



United Nations
Educational, Scientific and
Cultural Organization

Asia-Pacific
ERI-NET

Education Research Institutes Network



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OUTLINE

- About the ERI-Net study on transversal competencies
- Key findings of the phase I study (2013)
- Key findings of the phase II study (2014)
- NEXT STEP



ABOUT THE ERI-NET STUDY ON TRANSVERSAL COMPETENCIES



RESEARCH BACKGROUND AND RATIONALE

1 Growing debate on the importance on “21st century skills” (e.g. OECD and Voogt 2013)

International initiatives

- DeSeCo project
- Assessment and Teaching of 21st Century Skills (ATC 21)

Existing studies mainly from outside the region

2 Education reforms in the Asia-Pacific region introducing 21st century skills

Education reforms in Asia-Pacific region

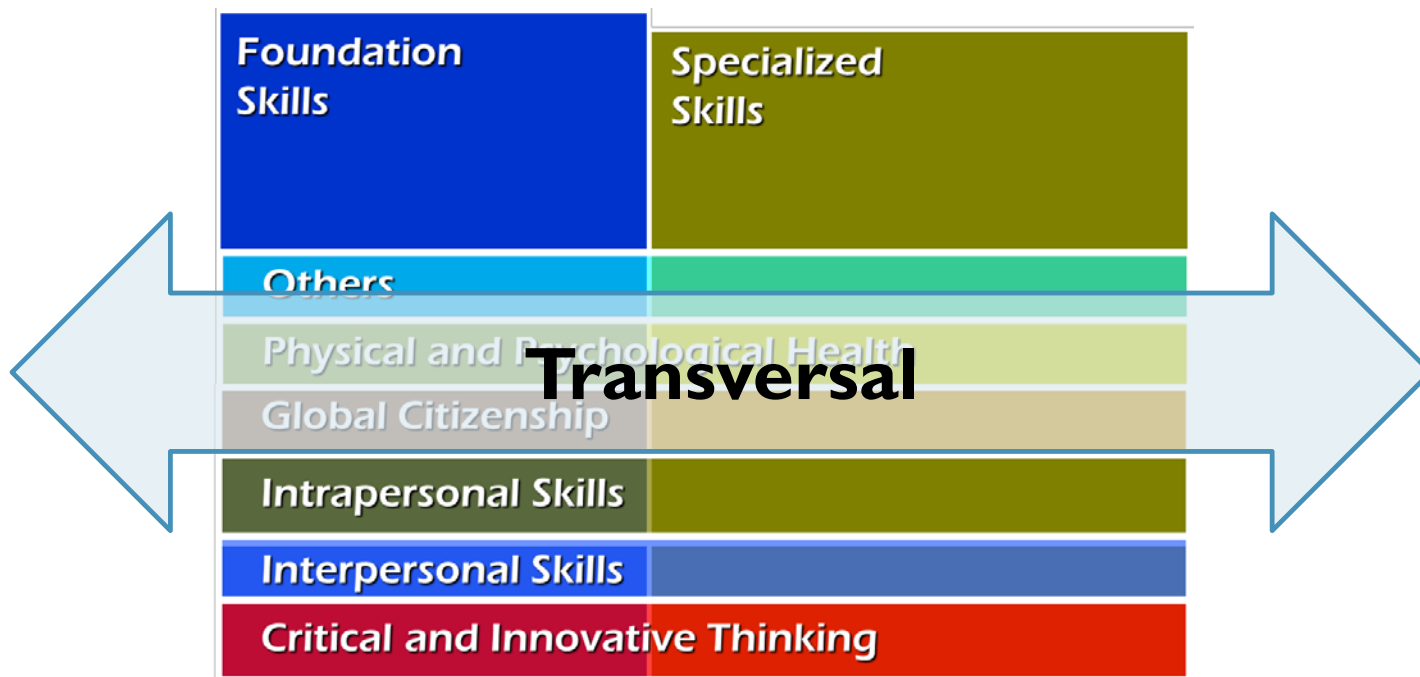
- Australia, “general capabilities ”
- Thailand, “life skills ”

These movements are not widely documented and shared

The regional research to collect and document perspectives and insights from the region

