Plenary Session II
YOUTH IN THE NET:
CHALLENGES FOR PARENTS AND GOVERNMENT

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&

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Introduction

Like many countries across the globe, Singapore is embracing the age of information technology or IT as the way forward into the 21st century. But even as the country was getting into gear to ride the IT wave, along came the Internet wave which took the world by storm, almost overnight. So suddenly, the reality of CHANGE hit us in Singapore too.

No more can we deal with things at our own pace, whether leisurely or not. We are talking about e-mail vs snail mail, not ‘ordinary’, ‘surface’ ‘sea’ or even ‘air’. There is clearly a change in lifestyle too. Where we used to talk, either face-to-face, or on the telephone, we now e-mail each other. Even colleagues in the same department find themselves sending e-mails to each other instead of talking. There is merit in this approach as the message can be sent to several people at the same time but this communication mode deprives us the opportunity to interact thereby affecting social relationships.

Never before has a language surfaced so quickly and spread so pervasively. The first time we entered a chat room, it was like staring at a different language even though it was English. People were chatting in signs, symbols and numbers. Try saying ‘7456’ in Mandarin. That’s what chatters use to show frustration. There is no dictionary for Netspeak. It is evolving all the time. We needed the teenager next to us to decode even as we watched the frantic pace with which five people talked to each other. The Internet and the e-mail are in this sense influencing the community culture, especially youth culture.

The advent of the Net has also changed the way we learn. In the virtual world, classrooms are without walls and classmates are represented by user IDs and e-mail passwords. Information is updated weekly, if not daily on some websites. Research is now based on the information obtained from the Net yesterday or even today. Quoting data and sources more than a year old makes us sound outdated. Wireless Internet is set to invade Singapore. Before long, we will have people staring into their mobile phones. SMS has already started that revolution. And you thought it was strange that people seemed to be talking to themselves as they walked down the shopping arcade, and rather loudly at that too.

Singapore is progressive in the way it embraces IT. At every turn, we try to catch the wave and ride it. To deal with the convergence of computing, communications and content, Singapore quickly reorganised itself and today, we are totally sold, not just on delivering data over the Net, but also doing it interactively, for commercial, educational and almost any purpose. IT, however, did not come to Singapore by accident. Back in 1992, Singapore’s National Computer Board was charged with the task of transforming Singapore into an Intelligent Island. Its IT2000 Masterplan sets out to make information

technology pervasive in Singapore - at work, at home, in school and at play. Succeeding this Masterplan is
the Infocomm 21 which facilitates the development of the Infocomm industry over the next five years.²

The take up of IT in Singapore seems clear. The lingo is dot.com and almost every forward
looking businessman is setting up a portal or website, if not to trade, at the very least, to provide
information. And the Net is the arena where age knows no barrier. There is a 12-year-old boy in Singapore
who has four teens (all below 14 years) as business partners. They even have jobs knocking on their doors!
A local newspaper Project Eyeball (28 Sep 2000), reported that these young technopreneurs are offering
web design (S$500 for designing 10 webpages) and maintenance services and have landed themselves a
local school and some Australian school organisations as clients.

Tiny Glen Lee had at least eight interested clients and he even rejected offers by 30-something job
applicants who asked for ‘high pay’ (S$2,000). Glen only pays himself S$100 a month for one hour of
work a day from his bedroom office. His business partners (from Singapore, US and Europe) never meet
face-to-face. All discussions are held over the ICQ (real-time messaging). Speaking of his schoolmates
involved with the business, Glen said: “We don’t really get along well. We never talk about personal things
because we are not real friends. We are just working colleagues.” This of course is symptomatic of the
kind of human relationships we will have to deal with in future.

Partners in the Internet Scene

Let us now share with you Singapore’s experience and approach in managing the impact of the
Internet. The Singapore Broadcasting Authority (SBA) regulates Internet content in Singapore with a light
touch and in a practical manner. The SBA regulates Internet service and content providers through the
Internet Class License Scheme and the Internet Code of Practice to ensure that some basic standards are set
to protect public interest and the core values of society. Internet Service Providers (ISPs) and Content
Providers are automatically licensed and they are given a clear idea of their responsibilities. Internet
Content Providers are required to comply with the Internet Code of Practice which outlines what the
Singapore community regards as offensive or harmful to Singapore’s racial and religious harmony and
public morals.

