

## Thinking out-of-the-box urged for Asian education

WHILE researching education systems in Asia, I had the opportunity to visit schools and universities in Japan and China.

What I observed was a scarcity of creative thinking. While students in those education systems achieve some of the highest scores in the world in math and science, they have problems when it comes to “thinking outside the box.”

This is problematic for the future of these Asian nations because creativity is increasingly becoming one of the most important skills in the global marketplace according to several distinguished authors.

In “A Whole New Mind: Why Right-Brainers Will Rule the Future,” business guru Daniel H. Pink outlines the four major historical ages: agricultural age (farmers), industrial age (factory workers), information age (knowledge workers), and conceptual age (creators and empathizers).

Pink argues that while logical thinkers ruled the first three ages, creative thinkers will rule the upcoming

conceptual age.

The scarcity of creative thinking in many Asian education systems bodes well for US students, who score lower in math and science but tend to think more creatively.

This is not to say that knowledge in math and science is not important, because it is. However, knowledge alone is not enough. It must be combined with the ability to apply knowledge in new ways. As Einstein put it, “Imagination is more important than knowledge.”

For centuries, the US has been the world’s innovation leader. It’s uncertain whether or not the US will maintain that position.

China is off to a good start. It now has the largest higher education system in the world. Five of its universities are in the world’s top 100.

University enrollment has more than tripled since 2000. More university degrees are awarded in China than in the US and India combined.

*(Bill Costello, an education columnist and blogger. He can be reached at www.makingmindsmatter.com.)*

## Reader: Free bicycles needed throughout World Expo site

DEAR Shanghai Daily:

Your news that Beijing is seeking ways to relieve traffic congestion by encouraging bicycle transport and your attention to encouraging bicycle use in Shanghai is gratifying (“The revival of bicycles in Beijing” January 28).

Bicycles are a ready-made symbol of “green” locomotion, they should be encouraged during the World Expo in Shanghai whose slogan is “Better City, Better Life.”

Within the Expo roadways, the number of bicycles and their circulation could be efficiently controlled by employing “bike-share,” “bike-and-ride” and other such programs.

Models already exist in cities across the globe, including in the Chinese cities of Hangzhou, Zhejiang Province, and Wuhan, Hubei Province, as

well as in Western cities such as Paris and Berlin. Shanghai’s own bike-share program in the Minhang District could be imported into the Expo campus.

Shanghai’s Expo 2010 takes commendable pride in offering free transport within its walls by ecologically worthy means: battery-driven buses and golf-cart-style vehicles. These are virtuous modes, but they should not leave private transport unrepresented.

For a “better city” with a “better life,” the bicycle offers the “cleanest” door-to-door service for individuals. Expo’s “city” provides an ideal venue to advertise man’s most eco-friendly *zhi xing che* — “self-moving-vehicle.”

*(Mary Frances Dunham, member of the Institute for Transport Development and Policy and of Transport Alternatives, New York City.)*

### Do you have an opinion?

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# Stimulus ‘green’ funding still needed

IN response to the financial crisis, almost every major government worldwide announced a fiscal stimulus package, and in almost every case a significant portion was earmarked for “green” initiatives.

HSBC (Hongkong and Shanghai Standard Banking Co) estimated that around the world, governments allocated more than US\$430 billion in fiscal stimulus to “climate change themes.”

However, this total includes rail, water and electricity infrastructure that is not specifically dedicated to clean energy. Once these are stripped out, an estimated total of US\$177 billion of stimulus funding has been allocated to renewable energy, energy efficiency, advanced transport, smart grid and other core clean energy technologies.

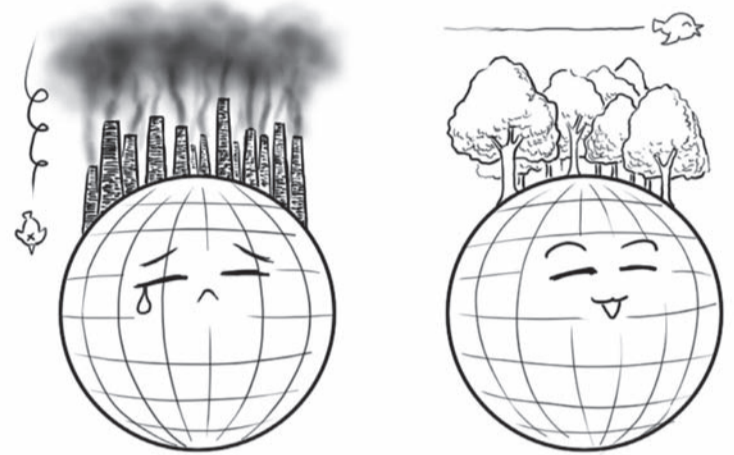
For the most part the spending is dominated by efficiency, renewable energy, electrical grid, general R&D and transportation. Energy efficiency, generally in the form of grants for the improvement of public sector buildings and for weatherizing homes, is set to take the largest slice of clean energy stimulus funds with US\$42 billion globally.