DEFINING TRANSVERSAL COMPETENCIES

- Adopted at 2013 ERI-Net annual meeting as a working term for the ERI-Net study



ERI-NET WORKING DEFINITION (2013)

| Domains | Example of key characteristics |
|-----------------------------------|---|
| Critical and Innovative Thinking | creativity, entrepreneurship, resourcefulness, application skills, reflective thinking, reasoned decision-making |
| Interpersonal skills | presentation and communication skills, leadership, organisational skills, teamwork, collaboration, initiative, sociability, collegiality |
| Intrapersonal skills | self-discipline, enthusiasm, perseverance, self-motivation, compassion, integrity, commitment |
| Global Citizenship | awareness, tolerance, openness, respect for diversity, intercultural understanding, ability to resolve conflicts, civic/political participation, conflict resolution, respect for the environment |
| Physical and Psychological health | healthy lifestyle, healthy feeding, physical fitness, empathy, self-respect |

ERI-NET WORKING DEFINITION (2014)

| Domains | Examples of key characteristics |
|--|--|
| Critical and innovative thinking | Creativity, entrepreneurship, resourcefulness, application skills, reflective thinking, reasoned decision-making |
| Interpersonal skills | Communication skills, organizational skills, teamwork, collaboration, sociability, collegiality, empathy, compassion |
| Intrapersonal skills | Self-discipline, ability to learn independently, flexibility and adaptability, self-awareness, perseverance, self-motivation, compassion, integrity, self-respect |
| Global citizenship | Awareness, tolerance, openness, responsibility, respect for diversity, ethical understanding, intercultural understanding, ability to resolve conflicts, democratic participation, conflict resolution, respect for the environment, national identity, sense of belonging |
| NEW! Media and information literacy | Ability to obtain and analyse information through ICT, ability to critically evaluate information and media content, ethical use of ICT |

RESEARCH TOPICS SINCE 2013

- “Integrating transversal competencies in education policy and practice in the Asia-Pacific region”
 - **Phase I (2013)**
Comparative analysis of **education policy**
 - Studied how countries and economies in the Asia-Pacific region define and integrate the concept of transversal competencies in their education policies and curriculum frameworks.
 - **Phase II (2014)**
Comparative analysis of **school level implementation**
 - Studied how education policies that promotes transversal competencies were interpreted and incorporated at classroom practices.

RESEARCH FRAMEWORKS

- Overarching questions
 - What is the status of integrating and applying transversal competencies in education policy and practice in Asia and the Pacific region?
 - What are the proven experiences?
 - What are the lessons learned?
- Suggested data collection methods
 - Desk study, questionnaire, interview, focused group discussion, classroom observation*

 Research framework was proposed by the ERI-Net Secretariat and discussed at expert meeting/ steering group meeting before the country study

*: Classroom observation was conducted mainly in phase II.



KEY FINDINGS OF THE PHASE I STUDY



PARTICIPATING COUNTRIES AND ECONOMIES

□ Phase I countries and economies

- Australia
- Shanghai, China
- Hong Kong SAR
- India
- Japan
- Republic of Korea
- Malaysia
- Mongolia
- Philippines
- Thailand



POLICY/CURRICULUM REVIEW (I)

- Emphasis on transversal competencies in education polices/curriculum are reported in all the ten case studies
- Varying rationale for integrating transversal competencies in education

