The 2nd Meeting of the 2nd Phase of ASEM Working Group on INNOVATIVE COMPETENCES AND ENTREPRENEURSHIP EDUCATION
The 2nd Meeting of the 2nd Phase of ASEM Working Group on

INNOVATIVE COMPETENCES AND ENTREPRENEURSHIP EDUCATION

Ananto Kusuma Seta
Senior Advisor to the Minister on Innovation and Competitiveness

Ministry of Education and Culture
Republic of Indonesia
Jakarta, 21st March 2016
Innovation is the specific tool of entrepreneurs, the means by which they exploit changes as an opportunity for a different business or a different service. It is capable of being presented as a discipline, capable of being learned, capable of being practiced.

Entrepreneurs need to search purposefully for the sources of innovation, the changes and their symptoms that indicate opportunities for successful innovation. And they need to know and to apply the principles of successful innovation.

- Peter Drucker -

### Business Sophistication and Innovation Scores

<table>
<thead>
<tr>
<th>Country</th>
<th>Business Sophistication</th>
<th>Innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Korea, Rep.</td>
<td>4.8</td>
<td>4.8</td>
</tr>
<tr>
<td>Malaysia</td>
<td>5.3</td>
<td>4.8</td>
</tr>
<tr>
<td>Latvia</td>
<td>4.1</td>
<td>3.3</td>
</tr>
<tr>
<td>Indonesia</td>
<td>4.3</td>
<td>3.9</td>
</tr>
</tbody>
</table>

---

### Diagrams for Korea, Rep., Malaysia, Latvia, and Indonesia

Each diagram represents different aspects contributing to the overall competitiveness of each country. The radars highlight various factors such as institutions, market size, technological readiness, and labor market efficiency.
Some key questions in education and skills development

• Do skills matter for innovation?
• What individual skills should people acquire to contribute to innovation?
• How to develop all categories of skills simultaneously?
• What change in teaching and assessment practices?
• What education policy measures could we propose to policy makers and practitioners?

Stéphan Vincent-Lancrin
OECD/CERI (2011)
Driving the skills agenda: Preparing students for the future

An Economist Intelligence Unit report, sponsored by Google

...global surveys of senior business executives, teachers and two groups of students, aged 11 to 17 and 18 to 25. Countries represented in the sample include Australia, Brazil, Canada, China, Finland, Ghana, India, Malaysia, Mexico, the Netherlands, New Zealand, Nigeria, the Philippines, Poland, Romania, Russia, Saudi Arabia, South Africa, Spain, Sweden, Thailand, Turkey, the UAE, the UK and the US.
1

What skills will the future demand?

“Education systems need to provide students with hands-on learning that mirrors real-world problems and work opportunities in an interdisciplinary way.”

Dr Helen Soulé, executive director, Partnership for 21st Century Skills

Chart 2 (business survey)

Which of the following would you say are the most critical skills for employees in your organisation to possess today?

Select up to three

(% of respondents)

<table>
<thead>
<tr>
<th>Skill</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem solving</td>
<td>50</td>
</tr>
<tr>
<td>Team working</td>
<td>35</td>
</tr>
<tr>
<td>Communication</td>
<td>32</td>
</tr>
<tr>
<td>Critical thinking</td>
<td>27</td>
</tr>
<tr>
<td>Creativity</td>
<td>21</td>
</tr>
<tr>
<td>Leadership</td>
<td>18</td>
</tr>
<tr>
<td>Literacy</td>
<td>17</td>
</tr>
<tr>
<td>Digital literacy</td>
<td>16</td>
</tr>
<tr>
<td>Foreign language skills</td>
<td>15</td>
</tr>
<tr>
<td>Emotional intelligence</td>
<td>12</td>
</tr>
<tr>
<td>Numeracy</td>
<td>12</td>
</tr>
<tr>
<td>Entrepreneurship</td>
<td>8</td>
</tr>
<tr>
<td>Don't know</td>
<td>1</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: The Economist Intelligence Unit.
How are skills of the future best taught?