It is seen as a sector that not only can have a significant impact on emission reductions and reduce household energy expenditure, but can also be quickly ramped up and, critically, create local unskilled and semi-skilled “green jobs.”

Grid improvements are also earmarked for a significant amount of stimulus spending, at US\$32 billion, particularly in China and the US where they are being supported by loans and grants respectively.

The Chinese funding is largely earmarked for grid extension to some of the areas where excess renewable energy is currently being produced, while much of the US spending is for the deployment of smart grid technology.

A key weakness of the stimulus approach, however, is that only around US\$25 billion — 14 percent of the total allocated — actually reached clean energy technology providers or project



Almost every government has spent a lot on green initiatives.

developers in 2009.

The flow of stimulus spending will strengthen to around US\$60 billion this year, which will almost certainly drive overall investment in clean energy into record territory, perhaps reaching as much as US\$200 billion. Stimulus funding will then remain at around US\$60 billion for 2011, before receding.

One of the most urgent questions facing policy makers in clean energy as elsewhere is how to close the stimulus funding taps in due course without causing the industry to collapse.

There is also some concern that as the global economy emerges from recession, governments will reconsider their spending plans, faced by increasing public debt and concerns over the state of their finances, and that money for green schemes may be diverted elsewhere.

**(The article is adapted from the report titled Green Investing 2010 by the World Economic Forum.)**

### Green investment

#### The United States

The American Recovery and Reinvestment Act (ARRA) was signed into law by President Obama in February 2009. US\$67 billion out of a total stimulus package of US\$788 billion was set aside to promote clean energy.

#### China

Early in 2009, China’s National Development and Reform Commission unveiled a US\$60 billion low-carbon stimulus package. Overall the Chinese stimulus is likely to flow faster than European or US packages because much of the money will take the form of loans rather than grants.

#### Europe

Of all the European green stimuli, the community-level one (US\$12.7 billion) is likely to be the fastest in reaching the sector. Offshore wind developers are expected to benefit first.

**(The article is adapted from the World Economic Forum’s report titled Green Investing 2010.)**

## Media tackle environment issues

### Takeshi Kokubu

I PARTICIPATED as a moderator in the “Asian City Journalist Conference” held in Fukuoka on December 14 last year, which coincided with the Fukuoka Motor Show 2009.

It was the 4th Conference co-organized by the UN Human Settlements Program (Habitat) Fukuoka Office, the Ministry of Land, Infrastructure, Transport and Tourism of Japan and the Nishinippon Newspaper.

This time, under the theme of “Towards sustainable transportation and cities without environmental divide,” journalists from eight Asian cities from Busan to Jakarta to Indonesia discussed how to

tackle the carbon dioxide reduction to prevent global warming.

“Environmental divide” is the problem of environmental disparities: economically poor people often live in the areas where land, water and air are polluted and do not benefit from the environment compared to rich people. Between rural and urban, between cities, even within the urban areas, environmental gap is large.

The discussion during the Conference highlighted the gaps between the eight participating cities in the urban environment.

The journalists from Jakarta, Kuala Lumpur, Bangkok, Ho Chi Minh City and Manila reported the difficult situations struggling

for the development of efficient public transport, while Fukuoka, Busan and Singapore have already developed it.

Journalists experienced “environmentally friendly” new technology during their stay in Fukuoka through the test-ride of fuel cell vehicles and hybrid vehicles and also through the visit to Kyushu University International Research Center for Hydrogen Energy.

However, they gasped to learn that the price of the fuel cell bus that they rode to and from the city center and suburban areas is about 300 million yen (US\$3 million)! So, what can the media do to help establish sustainable transport and environment, and eliminate the disparities?

Developing campaigns, reporting success and failure cases, educating young people.

Robert Adhi Kusumaputra (Kompas, Indonesia) proposed the continuation of discussion on the Internet, and demonstrated a prototype that he had prepared.

Habitat Fukuoka Office will set up the Asian Cities Partnership home page by this coming March.

They plan to upload the articles written by the ACJC journalists in English and Japanese on it, aiming to share and spread the information and know-how toward sustainable cities.

**(The author is senior editor of the Nishinippon Newspaper, Japan.)**