaching processes and planned goals or educational outcomes 	<ul style="list-style-type: none"> ❖ Teaching styles and behaviors, classroom climate, and working relationship with other key actors in school, etc.
3. Absence of Problems Model	<ul style="list-style-type: none"> ■ Absence of problems and defects in their teaching and work 	<ul style="list-style-type: none"> <input type="checkbox"/> There is no consensual criteria of teacher effectiveness but strategies for improvement are needed 	<ul style="list-style-type: none"> ❖ Absence of dysfunction, weaknesses, problems and crises, etc.

1st Wave: Internal Teacher Effectiveness



(from Cheng, 1998)



Limitations of 1st Wave Models

- **The 1st wave models may not be valid and useful if**
 - 1. The goals of education and nature of teaching tasks are very complicated and unclear particularly in a fast changing environment with conflicting expectations from multiple stakeholders;**
 - 2. There may not be sufficient resources to achieve planned goals and tasks, to ensure healthy internal processes and prevent problems or defeats in teaching and learning;**
 - 3. There may not be sufficient time to achieve and measure the long term impacts or comprehensive effects of education processes (including teaching and learning)**

Paradigm Shift to 2nd Wave Education: Effectiveness → Quality

- School education in a larger changing social context
- Needs of multiple stakeholders are crucial

Internal Effectiveness

→ Interface Effectiveness (i.e. Market Effectiveness)

→ Satisfaction & Accountability

Quality



2nd Wave Education

- **Teaching & other professional practices** as Teacher's Service to Clients & Stakeholders
- **Learning** as Student receiving a service and becoming competitive in study and job market