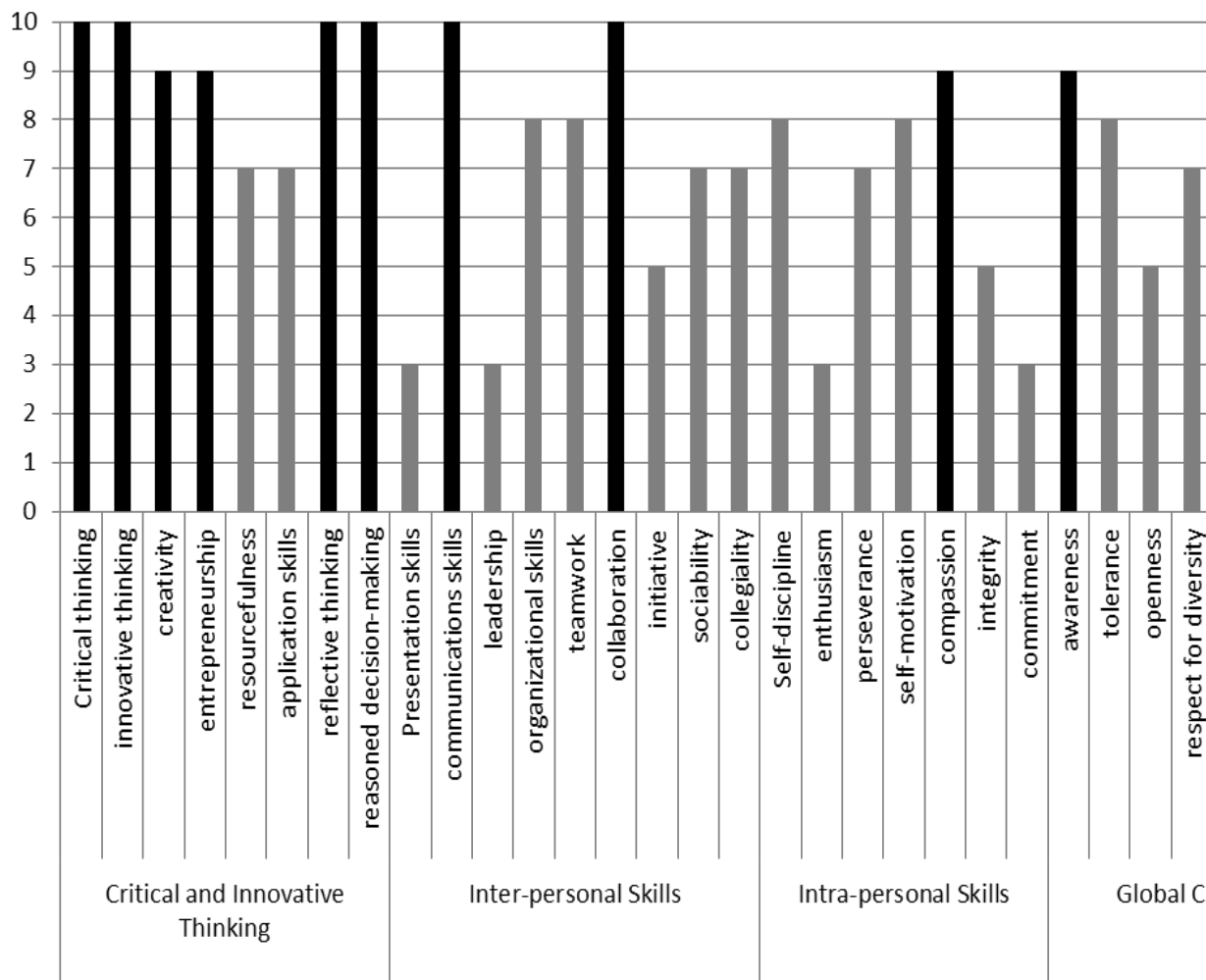
| | Economic Discourse | Social Discourse | Humanity Discourse |
|-----------------------------|---------------------------|-------------------------|---------------------------|
| Global Perspective | Competitiveness | Understanding & Peace | Global Citizenship |
| National Perspective | GDP Growth | HDI Growth | Patriotism |
| Personal Perspective | Employability | Community/Harmony | Moral Formation |

POLICY/CURRICULUM REVIEW (2)

- Modes of integration of transversal competencies vary

| Country/economy | Subject-specific | Cross-subject | Extra-curricular |
|----------------------|------------------|---------------|------------------|
| Australia | ✓ | ✓ | - |
| Hong Kong SAR(China) | ✓ | ✓ | ✓ |
| Shanghai (China) | ✓ | ✓ | ✓ |
| India | - | ✓ | ✓ |
| Japan | - | ✓ | ✓ |
| Republic of Korea | ✓ | ✓ | ✓ |
| Malaysia | ✓ | ✓ | ✓ |
| Mongolia | ✓ | ✓ | - |
| Philippines | ✓ | ✓ | ✓ |
| Thailand | ✓ | ✓ | ✓ |

SKILLS AND COMPETENCIES (SIMILARITIES)



