



**The 7<sup>th</sup> International  
Policy Advisory  
Group Meeting  
3-4 August 2015**

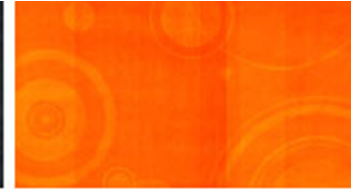


**Skills Upgrading and Human Capital  
Development for Knowledge Based  
Economies**

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# Skills and Talent for Innovation and Knowledge Based Economies



## KNOWLEDGE ECONOMY

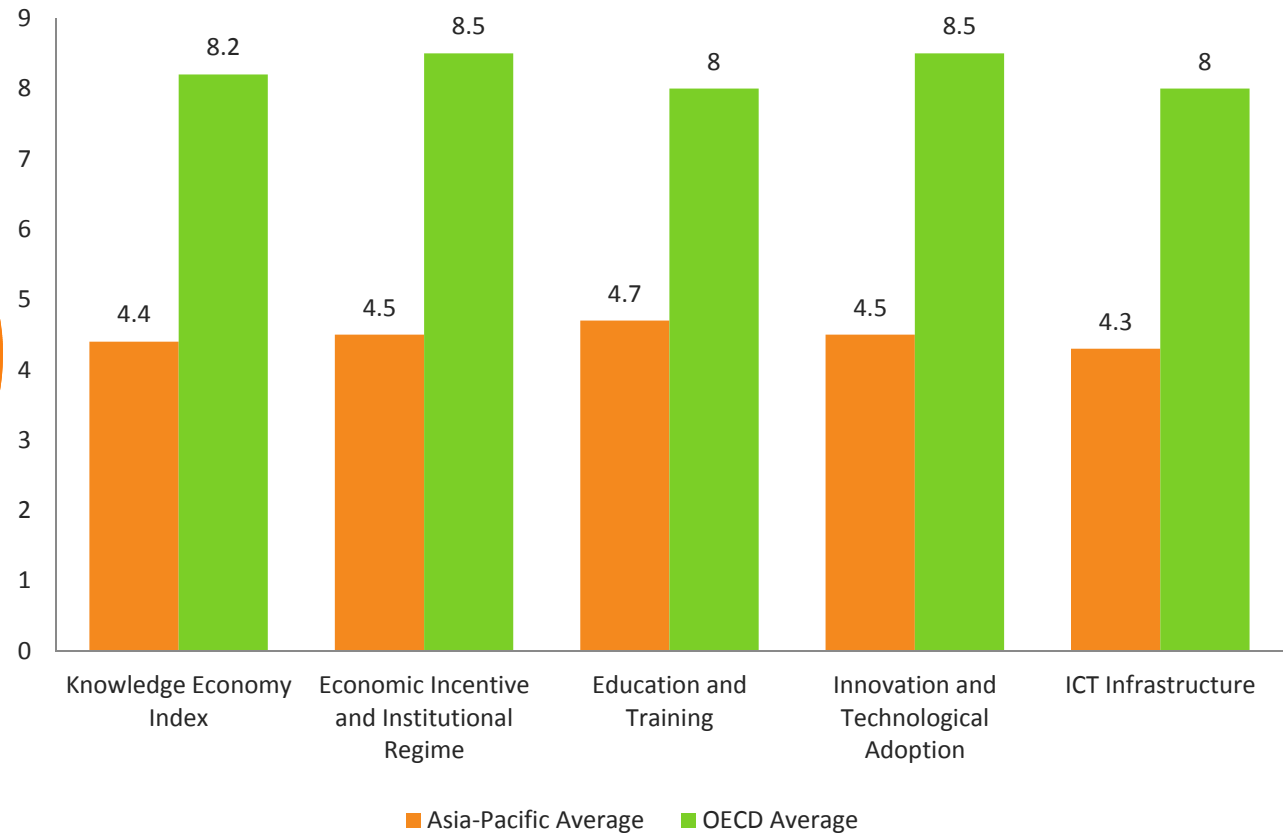
- Uses advanced technologies, skills, and knowledge to drive economic growth.
- Invests in software, patents, designs and new businesses and innovation and R&D.

## TRADITIONAL ECONOMY

- Depends on labor-intensive agriculture; low labor cost advantages;
- Basic manufacturing using ideas and systems developed elsewhere.