2nd Wave: Interface Teacher Effectiveness

Role of
Teacher

As Educational Service Provider

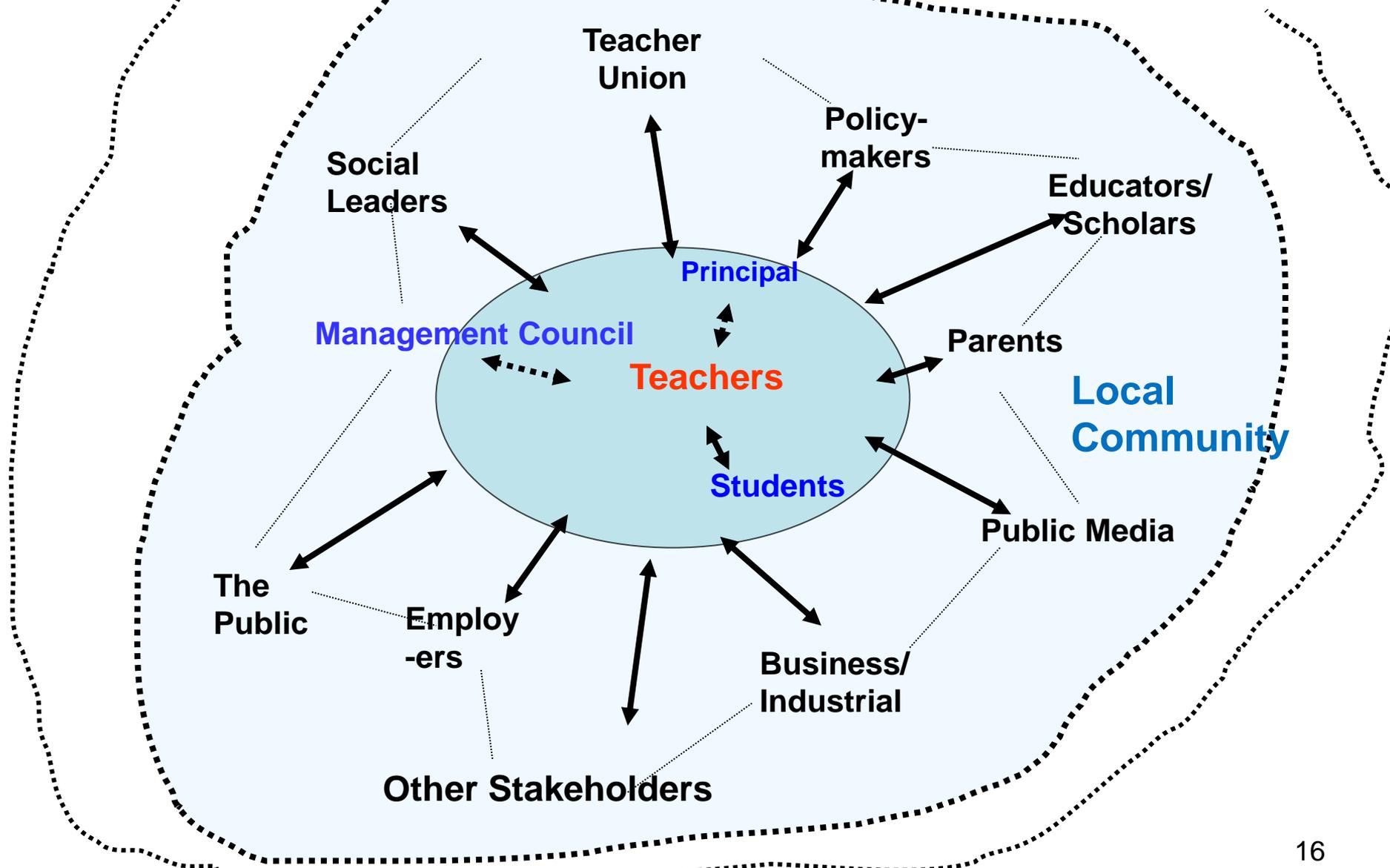


Conception of
Teacher
Effectiveness

Interface Teacher Effectiveness:

As satisfaction of stakeholders with the educational services; and as teacher's accountability to the school and the public

Multiple Stakeholders



2nd Wave: Interface Teacher Effectiveness Issues

1. To what extent the performance of teaching and the outcomes of learning **meet the stakeholders' expectations?**
2. To what extent the education services of teachers **be ensured accountable to the public and stakeholders?**
3. To what extent the teachers **become competitive to achieve resources and provide quality services in the education market?**

2nd Wave Models: Measuring Interface Teacher Effectiveness

	Conceptions of Teacher Effectiveness	Conditions for Model Usefulness	Examples of KPIs for Measurement
Resources Model	<ul style="list-style-type: none"> • Use of allocated resources and acquisition of inputs for working process 	<ul style="list-style-type: none"> <input type="checkbox"/> There is a clear relationship of resources to work process and output <input type="checkbox"/> Resources for achieving goals and tasks are limited 	<ul style="list-style-type: none"> ❖ Management and use of resources for their work ❖ Achievement of necessary resources for their work
Satisfaction Model	<ul style="list-style-type: none"> • Satisfaction of key stakeholders' expectations & demands 	<ul style="list-style-type: none"> <input type="checkbox"/> The demands of stakeholders are compatible and cannot be ignored 	<ul style="list-style-type: none"> ❖ Satisfaction of students, parents, teachers and school administrators, etc.
Accountability Model	<ul style="list-style-type: none"> • Demonstrating evidence of their accountability 	<ul style="list-style-type: none"> <input type="checkbox"/> Great demands for internal and external accountability 	<ul style="list-style-type: none"> ❖ Track records, reputation, professional qualifications, external awards, and other evidence of accountability

Limitations of 2nd Wave Models

- **The 2nd wave models may not be valid and useful if**
 - 1. There is no strong relationship of the resources to the planned goals/tasks or work processes.**
 - 2. There expectations and demands of external and internal stakeholders are too diverse and conflicting such that it is impossible to meet them.**
 - 3. The expectations of and accountability to stakeholders can be ignored, if the education demands much larger than the supply of services;**
 - 4. The demands of stakeholders in current “market” may not be so educationally relevant to the future of students in an era of globalization.**

Paradigm Shift to 3rd Wave Education: Quality → Relevance to the Future

Teachers should provide World-class Education in a context of globalization:

- **Relevant** to new developments and the future of students and the world in new century



Multiple Developments in Globalization

- Technological Development
- Economic Development
- Social Development
- Political Development
- Cultural Development
- Learning Development