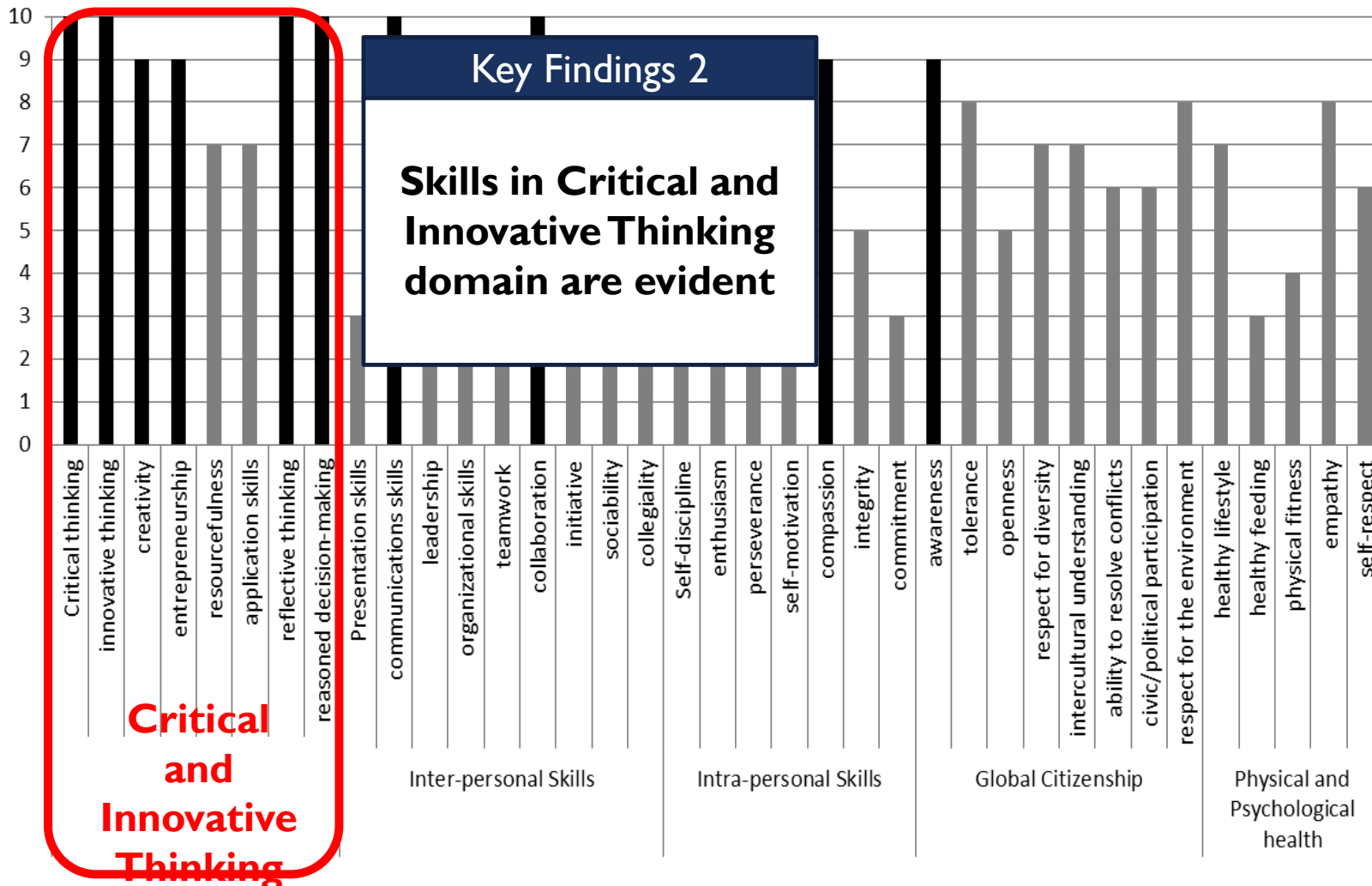
Key Findings I

Top 10 skills introduced in education policies

- critical thinking (10)
- innovative thinking (10)
- reflective thinking (10)
- reasoned-decision making (10)
- communication skills (10)
- collaboration (10)
- creativity (9)
- Entrepreneurship (9)
- compassion (9)
- awareness (9)

