Rapid changes in information and communication technologies (ICT) are a key driving force of change in our societies today. These changes are increasingly affecting all aspects of human life: how we communicate, work and socialize.

In particular it is technologies such as mobile telephones, computers, television, and associated software and modalities which, by enabling fast and efficient communication, are bringing about significant changes.

The Internet is particularly revolutionary. It enables access to vast quantities of up-to-date information, anywhere and at any time, and, being an interactive medium, it facilitates extremely rapid exchange of ideas and knowledge.

Because of the extent and speed at which it provides information, Internet technology has momentous potential in terms of empowering people and enabling them to improve their lives. Importantly, the Internet offers the potential for disadvantaged groups to gain the knowledge and skills they require to participate on a more equal footing in the societies of which they are a part. It also enables these groups to share their own knowledge and skills with the world.

The Internet also offers exceptional potential to revolutionize formal and non-formal education. Education is essentially about imparting information, knowledge and skills. By making information and educational materials and tools available anytime and anywhere, the Internet is enabling education to be more flexible and to be accessible outside of schools and learning centres. In addition, the Internet is enabling the idea of lifelong learning to become a reality.

“Digital technologies are transforming businesses and governments, and changing the ways we live and interact.”

International Telecommunication Union, Internet Report 2006: Digital Life

“The twenty-first century is the century of information. The internet, SMS messaging, the fact that anyone can be reached anywhere and at any time: these are phenomena which have completely revolutionised professional and private life.”

Samuel Schmid, President Of The Swiss Confederation, World Summit on the Information Society (WSIS), Tunis, 16 November 2005

“ICTs help us to be more productive and efficient than ever before in order to fulfill our desire for a better life.”

H. E. Mr. Yoshio Utsumi Secretary-General of The International Telecommunication Union WSIS, Tunis, 16 November 2005

“The Internet holds the greatest promise humanity has known for long-distance learning and universal access to quality education... It offers the best chance yet for developing countries to take their rightful place in the global economy... And so our mission must be to ensure access as widely as possible. If we do not, the gulf between the have and the have-nots will be the gulf between the technology-rich and the technology-poor”.

Kofi Annan, Secretary-General of the United Nations, 1999
However, it is not always clear how to best harness the potential of the Internet for education. The process of integrating the use of the Internet into education is complex, not only involving obtaining the right equipment but also requiring appropriate pedagogical techniques, relevant learning materials and ongoing support.

In several countries of the Asia-Pacific region the process of integrating the Internet into education is especially challenging given that many schools lack the required infrastructure and have few teachers who are experienced in utilizing the Internet and other forms of ICT in the classroom.

Also, the Internet is currently not accessible to all. While access to the Internet has grown rapidly in recent years, particularly in Asia, only a relatively small proportion of the world’s population, 16 per cent, has access to the Internet. And, in spite of rapid usage growth, there remains a vast “digital divide”. As the table below shows, although Asia has 56.5 per cent of the world’s population, it has only 35.8 per cent of the world’s Internet users. In the case of the Pacific Island countries, there is an even starker divide. As the table below shows, 7.8 per cent of the population of Pacific Island countries has access to the Internet, whereas in Australia and New Zealand 70.9 per cent of the population has Internet access.

Table 1: Comparison of Internet Usage, by Region

<table>
<thead>
<tr>
<th>Region</th>
<th>Population (2007 est.)</th>
<th>Percentage of world population</th>
<th>Internet users</th>
<th>Internet users as a percentage of the population</th>
<th>percentage of the world usage</th>
<th>Usage growth (2000-2007)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia4</td>
<td>3,712,527,624</td>
<td>56.5 %</td>
<td>398,709,065</td>
<td>10.7 %</td>
<td>35.8 %</td>
<td>248.8 %</td>
</tr>
<tr>
<td>Other</td>
<td>2,862,138,793</td>
<td>43.5 %</td>
<td>715,565,361</td>
<td>25.0 %</td>
<td>64.2 %</td>
<td>190.1 %</td>
</tr>
<tr>
<td>World total</td>
<td>6,574,666,417</td>
<td>100.0 %</td>
<td>1,114,274,426</td>
<td>16.9 %</td>
<td>100.0 %</td>
<td>208.7 %</td>
</tr>
<tr>
<td>Pacific Islands4</td>
<td>9,209,260</td>
<td>0.1%</td>
<td>510,350</td>
<td>7.8%</td>
<td>0.05%</td>
<td>-</td>
</tr>
<tr>
<td>Australia &amp; New Zealand6</td>
<td>25,259,183</td>
<td>0.4%</td>
<td>17,929,191</td>
<td>70.9%</td>
<td>1.65%</td>
<td>-</td>
</tr>
<tr>
<td>Other</td>
<td>6,540,197,974</td>
<td>99.5%</td>
<td>1,095,834,885</td>
<td>16.8%</td>
<td>98.3%</td>
<td>210.1 %</td>
</tr>
<tr>
<td>World total</td>
<td>6,574,666,417</td>
<td>100.0 %</td>
<td>1,114,274,426</td>
<td>16.9%</td>
<td>100.0%</td>
<td>208.7 %</td>
</tr>
</tbody>
</table>


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2 Internet World Stats defines an Internet User as anyone currently with the capacity to use the Internet. There are two requirements for a person to be considered an Internet User:
   - The person must have available access to an Internet connection point.
   - The person must have the basic knowledge required to use web technology.
3 In this case “Asia” encompasses the Middle East countries in addition to the 33 Member States that UNESCO categorizes as part of the “Asian” region. http://portal.unesco.org/ev.php-URL_ID=2315&URL_DO=DO_TOPIC&URL_SECTION=201.html
4 “Pacific Islands” includes 12 UNESCO Member States situated in the Pacific Ocean, along with 17 other Pacific countries and territories.
5 Australia and New Zealand are listed separately because their population sizes and Internet usage figures differ significantly from other countries in “Oceania.”
Recognizing these challenges, UNESCO initiated the SchoolNet project, with the aim of assisting countries in the Asia-Pacific region to harness the Internet’s potential for enhancing education. By training teachers to utilize the Internet and integrate it into education; by assisting in the development of relevant learning materials; and by initiating or strengthening national-level SchoolNets, the UNESCO SchoolNet project has facilitated access to the Internet and promoted mechanisms by which students can use it to improve learning, and gain the skills they need to participate in the emerging knowledge societies of the 21st century.

This third edition of the SchoolNet Lessons Learned series identifies and describes the key processes involved in initiating and managing SchoolNets, drawing on the experiences of the UNESCO SchoolNet project and of existing SchoolNets around the world.

This publication is aimed at policy makers, educators, intergovernmental organizations, non-governmental organizations (NGOs), training organizations and educational technology providers who are in a position to set up, implement and maintain SchoolNets. However, the examples and information this book contains will also be useful for those interested in learning more about the successes and challenges of ICT use in education in the Asia-Pacific region.

Beginning with an overview of SchoolNets, what they are and why they are set up, this book then briefly describes the UNESCO SchoolNet project’s objectives and key outcomes. Next, a number of examples of existing SchoolNets are provided and the features of successful SchoolNets are identified. Following this, the main factors to be considered when initiating and managing a SchoolNet are examined; with each factor explained using examples drawn from the UNESCO SchoolNet project and existing SchoolNets. In the final chapter, the lessons-learned about initiating and managing SchoolNets are summarized.