Besides its light touch policy framework, the SBA also encourages the industry to self-regulate. ISP
are encouraged to take their own initiatives against undesirable contents and the Authority also
encourages the labelling of websites and supports international efforts at content labelling. As part of
industry self-regulation, ISPs have taken the initiative to implement Acceptable-Use Policies for their
customers to prevent abuses such as spamming and viruses. As a significant step, the three main ISPs also
offer parents the option of subscribing to special Family Access Network (FAN) services. These services
can, to a certain extent, filter out pornographic as well as other undesirable sites and provide an optional,

² The Infocomm 21 is Singapore’s blueprint for harnessing information communication technologies for
national competitiveness and improving the quality of life in Singapore. The InfoComm Development
Authority of Singapore (IDA), a Government statutory board, was created on 1 December 1999 from the
merger of the National Computer Board (NCB) and the Telecommunication Authority of Singapore (TAS).
hassle-free network solution to parents who are unfamiliar with the use of stand-alone filtering software such as CyberPatrol and NetNanny.

In Singapore, the community forms the third pillar of a three-pronged approach, where the government, industry, and the public co-operate to create a safer on-line environment for children. The Parents Advisory Group for the Internet (PAGi) leads the community effort. PAGi is a volunteer group of parents which serves as a support network for parents to share their ideas and concerns on guiding their children to use the Internet positively. PAGi empowers parents on on-line safety by conducting regular Online Safety Workshops, and collaborating in exhibitions and events organised by schools, libraries and community groups. We will discuss more about the efforts of PAGi later.

**Computer and Internet use**

Back to IT and the Internet. One of the reasons why Singapore could hop on to the IT bandwagon is its smallness. Because we are but a tiny island, wiring the nation becomes an achievable dream. Hence, the Singapore Government’s concerted efforts to promote the use of the PC and the Internet can bear and have borne much fruit.

Here are a few examples. Home computer ownership and home Internet penetration have increased substantially over the years. According to the IT Household Survey 1999\(^3\), only 11% of Singapore homes owned a computer in 1987. Ownership grew to 19% in 1990 and by last year, 59% of Singapore homes owned at least one computer! This is more than half of all the homes in Singapore! The percentage for Japan is 42%\(^4\) and US is 54%\(^5\). Another noteworthy point is that not only is PC ownership high, there is a general trend towards having more than one computer at home. Some 16% of Singapore homes have more than one PC. Also note that in some 80% of the households with computers, there are two or more users.

**Table 1: Computer ownership**

<table>
<thead>
<tr>
<th></th>
<th>1987</th>
<th>1990</th>
<th>1999</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership of computers</td>
<td>11%</td>
<td>19%</td>
<td>59%</td>
</tr>
</tbody>
</table>

Source: IT Household Survey 1999

Internet access also grew exponentially over the years from 9% of Singapore homes in 1996 with Internet access to 42% last year, according to the same IT survey. Again, Internet access in Singapore is relatively high compared to the 13% in Japan\(^6\) and 40% in the US\(^7\).

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3 The IT Household Survey 1999 is the fourth survey conducted by NCB since 1990. The report was released on 20 January 2000.

4 Nomura Research Institute, May 1999.

5 GartnerGroup’s Dataquest, Feb 9 & Arbitron New Media, 1999.


On Internet use, the IT Household Survey 1999 found that there were 477,928 internet account holders compared to only 88,473 in 1996, representing a five-fold increase in three years. As most households have family members accessing the internet without their own accounts (70%), the estimated number of home internet users was 764,680 in 1999, almost seven times the number in 1996 (114,368).

Table 2: Internet access

<table>
<thead>
<tr>
<th></th>
<th>1996</th>
<th>1999</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet access</td>
<td>9%</td>
<td>42%</td>
</tr>
<tr>
<td>Internet account holders</td>
<td>88,473</td>
<td>477,928</td>
</tr>
<tr>
<td>Home Internet users</td>
<td>114,368</td>
<td>764,680</td>
</tr>
</tbody>
</table>

Source: IT Household Survey 1999

According to the Infocomm Development Authority of Singapore, the number of Internet users in Singapore currently (as at October 2000) stands at 1.9 million or 48% of the 4 million population of Singapore\(^8\). The phenomenal growth in Internet use is in part due to the low cost of Internet subscription and in some instances, free access. The top five uses of the Internet are e-mail, information retrieval, news, web applications, play on-line games/watch movies.