3rd Wave Education

for Contextualized Multiple Intelligence (CMI)

- Technological Person
- Economic Person
- Social Person
- Political Person
- Cultural Person
- Learning Person

CMI

- Technological Intelligence
- Economic Intelligence
- Social Intelligence
- Political Intelligence
- Cultural Intelligence
- Learning Intelligence

Multiple & Sustainable Effectiveness
for Multiple Developments
in New Era

Challenges from Changing Environment

3rd Wave Education

■ **Teaching** as teacher facilitating CMI & sustainable developments of students in Local & global contexts in an New Era;

■ **Learning** as a process of student developing CMI & Creativity for multiple & sustainable effectiveness in future



3rd Wave: Future Teacher Effectiveness

**Role of
Teacher**

As facilitator for students' CMI & sustainable developments

**Conception of
Teacher
Effectiveness**

Future Teacher Effectiveness:

As contribution to capacity building for CMI, Creativity & sustainable developments of students for the future

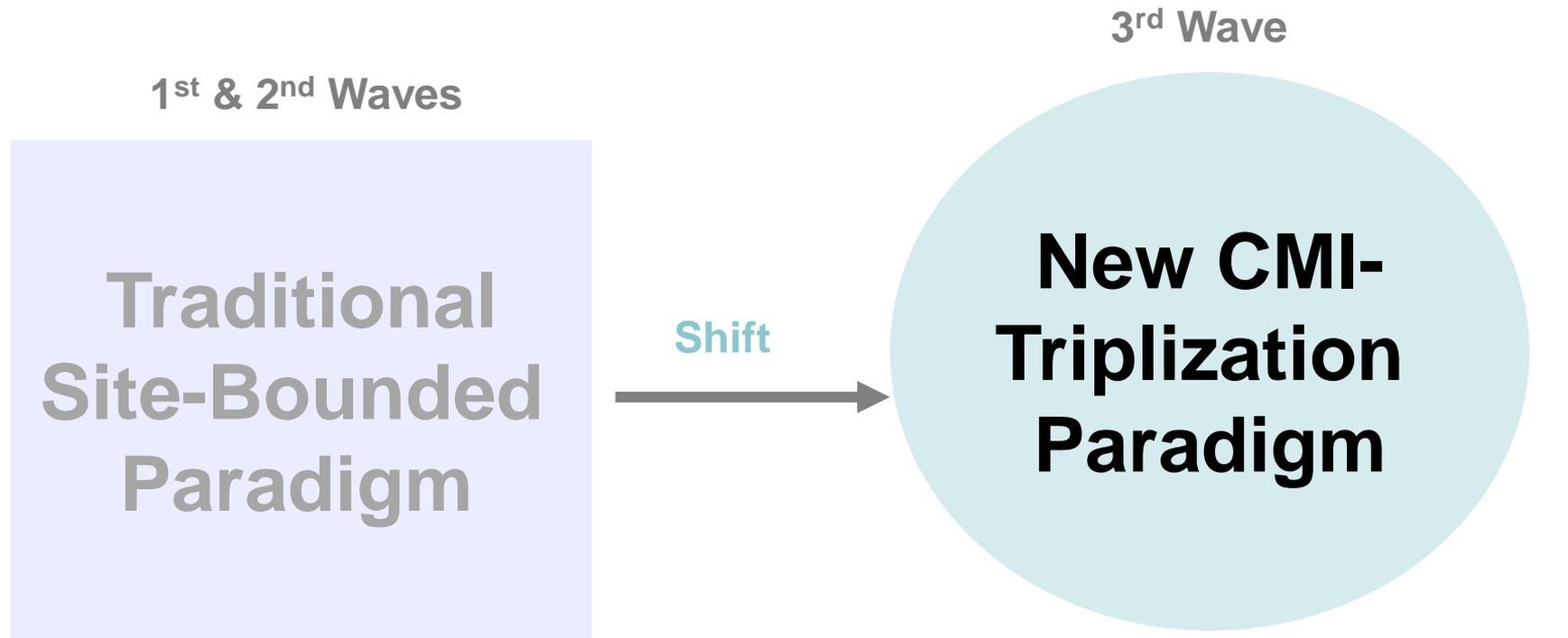


3rd Wave: Future Teacher Effectiveness (1): To Groom CMI & Creativity

1. General Education, Liberal Studies...
2. Creativity, Imagination...
3. Integrated Learning, Self regulated Learning, Life-long Learning....
4. Multi-disciplinary Learning...
5. Inter-disciplinary Studies...
6. 21st Century Skills & Competencies...
7.