# ASIA NEEDS TO ENHANCE READINESS FOR KNOWLEDGE BASED ECONOMIC DEVELOPMENT

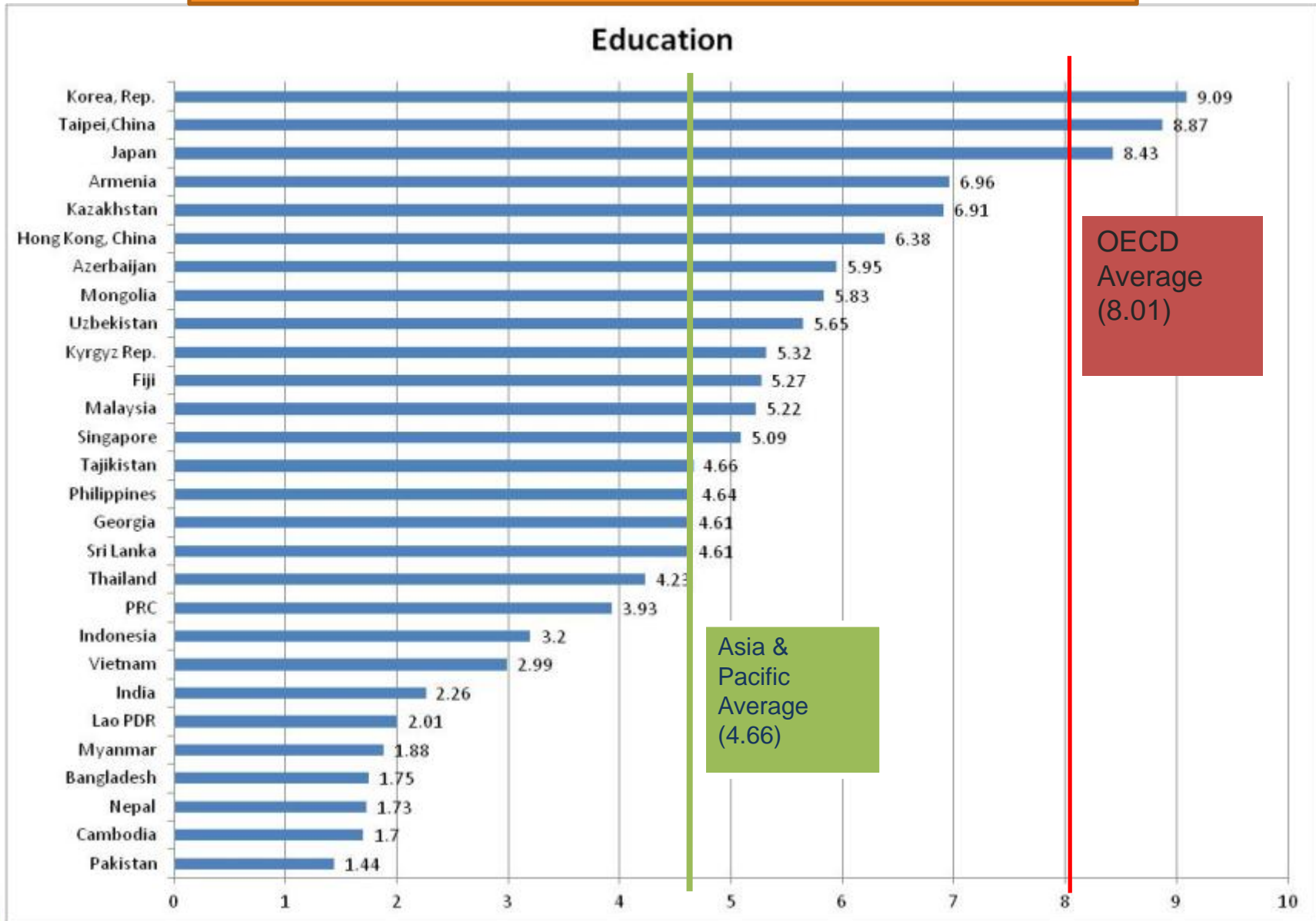
**FOUR PILLARS  
OF THE  
KNOWLEDGE  
ECONOMY  
INDEX**



**ASIA ABOUT HALF THE OECD AVERAGE**



# EDUCATION IN THE KNOWLEDGE ECONOMY INDEX



OECD  
Average  
(8.01)

Asia &  
Pacific  
Average  
(4.66)

# TIMES ARE OPPORTUNE FOR DEVELOPING ASIA



**BY 2020**

- **LARGEST COHORT OF UNIVERSITY STUDENTS**
- **A LARGE SHARE OF GLOBAL R&D**
- **54% OF GLOBAL MIDDLE CLASS WITH 42% SHARE OF CONSUMPTION**
  