(): no. of countries selected

SKILLS AND COMPETENCIES (SIMILARITIES)



SKILLS AND COMPETENCIES (SIMILARITIES)

| Countries and economies | | Australia | China | Hong Kong (SAR) | India | Japan | Malaysia | Mongolia | Philippines | Republic of Korea | Thailand |
|-------------------------|-------------------------------|-----------|-------|-----------------|-------|-------|----------|----------|-------------|-------------------|----------|
| Global Citizenship | awareness | • | • | • | | • | • | • | • | • | • |
| | tolerance | • | | • | | • | • | • | • | • | • |
| | openness | • | | | | | • | • | | • | • |
| | respect for diversity | • | | • | | | • | • | • | • | • |
| | intercultural understanding | • | | • | | | • | • | • | • | • |
| | ability to resolve conflicts | • | | • | | | • | | • | • | • |
| | civic/political participation | • | | • | | | • | | • | • | • |
| | respect for the environment | • | • | • | | • | • | • | • | | • |

Critical and Innovative Thinking

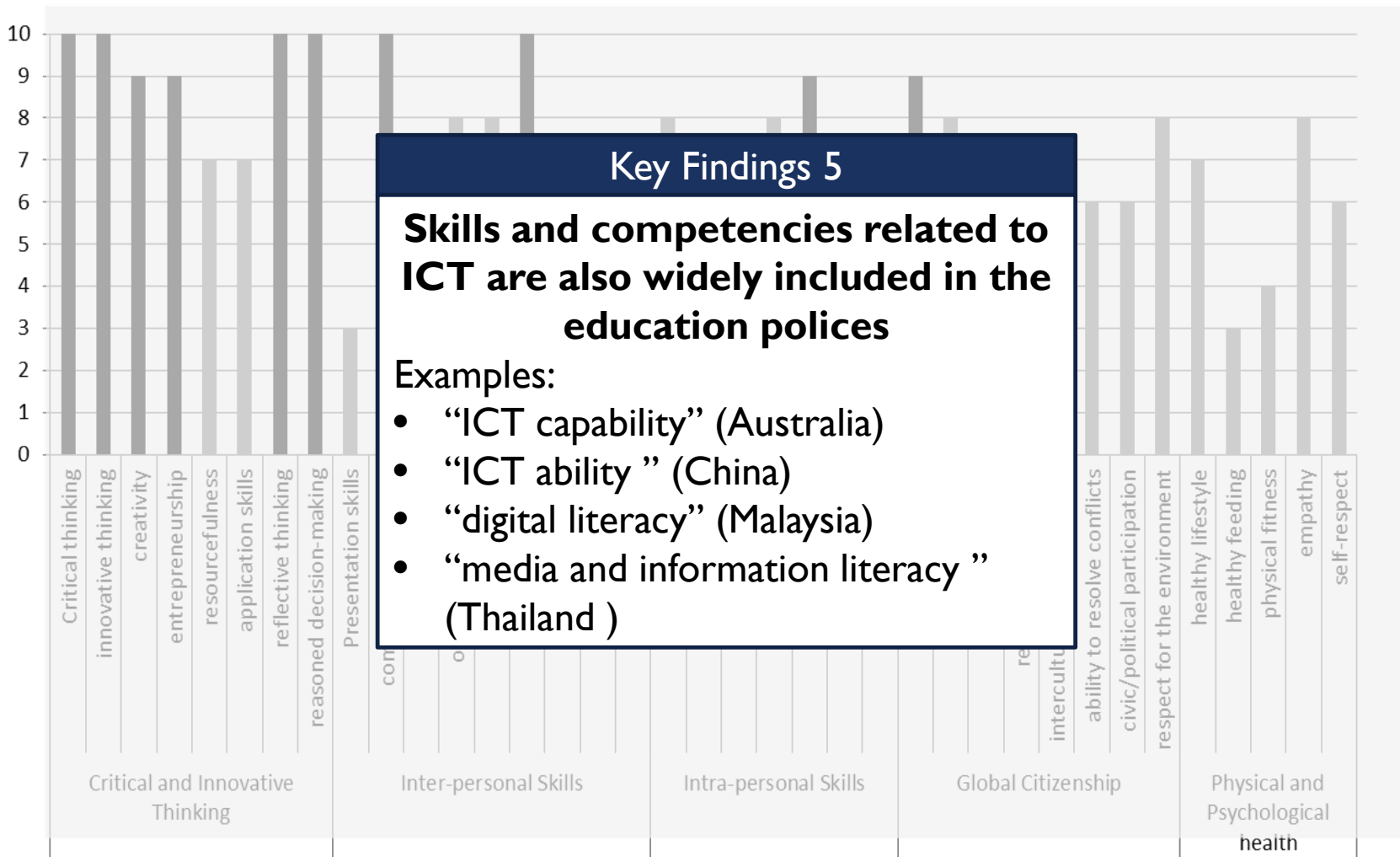
Inter-personal Skills

Intra-personal Skills

**Global
Citizenship**

Physical and Psychological health

SKILLS AND COMPETENCIES (SIMILARITIES)



SKILLS AND COMPETENCIES (DIVERSITY)

Key findings

Skills observed in a few countries

- Ability to learn independently (Australia, Japan)
- Risk-taking (Hong Kong SAR, Malaysia and Philippines)
- A sense of belongingness (Australia, China and Malaysia)

Togetherness, Sense of community (Australia)

Patriotism (Shanghai-China)

National identity (Malaysia)

Key

- “Dealing with stress” (India)
- “Emotional intelligence” (Malaysia)
- “Global spirituality” (Philippines)
- “Language etiquette in speaking and writing” and “Cyber etiquette” (Republic of Korea)

ACHIEVEMENTS

- All ten countries/economies reported some achievements from integrating transversal competencies to varying extent
 - Some case studies reported **the positive changes both in teachers' mindsets and students' interpersonal skills** after education reforms that promote transversal competencies.
 - Some case studies also documented that **collaboration between parents, schools and the local community were improved.**