3rd Wave Learning: New Paradigm of Learning



Triplization in Learning =
Globalization + Localization + Individualization in L.

Cheng (1999, 2000)





3rd Wave: Future Teacher Effectiveness (2): Facilitate Individualization in Learning

To maximize human motivation, potential, and creativity of the individuals in learning..

- 1. Tailor-made educational programs to meet individual needs...**
- 2. Individualized learning targets, methods, and progress schedules by web-based technology...**
- 3. More flexible curriculum & diverse course offerings for students to select those meeting their diverse needs...**
- 4. Self -managing, self regulated learning as the major approach to student-centred curriculum design...**
- 5. Mobile learning or e-learning as one of major tools to optimizing the learning opportunities for individuals.....**





■ 3rd Wave: Future Teacher Effectiveness(3): Facilitate Localization in Learning

- **To maximize the local resources, community support and cultural relevance in learning...**
- 1. Community involvement/ partnership across sectors in Learning ..
- 2. Local field experience, experiential learning, service learning...(e.g. Internship, Practical Experiences,...)...
- 3. Mentoring by local experts in learning...
- 4. Cultural and local relevance of learning experience...
- 5. Local networked learning (e.g. Interest Gps, Face Book Gps..)
- 6. Discovery and application of local resources and culture in Learning....



■ 3rd Wave: Future Teacher Effectiveness (4): Facilitate Globalization in Learning

To maximize the global networking, international support, & world-class resources in learning...

1. Web-based learning across geographical boundaries...
2. International visits/ Immersion programs...
3. Networked learning across cultures and countries...
4. International partnership in learning (e.g. credit transfer, joint degrees/ programmes..)...
5. Exchanges through video-conferencing across countries, communities, institutions, & individuals...
6. World-class learning materials and contents by mobile or web-based technology....

3rd Wave Models: Measuring Future Teacher Effectiveness

	Conceptions of Teacher Effectiveness	Conditions for Model Usefulness	Examples of KPIs for Measurement
Triplization Model	<ul style="list-style-type: none"> Creating unlimited opportunities for life-long learning & sustainable development thru Triplization 	<ul style="list-style-type: none"> Triplized learning is possible and feasible with the support of ICT and networking 	<ul style="list-style-type: none"> Extents of being globalized, localized and individualized in learning for students
CMI Model	<ul style="list-style-type: none"> Facilitating students' development of CMI and creativity 	<ul style="list-style-type: none"> A strong link between students' future development and their CMI & creativity 	<ul style="list-style-type: none"> Development and enhancement of students' CMI & creativity
Continuous Learning Model	<ul style="list-style-type: none"> Adaptation to the challenges from changing local and global environments 	<ul style="list-style-type: none"> Teachers need to respond to 3rd wave education reforms 	<ul style="list-style-type: none"> Triplization in professional learning, and enhanced CMI and creativity in practice

Concerns of Traditional Paradigm (1st & 2nd Waves) in Measuring Teacher Effectiveness

1. How well can teachers **deliver the planned content** including knowledge, skills and values to their students?
2. How well can students be helped to **progress in the planned curriculum** and achieve at a higher standard in the public examinations?
3. How well can the performance of teaching and the outcomes of learning **meet the stakeholders' expectations?**