- **138 M OFF-GRID, ON-NET POPN IN 2015**
- **10 M JOBS FROM CLOUD COMPUTING**
- **47% OF WORLD MOBILE DATA TRAFFIC IN 2017**
- **7 OF TOP 10 LOCATIONS FOR GLOBAL IT-BPO SERVICES**





# DEVELOPING ASIA NEEDS TO DO **MORE** FOR EDUCATION, BUT ALSO **RIGHT** IN EDUCATION



**Adapting to current  
trends and amplifying  
existing strengths**

## **MORE**

- Higher order talent and tertiary education
- Increased access to skills development
- Centers of excellence in R&D for innovation/S&T
- World standard tertiary institutions

## **RIGHT**

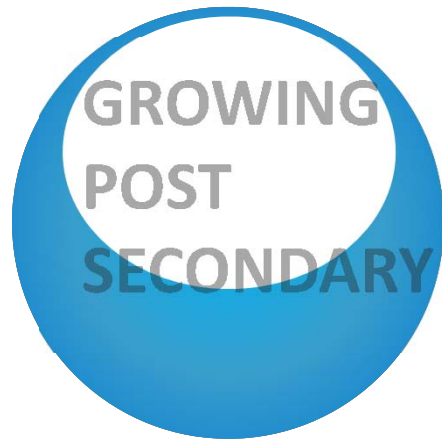
- Diversity and depth in education and skills
- Less degree bias with a range of credentials
- Strengthen the knowledge triangle – coordination between science, education, innovation
- Skills and talent required for specific sectors of competitive strength for economic growth





**TIMELY  
AND  
RELEVANT  
EDUCATION**

# ADB PORTFOLIO IN EDUCATION



- **OVER 80% OF 2015-17 ALLOCATIONS FOR UPPER SECONDARY, TVET AND HIGHER EDUCATION.**
- **OVER 50% OF THE PORTFOLIO IS FOR SKILLS DEVELOPMENT, RESPONDING TO STRONG COUNTRY DEMAND**
- **23% FOR UPPER SECONDARY, STRENGTHENING STEM EDUCATION**
- **TERTIARY EDUCATION IS SMALL BUT STRATEGIC**





# ADB SKILLS DEVELOPMENT PORTFOLIO

## SAMPLE OF INTERVENTIONS

- SKILLS FOR DISADVANTAGED POPULATIONS AND INCREASING SKILLS FOR JOBS
- SKILLS FOR ECONOMIC GROWTH TO MOVE FROM LOW TO MIDDLE INCOME AND MIDDLE TO HIGH INCOME
- HIGHER ORDER SKILLS IN WORKFORCE
- SUPPORT TO POLYTECHNICS TO ENHANCE CREDENTIALS AND NATIONAL QUALIFICATION FRAMEWORK
- SUPPORT TO SHORT TERM, RURAL-BASED TRAINING FOR DISADVANTAGED YOUTH AND WOMEN
- COMPETENCY BASED SKILLS TRAINING AND INDUSTRY PARTNERSHIPS
- STRENGTHENING SOFT SKILLS: LANGUAGE AND IT SKILLS; EMPLOYMENT SERVICES AND JOB PLACEMENTS
- IMPROVING TRAINING COURSES, ACCREDITATION, QUALITY OF TRAINERS
- SKILLS FUND
- SKILLS PARKS
- POLICY REFORMS
- PRIVATE SECTOR PARTNERSHIPS
- NATIONAL QUALIFICATION FRAMEWORKS

## GOING FORWARD: EDUCATION AND SKILLS FOR INNOVATION

- High quality tertiary education; Industry-university clusters; triple helix with regulatory incentives
- Decentralized education clusters , innovation districts at local levels (second tier cities, institutions)
- Education and skills for i-gen – critical mass in IT Skills
- Skills for high value services: “Manu Services”, Services for creative industries
- Green skills; skills for sustainability
- Augmented STEM AND STEAM in secondary education; Creative Sciences; Maker spaces; innovation labs