Table 3: Top five uses of the Internet

<table>
<thead>
<tr>
<th>Use</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>e-mail</td>
<td>87%</td>
</tr>
<tr>
<td>Information retrieval</td>
<td>70%</td>
</tr>
<tr>
<td>News</td>
<td>25%</td>
</tr>
<tr>
<td>Web applications</td>
<td>20%</td>
</tr>
<tr>
<td>Play on-line games/watch movies</td>
<td>17%</td>
</tr>
</tbody>
</table>

Source: IT Household Survey 1999

E-commerce related activities such as on-line shopping with or without purchases attracted only 8% of the home users. So e-commerce is still in its infancy in Singapore. The IT Household Survey 1999 found that 35% of those not shopping and buying on-line gave ‘preference for physical shops for variety and price comparison’ as the reason. Perhaps it is the smallness of the country making shopping accessible, and the Singaporean passion for shopping as a leisure activity that are keeping e-commerce at bay! Low e-commerce notwithstanding, Singapore is billed as one of the most e-commerce ready countries in the world. It is ranked top in Asia and 8\(^{th}\) in the world for e-Business readiness by the Economist Intelligence Unit 2000.

\(^8\) www.ida.gov.sg/website/IDAhome.nsf/Home?OpenForm
**Digital divide**

We have taken some time to share some findings of the IT Household Survey 1999 to present a broad-brush picture of the computer and Internet scene in Singapore. While the statistics look impressive to the extent that we have come a long way in embracing IT, the advent of the Internet has also exacted a price.

There are some people left behind in the onslaught. The digital divide – the gap between the Internet savvy and those who are not – is confronting Singapore, albeit not as badly as in some countries, in part because Singapore has, right from the start, made the Internet easily accessible and affordable to all Singaporeans. According to the IT household survey 1999, the digital gap is steadily narrowing. PC ownership and Internet penetration among 1- to 3-room HDB flats\(^9\) owners (the lowest levels of public housing) have almost doubled in the past three years to 41%. This compared against the national average of 59% is encouraging. Internet use in this group is 27% compared to the national average of 42%.

<table>
<thead>
<tr>
<th></th>
<th>1-3 room HDB</th>
<th>National average</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC ownership</td>
<td>41%</td>
<td>59%</td>
</tr>
<tr>
<td>Internet use</td>
<td>27%</td>
<td>42%</td>
</tr>
</tbody>
</table>

Source: IT Household Survey 1999

The Singapore Government is trying to bridge the gap. While on the one hand, it is doing mass outreach programmes, it is also taking a more focused approach by tailoring specific programmes for different sectors of the population such as senior citizens, workers, homemakers and the youths. Community groups are mobilised to help in this targeted approach so that the programmes are more relevant to the audience.

The Government has committed S$25 million to promote PC and Internet awareness and use in the people sector through collaboration with voluntary welfare organisations and community groups. To help improve accessibility and affordability, a key initiative has been launched to benefit 30,000 low-income households with a monthly income of not more than S$2,000. Used PCs bundled with free Internet access and basic training are provided. Community clubs and centres are also given free broadband access. For this effort, the Government has obtained pledges amounting to S$3.12 million from six hardware and software providers as well as one ISP.

Late adopters of technology are being encouraged to board the bandwagon. There are e-Ambassadors trained to volunteer as guides and a helping hand to the late adopters. Some 2,500 e-Ambassadors will be marshalled to take on this effort. These e-Ambassadors have their own domain names.

\(^9\) Size of 3-room flat: 69 sq m.
and can create their own personal websites and give people personal e-mail accounts. The Government is also working with industry and community groups to have more relevant local content in other Asian languages to bridge the language gap.

The older generation catches up

There is also another divide arising from the arrival of the Internet. While the young can embrace new technology with relative ease, the older generation has found the Internet somewhat daunting and intimidating. Many do not understand how the information superhighway works as the only highway they know how to deal with is made of concrete and tar – very physical, can be seen, can be touched. They can deal with the TV. It is about sight and sound. They can deal with the telephone. They talk to each other. But the Internet baffles them. How do you get so much information and so many pictures to come out of a computer, they ask.