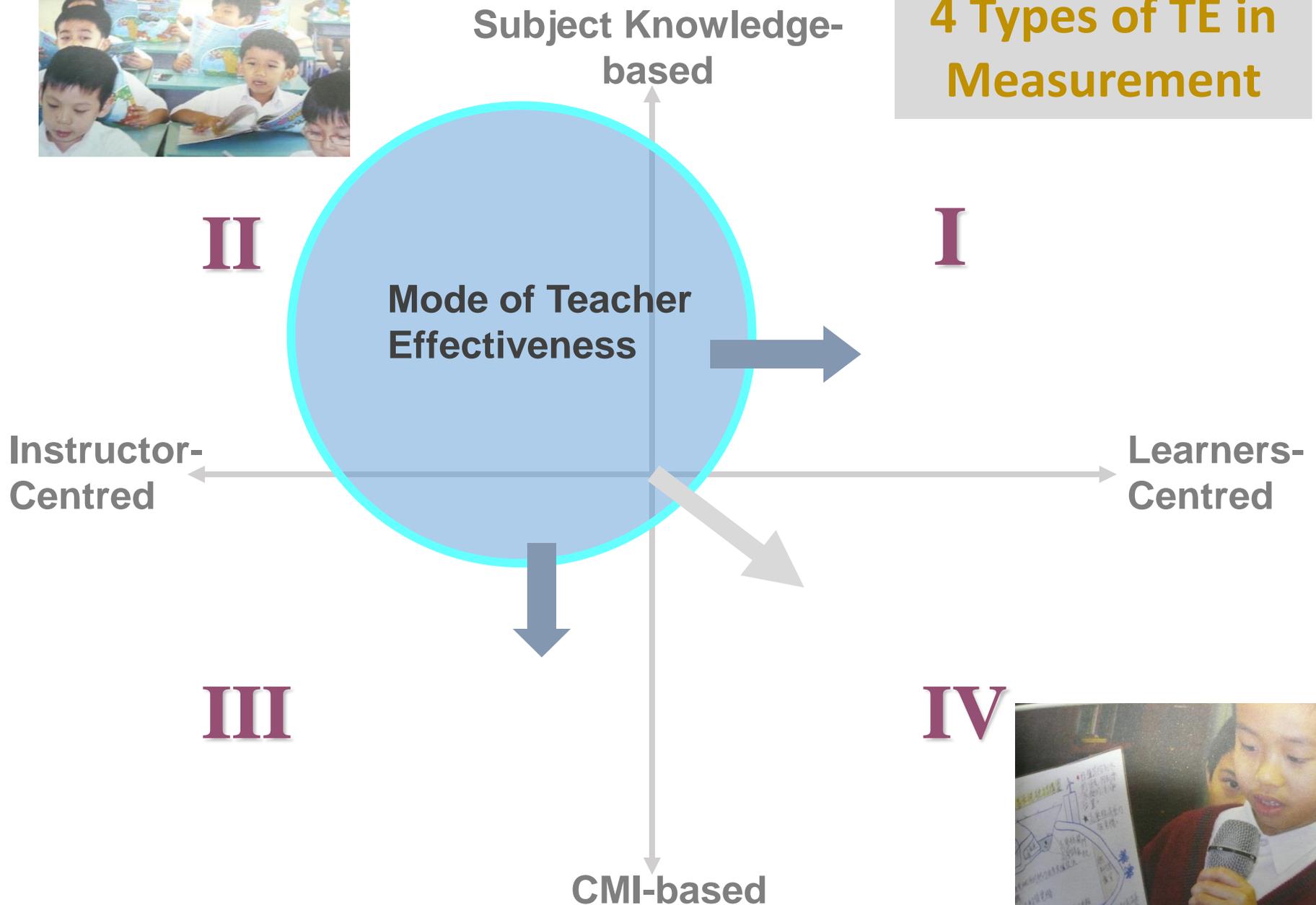
Concerns of **New Paradigm** in Measuring Teacher Effectiveness

- 1.** How well can students' learning **opportunities be maximized** individually, locally and globally?
- 2.** How well can students' self-learning be **facilitated as potentially lifelong**?
- 3.** How well can students be facilitated to develop their own **ability to globalize, localize and individualize** their own learning ?
- 4.** How well can students be facilitate to develop their **contextualized multiple intelligence & creativity**?