 - However, more time is need to properly asses the impact of movements/reforms towards transversal competencies in education.

CHALLENGES

Definitional

- Lack of clarity in and agreement on the scope of transversal competencies

Operational

- Lack of assessment mechanisms
- Insufficient teaching/learning materials and teaching guides
- Lack of incentives
- Insufficient capacity of teachers
- Lack of budget (policy-budget inconsistency)
- Additional burden on teachers

Systemic

- Large class size
- Overloaded curricula
- Pressure for academic success
- Inconsistency with high-stake exams
- Lack of understanding among parents and other stakeholders
- Overall school/community culture not conducive



KEY FINDINGS OF THE PHASE II STUDY



PARTICIPATING COUNTRIES AND ECONOMIES

□ Phase II countries and economies

- Australia
- Shanghai, China
- India
- Japan
- Republic of Korea
- Malaysia
- Mongolia
- Philippines
- Thailand
- VietNam **New!**



SCHOOL POLICY

- Case studies indicated that idea of promoting transversal competencies in education policy was **more or less observed in school documents such as school development plan and school mottos.**

SCHOOL POLICY

- Important skills and competencies in school development plan
(Top 5, teachers' responses: Australia, China, India, Mongolia, Thailand)

| Skills and Competencies | Australia | China | India | | Mongolia | Thailand |
|--------------------------|-----------|-------|-------|------|----------|----------|
| | | | (gv) | (pt) | | |
| Content knowledge | | ● | ● | | | ● |
| Creativity | | ● | ● | ● | ● | |
| Critical thinking | ● | | | | | |
| Application skills | | | | | | ● |
| Reasoned decision making | ● | | | | | ● |
| Communication skills | ● | | | ● | | |
| Teamwork/collaboration | ● | ● | ● | ● | ● | ● |
| Sociability | | | | | | |
| Self-discipline | | ● | | | | |
| Perseverance | ● | ● | | | | |
| Self-motivation | ● | ● | | | | |
| Compassion | | | | | | |
| Environmental awareness | | | ● | ● | | |
| Tolerance | | | | | | |
| Conflict resolution | | | | | | |
| Computer literacy | | | | ● | | |
| Others (please specify) | | | | | | |

