The digital divide is more than just access.

The most widely discussed aspect of the digital divide is about the gap between the wired rich and the unconnected poor. The most obvious gap seems to exist between regions of the world, as indicated by the following table:

<table>
<thead>
<tr>
<th></th>
<th>Population</th>
<th>Main Telephone Lines</th>
<th>Cellular Subscribers</th>
<th>Internet Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>13%</td>
<td>2%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Americas</td>
<td>14%</td>
<td>30%</td>
<td>30%</td>
<td>49%</td>
</tr>
<tr>
<td>Asia Pacific</td>
<td>59%</td>
<td>32%</td>
<td>36%</td>
<td>23%</td>
</tr>
<tr>
<td>Europe</td>
<td>14%</td>
<td>36%</td>
<td>33%</td>
<td>27%</td>
</tr>
</tbody>
</table>

Despite having the majority of the world’s population, the Asia Pacific does not predominate as far as connectivity is concerned. The population of Africa is close to that of the Americas and Europe, yet it lags far behind in terms of connectivity.

In terms of online access, the global perspective of the divide seems like a chasm. About 429 million people are online globally. This represents only 6% of the world’s entire population.

The divide also exists among countries of the same region. In the Asia Pacific, connectivity ratings are as follows (with 10 as the highest):

- Singapore: 8
- Hong Kong, China: 8
- Australia: 8
- New Zealand: 8
- Japan: 8
Although the gaps indicated are mainly between countries, the digital divide within a country can be inferred from the different ratings for Hong Kong, Taipei and the People’s Republic of China.

Other specifics could be cited to further illustrate the divide.

In terms of gender, women are only 22% of Asia’s 48 million Internet users, even if they constitute half of the region’s population.

Bangalore is reknowned as India’s software center, yet 85% of the population of this place has no access to a computer.

A close look at the foregoing indicates that the digital divide is only partly about access. The divide actually reflects issues that have segmented societies of the world: gender, urban / rural and income. Asia sharply reflects the segmentation because it has countries at every point along the development spectrum.

**Promoting ICT education to narrow the digital divide**
The ASEAN Initiative

Government and business leaders of the Asia Pacific Economic Cooperation (APEC) have identified three requirements for the region to overcome the digital divide. These are: physical infrastructure, human resource pool, and the legal and regulatory framework.

The response of the Association of Southeast Asian Nations (ASEAN) was to form the e-ASEAN Task Force. It has been mandated to develop a broad and comprehensive action plan that will develop the competencies within ASEAN to compete in the global economy. ICT education is a crucial component of its undertakings. Its major activities are geared towards the following:

- Creating a common IT market
- Enhancing physical infrastructure
- Human development
- Promoting e-commerce
Supporting e-governance

The SEAMEO Response

The Southeast Asian Ministers of Education Organization (SEAMEO) formulated the SEAMEO IT Plan for its fourteen SEAMEO Centers. All the Centers have begun moving towards implementation of the plan. One of these Centers is SEAMEO INNOTECH, which specializes in educational innovation and technology. SEAMEO INNOTECH efforts in ICT education have been in the training of teachers and principals.

The following are the training courses for teachers: Technology Applications in Education for Teachers and Teacher Trainers, Technology Tools for Producing Instructional Materials, and Using Leading Edge Technologies for Quality Education. The training course for principals is called The Principal as CEO and Technology Leader. Customized ICT courses are also conducted on request.

SEAMEO INNOTECH has also developed a Personnel Management Information System for the Philippine Department of Education for the professional and personal profile of teachers and non-teaching personnel and a management Information System for the Bureau of Non-formal Education that serves as tracking system for learners and database of courses and resources.

In terms of data-gathering, SEAMEO INNOTECH has conducted a survey of all teachers in the Philippine public school system as well as a nationwide survey of ICT readiness of all public and private primary and secondary schools in the Philippines.

Private sector efforts

“The reality is that while many of Southeast Asia’s governments want to build knowledge societies, it’s the private sector that’s driving many such initiatives.”

There are many examples of private sector initiatives in Southeast Asia. Such initiatives consist of donating computers and providing training programs on utilization. These efforts are particularly valuable where governments lack financial resources to carry out IT development plans. Many of the private organizations are business corporations, with an understandable dominance of IT companies such as Intel and Oracle. It is however significant to note that consumer-oriented companies, such as Coca Cola, are also involved.

The Prospects

What impact has there been in terms of narrowing the digital divide?
There is a backlog even in basic telephone infrastructure. Most economies in Southeast Asia still have a long way to go. This is according to Roberto Romulo, Founding Chairman of the E-ASEAN Task Force said during the CEO summit that led up to the 8th APEC Economic Leaders Meeting. Yet the outlook could look encouraging. This is indicated by the following: APEC has pledged to triple the number of Internet users in the region to 750 million by 2005.

The Asian Development Bank is considering to build a fiber optic loop to connect Vietnam, Cambodia, Laos and Thailand.

At the 2000 G8 summit in Okinawa, Japan pledged $15 over 5 years to help alleviate the digital divide, mainly in Asia.

There are Asian business leaders who think that Asian IT remains vibrant. Michael Rawding, President of Microsoft Asia, says that business is growing faster than the overall economy, and corporate customers very much view IT as a critical imperative.

It therefore seems that the technology environment needed to promote ICT education is, or at least will be, in place.

A focus for ICT education

ICT education is a given in narrowing the digital divide. However, a focus is needed so that it can really go beyond mere acquisition of computer skills. As pointed out earlier in this paper, issues of the digital divide reflect segmentation in societies. ICT education could therefore contribute significantly to addressing the issues by developing cyber fluency that enables learners to utilize tools and interpret content. Learners should be able to access content, analyze its value, and apply it to their needs. If they are able to create content that is relevant to their needs as well, then ICT education would concretely enable them to find ways of meeting those needs.

The digital bridges of ICT education should connect to the learners and their needs. At the community level, this means having community technology centers that make technology relevant to local needs. For example, neighborhood technology skills training could be offered. Or community spaces on the Internet could be created so that the local people can communicate and interact regarding matters that are important to them. The thrust could be to disseminate knowledge and bring relevant information such as employment opportunities or health services, to communities through shared resources.

Schools could be encouraged to be education technology centers of the community. Or within the school, ICT education could be made as relevant as possible to the needs of the teachers and students. This could be in terms of enabling them to explore,
create and share content that improves the quality of their lives. Again, what is critical would be for them to have information that they consider important.

**Conclusion**

This paper has presented some dimensions of the digital divide, given examples of efforts to narrow the divide in terms of ICT education, and attempted to envision some prospects. The challenge in narrowing the divide is in the enormity of the task. The key will be collaboration among all concerned sectors. If we remain divided, digitally or otherwise, we will not be able to effectively meet the challenge.

Source: [http://gauge.u-gakugei.ac.jp/](http://gauge.u-gakugei.ac.jp/) 10/2002