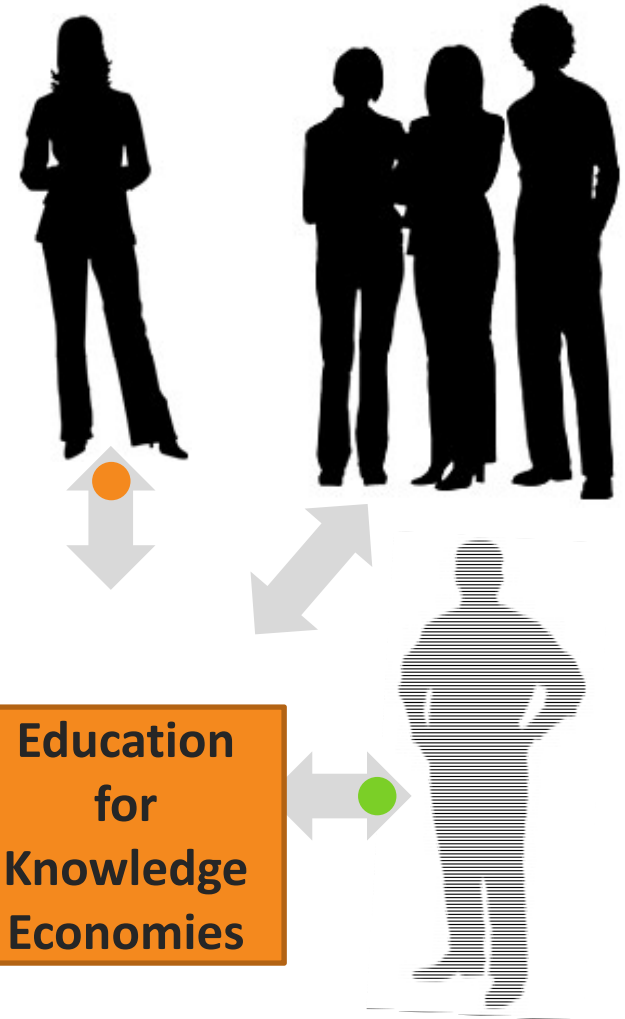
## GOING FORWARD: EDUCATION AND SKILLS FOR INNOVATION

- BLENDED AND NON-INSTITUTIONAL LEARNING
- A NEW VISION FOR TRANSFORMATIONAL TECHNOLOGY IN EDUCATION
  - Learning management systems
  - Learning games
  - Learning analytics
  - Cloud enabled services

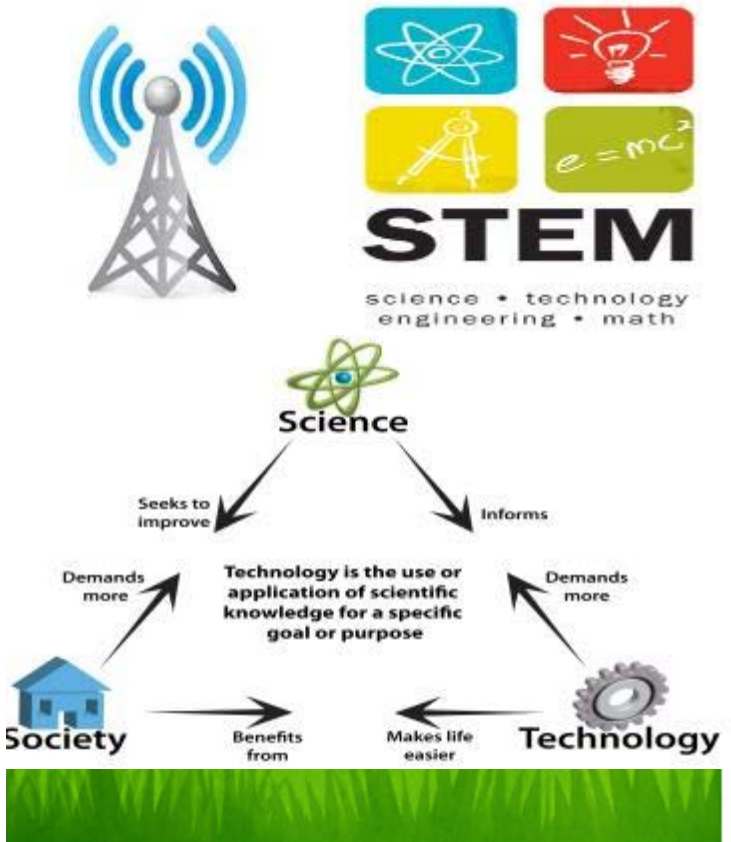
Education with physical and virtual infra: Consistent investments in new technologies for education: ICT that is upgradable/adaptable/affordable
- Private sector solutions for workforce training and talent management
- Education Venture Fund – private sector space

# Collaborations and Partnerships

- Even advanced economies seek partnerships – it is a world of mutual benefit
- Singapore has one of the most successful education systems of the world through partnerships
- Korea has one of the highest ICT penetration in the world which transcends all sections of society
- Regional cooperation in S&T would be very beneficial for developing Asia., particularly ASEAN S&T roadmap







# Investing in Education for Knowledge Economies

Timely Action that Matches Accelerating Change

can be

Game Changing for Developing Asia