Teamwork/Collaboration
is acknowledged by teachers in all
the five countries

SCHOOL POLICY

- Important skills and competencies in school development plan
(Top 5, teachers' responses: Australia, China, India, Mongolia, Thailand)

| Skills and Competencies | Australia | China | India | | Mongolia | Thailand |
|--------------------------|-----------|-------|-------|------|----------|----------|
| | | | (gv) | (pt) | | |
| Content knowledge | | ● | ● | | | ● |
| Creativity | | ● | ● | ● | ● | |
| Critical thinking | ● | | | | | |
| Application skills | | | | | | ● |
| Reasoned decision making | ● | | | | | |
| Communication skills | ● | | | | | |
| Teamwork/collaboration | ● | ● | | | | |
| Sociability | | | | | | |
| Self-discipline | | ● | | | | |
| Perseverance | ● | ● | | ● | | ● |
| Self-motivation | ● | ● | | ● | ● | |
| Compassion | | | | | | |
| Environmental awareness | | | ● | ● | | |
| Tolerance | | | | | | |
| Conflict resolution | | | | | | |
| Computer literacy | | | | ● | | |
| Others (please specify) | | | | | | |

Perseverance is chosen by teachers in all the five countries

SCHOOL POLICY

- Transversal competencies in school mottos
(China, Japan, Malaysia, Republic of Korea and Thailand)

| Example of school motto, vision and objectives of sampled schools | Country |
|--|-------------------|
| <ul style="list-style-type: none"> • Self -discipline and integrity • All-round development, human well-being and exploring the truth bravely | China |
| <ul style="list-style-type: none"> • Learning proactively and having compassion and zest for living • Be a child with dream and self-motivation, let's make our school a happy place to be | Japan |
| <ul style="list-style-type: none"> • Intelligence is based on one's ability to think • Knowledgeable, Disciplined, Cultured | Malaysia |
| <ul style="list-style-type: none"> • Sincerity, creativity, and cooperation • A school helps all students develop through true learning and teaching | Republic of Korea |
| <ul style="list-style-type: none"> • Virtue, Academic, Health • Friendliness (Smiles), Good Thinking, Virtue (Salam) | Thailand |

TEACHING PRACTICES (I)

- Certain gap is indicated between what is used and what is considered effective.
- Top 5 Teaching practices used in lessons (Australia, China, India, Japan and Thailand)

| Teaching Practices | Australia | Shanghai (China) | India | | Japan | Thailand | Overall Ranking |
|---------------------------------------|-----------|---------------------|-------|------|-------|----------|--------------------|
| | | | (gov) | (pv) | | | |
| Lectures by teachers | 1 | 2 | 1 | 2 | 1 | 1 | 1 |
| Group projects and presentations | | 4 | 2 | 3 | 3 | 2 | 2 |
| Computer-aided activities | 4 | 1 | 5 | 1 | 4 | | 3 |
| Individual projects and presentations | ↑ | ↑ | ↑ | ↑ | ↑ | 5 | 4 |
| Small group discussions | 3 | | 3 | | - | 3 | 5 |
| Field studies | 5 | 5 | | 5 | 5 | 3 | 6 |
| Others | 1 | | | | | | 7 |

Source: compiled by ERI-Net secretariat from the case studies

30 TEACHING PRACTICES (I)

- Certain gap is indicated between what is used and what is considered effective.
- Top 5 Teaching practices considered effective in lessons (Australia, China, India, Japan and Thailand)

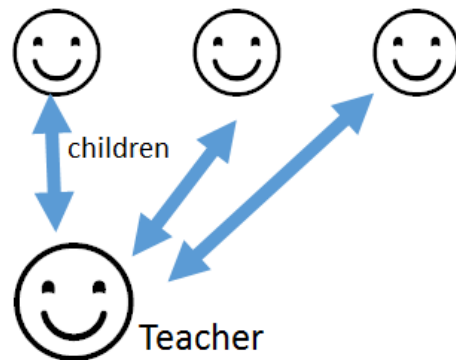
| Teaching practices | Australia | Shanghai (China) | India | | Japan | Thailand | Overall Ranking |
|---------------------------------------|-----------|------------------|-------|------|-------|----------|-----------------|
| | | | (gov) | (pv) | | | |
| Group projects and presentations | 4 | 2 | 1 | 2 | 1 | 2 | 1 |
| Field studies | 1 | 5 | 3 | 4 | 3 | 3 | 2 |
| Individual projects and presentations | | 3 | 4 | 5 | 2 | 1 | 3 |
| Small group discussions | 1 | 4 | 2 | | - | 5 | 4 |
| Extra-curricular activities | 3 | 1 | | | 4 | 4 | 4 |
| Computer-aided activities | 5 | | 5 | 1 | 5 | | 6 |
| Lectures by teachers | | | | 3 | | | 7 |