4 Types of TE in Measurement



Limitations of 3rd Wave Models

□ The 3rd wave models may not be valid and useful if

1. Paradigm shift in learning towards the 3rd wave is not well recognized by policy makers or other key stakeholders.
2. There may not be sufficient resources to build up capacity of teachers to implement paradigm shift in teaching and facilitate students' triplized learning.
3. The development of students' CMI and creativity is not a key concern in ongoing school education.
4. There may not be sufficient time to achieve and measure the long-term impacts of 3rd wave teacher performance on students' development of CMI and creativity.

A Spectrum of Multiple Conceptualizations

First Wave Models:

- Goal Model
- Process Model
- Absence of Problems Model

Second Wave Models:

- Resource Model
- Satisfaction Model
- Accountability Model

Third Wave Models:

- Triplization Model
- CMI Model
- Continuous Learning Model



- Provide a wide spectrum of multiple conceptualizations of teacher effectiveness for the diverse needs and expectations in various situations and conditions.
- For different paradigm, different conditions, then different conceptualizations & different models may be used

Some Fundamental Issues in TE Measurement

1. **What paradigm/ models?** (given 3 paradigms, 9 models)
2. **What criteria?** (given the diverse roles of T, for what purposes?)
3. **Whose criteria?** (given diverse expectations of multiple stakeholders)
4. **Effective for whom?** (e.g. parents, students, policy makers, educators...?)
5. **At what levels ?** (e.g. individual, team, school, system? of Students or Ts?)
6. **Who to define?** (e.g. parents, administrators, policy makers, educators...?)
7. **How to evaluate?** (e.g. Given complexities, what aspects? by what? by whom?,)
8. **When to evaluate?** (e.g. immediate, short term, middle term, long term?)
9. **What constraints?** (e.g. limited time, resources, capacity, ...)



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To avoid:

• **Misuse**

• **Mismatch**

• **Inconsistence**

• **Contradicting**

• **Gaps**

Often technically and conceptually problematic and controversial, because **no standard elements and approaches accepted by all concerned stakeholders for evaluation**

Concluding Remarks (1)

Diverse Views among Different Stakeholders:

- To different stakeholders, the expectations of teacher effectiveness are often different.
- How to achieve consensus among the various stakeholders on the choices of models, criteria, levels, timeframes and other conditions for measuring TE is always a dilemma in practice, particularly when the available resources and capacity for implementation are often quite limited.



Concluding Remarks (2)

Diverse Perspectives among Different Disciplines:

- **To different academic disciplines, the emphases & perspectives** on models and levels of teacher effectiveness to be used may be diverse.

For example,

- **Educational psychology** more on teacher effectiveness at the individual level in the work process model
- **Sociology of education or policy studies** more on teacher effectiveness at the school or society level, particularly those related to social mobility, equality of education and stratification of social class,
- **Economics or finance of education** more on the economic or financial sides of teacher effectiveness at different levels.
- **Organization and management studies** more on the institutional level

Concluding Remarks (3)

Narrow and Broad Conceptions in Measuring TE :

- **Traditionally, often focus narrowly on one or two models of teacher effectiveness** such as the goal model or process model at the individual level, and they ignore the other types of teacher effectiveness at different levels.
- **Advantage:** More focused and easier for implementation
- **Weakness:** Ignoring complexity in the nature of teacher effectiveness inevitably sets a tight limit to effort for improvement
- **If broadening the conceptions involving more models, it will create more difficulties in the design and implementation of the measurement and become more demanding in terms of time, effort and resources in practice.**
- **How to make a balance between the narrow and broad conceptions in the design** inevitably becomes a dilemma to the stakeholders when planning the measurement of teacher effectiveness.

Concluding Remarks (4)

Complicated Relationship among Various Types of TE:

• **The relationships among the various models and different levels of teacher effectiveness** may be very complicated, and not necessarily positive. For example:

1. High in internal effectiveness (e.g. the process model) does not necessarily compromise high interface effectiveness (e.g. the satisfaction model).
2. Individual teachers are performing well in their own jobs, it does not imply that teachers are effective in the team work.
3. The relationship between teacher effectiveness and teacher efficiency may not be so simple and direct.

Thank You