“Teachers need to understand that 21st century skills are not taught but modelled.”

Brian Schreuder, deputy director-general, Curriculum and Assessment Management, Western Cape Education Department

Chart 3 (teacher survey)

To incorporate “21st-century skills” in any way into your daily teaching, which are the biggest challenges you have faced to date? Select up to three (% of respondents)

- Lack of time-standard curriculum is too demanding and strictly enforced: 49%
- Lack of appropriate training: 31%
- Education authorities’ strict requirements that focus in the classroom be on literacy and numeracy: 30%
- Difficulty identifying what skills students need to be successful in the labour market: 26%
- Lack of support from school management: 24%
- Lack of motivation: 23%
- Lack of support from the business community: 23%
- Don’t know: 6%
- Other (please specify): 4%

Source: The Economist Intelligence Unit.
How are skills of the future best taught?

Chart 4 (teacher survey)

To what extent, if at all, do you agree or disagree with the following statements?

- Strongly agree
- Somewhat agree
- Somewhat disagree
- Strongly disagree
- Don’t know

Technological advances (e.g., the explosion of mobile devices and social media) have changed the way I teach

- 34% Strongly agree
- 51% Somewhat agree
- 10% Somewhat disagree
- 2% Strongly disagree
- 3% Don’t know

Students in my classroom often have a more advanced understanding of technology than I do

- 21% Strongly agree
- 37% Somewhat agree
- 27% Somewhat disagree
- 11% Strongly disagree
- 3% Don’t know

Source: The Economist Intelligence Unit.

Chart 5 (survey of 11-17-year-olds)

What changes, if any, would you most like to see in your school?

<table>
<thead>
<tr>
<th>Change</th>
<th>(% of respondents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>More lessons where I can use technology</td>
<td>40%</td>
</tr>
<tr>
<td>(for example, computers or the Internet)</td>
<td></td>
</tr>
<tr>
<td>More lessons where I can talk about my own ideas</td>
<td>26%</td>
</tr>
<tr>
<td>Homework that is more interesting</td>
<td>24%</td>
</tr>
<tr>
<td>More/better feedback from teachers on how to improve my work</td>
<td>23%</td>
</tr>
<tr>
<td>More advice/support on how to get a job when I leave school or university</td>
<td>22%</td>
</tr>
<tr>
<td>More opportunities to study in another country</td>
<td>18%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>6%</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>1%</td>
</tr>
</tbody>
</table>

Source: The Economist Intelligence Unit.
Are schools failing to equip students for the world of work?

Chart 6 (business survey)

Which of the following changes to your country’s education system, if any, do you think would benefit your business?

Select up to two (% of respondents)

- Providing better access to company schemes or internships: 36%
- Improving teacher training: 35%
- Broadening the access to technology in schools and universities: 31%
- Improving career advice given to students: 29%
- Providing more opportunities to study abroad: 22%
- Encouraging the creation of student networks (e.g., to facilitate career progression): 12%
- Don’t know: 5%
- Other (please specify): 1%

Source: The Economist Intelligence Unit.
Some key questions in education and skills development

- Is there a national policy for entrepreneurship curriculum development?
- Do policies aim to integrate entrepreneurship at all levels in the educational system?
- Are there policies for introducing more interactive and experience-based teaching approaches in the educational system?
- Does the government support programmes to provide training of entrepreneurship teachers?

- Are academic institutions encouraged and supported in providing training, counselling, diagnostic and advisory services to SMEs and early-stage entrepreneurs?
- Is there funding to promote extracurricular entrepreneurial activities (e.g. student activities, business plan competitions, business development programmes etc.)?
- Are entrepreneurship training programmes offered outside the formal education system? Do these programmes address low-literacy groups and those in rural areas?
- Has research been undertaken to monitor the provision and/or outcomes of entrepreneurship education?

Source: UNCTAD (2010) - Key components of entrepreneurship and innovation policy frameworks.
thank you