Source: compiled by ERI-Net secretariat from the case studies

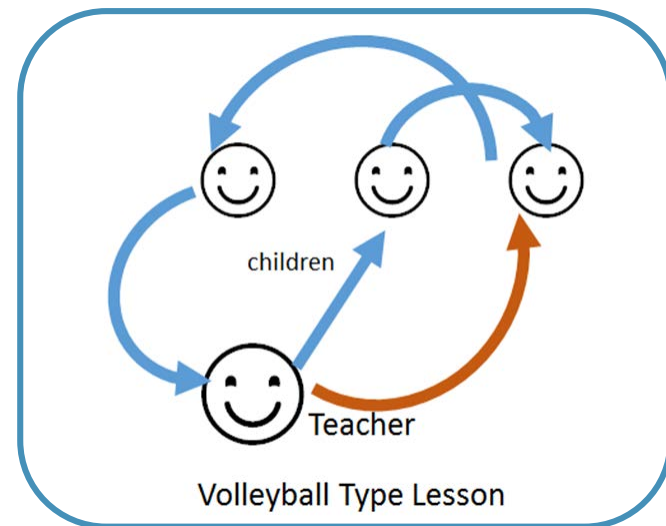
TEACHING PRACTICES (2)

- Country case studies suggested that role of teachers in lessons have been altered **from transmitters of knowledge to facilitators of learning**

- Volley ball type lesson (Japan)



Ping-pong Type Lesson



Volleyball Type Lesson

TEACHING PRACTICES (3)

- Teachers use various teaching methods to make their lessons student-centered, which is the key to encouraging development of transversal competencies
 - The cases of Australia, China, Japan and Republic of Korea reported that teachers incorporated various teaching methods in structured lessons (mostly, divided into three sections as introduction, development and conclusion).

| Sections | Examples of teaching practices for developing TVCs |
|---------------------|--|
| Introduction | Stimulating students' curiosity and motivating students <ul style="list-style-type: none">➤ Letting students to examine pig's kidney (Japan) |
| Development | Balanced combination of individual learning and learning in a group <ul style="list-style-type: none">➤ Utilized the cycle of individualized learning, small group discussion and the group presentation (China) |
| Conclusion | Reflection of lesson of the day <ul style="list-style-type: none">➤ Summarizing what students have learned and how they felt at the class and sharing them with the classmates (Japan, Republic of Korea) |

CHALLENGES FOR PROMOTING TVCS AT SCHOOL LEVEL

□ Top 5 challenges identified by teachers (Australia, China, India, Mongolia and Thailand)

| Challenges | Australia | Shanghai (China) | India | | Mongolia | Thailand | Overall Ranking |
|---|-----------|------------------|-------|------|----------|----------|-----------------|
| | | | (gv) | (pv) | | | |
| Emphasis on academic achievement (exams) | 1 | 1 | 1 | 1 | 3 | 5 | 1 |
| Lack of practical guidance | 2 | 2 | 3 | 2 | 2 | 2 | 2 |
| Insufficient awareness of parents | 4 | 3 | 4 | 3 | 4 | 3 | 3 |
| Lack of clarification of the definition of transversal competencies | 5 | 4 | 2 | 2 | | 5 | 4 |
| Lack of IT facility | | | 5 | | 1 | 1 | 5 |
| Lack of materials | 3 | 5 | 4 | 3 | 5 | | 6 |
| Insufficient awareness of community members | | | 4 | 3 | | 3 | 7 |
| Others | | | | | | | |

Source: compiled by ERI-Net secretariat from the case studies

NEXT STEPS

- Proposed research focus for 2015



- Also investigating the impact of globalization and regionalization on education reforms aiming at integration of TVCs
- Agreeing on the research framework and instruments so that the results can be more comparable across case studies

THANK YOU!