In Singapore, as part of the life-long learning promotion, the older generation is now also given a chance to get clued into this new way of life. In celebration of senior citizens’ week in November, Internet sessions were conducted. Led by their peers, early adopters served as e-Ambassadors in holding their hands as they tried checking out the Net. It is always easier to convince someone that he can do it when a peer member has done it. On a separate front, school-going children are also teaching their grandparents about the Internet and some are surfing with them. What a way to build inter-generational bonds!

Internet and the youth

We will now move on to discuss the Internet and its impact on the youths in Singapore. For the purpose of this paper, youth is defined as those aged between 15 and 29 years. This group accounts for 21% of the population (691,500 as at September 2000)\(^\text{10}\). Youths have become better educated over the years with the mean years of schooling rising from 8.4 years in 1984 to 11.3 years in 1999. Last year, some 622,372 people (16% of the population) were enrolled in educational institutions from Primary Schools to the University. Of these, 28% are in some 152 secondary schools.

Earlier, we discussed how Singapore embraced IT. To determine if school-going youths (secondary one) are receptive to the spread of IT in Singapore, the Nanyang Technological University conducted a study. The survey results are still being analysed. We will share some preliminary findings here.

But before we go into that, let us first provide an overview of the Singapore education scene with respect to IT. To prepare school-going youths for the challenges of the future, the Ministry of Education launched the *Masterplan for IT in Education* \(^\text{11}\) in 1997 to promote and diffuse IT to students. This enabled

\(^{10}\) Singapore 1999 Statistical Highlights, and Monthly Digest of Statistics (September 2000), Singapore Department of Statistics.

\(^{11}\) The Masterplan for IT in Education is an integral part of the IT2000 Masterplan.
students to learn and acquire hands-on experiences with IT as well as learn and use a multitude of computer and Internet applications.

The Government will be spending some S$2 billion over a five-year period to ensure that students in Singapore schools can have access to computers. There will be computers and networked schools. Physical renovations, software and courseware as well as teacher training will be financed. The plan is to give students hands-on use of computers for 30 percent of their curriculum time by the year 2002.

This year, the student-computer ratio is 6.6 to 1 in all primary schools and 5 to 1 in all secondary schools and junior colleges. By 2002, the Ministry of Education hopes to achieve a 2 to 1 student-computer ratio in schools. Teachers are already trained to use computers to prepare their lessons, to teach, to go through their students’ work and to communicate with students, peers and the Ministry of Education. IT is already part and parcel of the education process.

The Singapore Internet Project

The Receptivity of Youth Towards the Diffusion of IT study is part of the Singapore Internet Project (SIP) by the Nanyang Technological University's School of Communication Studies. As part of this project, a survey of 1,000 secondary one students was conducted this year. The study shows that students are receptive to IT and do respond positively to the Government’s push to introduce IT to students. Students are interested in and enjoy using IT. They report high levels of affinity for IT and hold positive attitudes about the benefits of IT to themselves and to other people.

They are also eager to use IT and initiate contact with IT as it is regarded as useful for getting information, either for schoolwork or personal interests. Information technology makes school work more interesting, and helps students understand and complete their assignments. IT also helps students stay in contact with friends, for example with the use of e-mail. Students are generally not apprehensive about IT. They do not find IT particularly difficult to use and neither are they unsure of how to use IT. Students are not confused by IT and are confident that they could handle IT, not fearing that they would spoil the equipment. These signs are very encouraging. The positive attitude means that they are likely to incorporate IT into all aspects of their lives.

However, when we take a closer look at the findings, the survey reveals some areas of concern. Students in the Normal stream (one level below the Express and Special streams) had lower levels of receptivity to IT compared with students from the Special and Express streams. Normal stream students had lower affinity levels, had less positive attitudes about the benefits of IT to themselves and to other people and were more apprehensive about IT.

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12 To be published.
13 The Special and Express streams are four-year courses that lead to the Singapore-Cambridge General Certificate of Education (GCE) ‘O’ Level examination. The Normal course is a four-year programme that leads to the GCE ‘N’ Level examination. A fifth year is available to pupils who do well in this examination to prepare for and take the GCE ‘O’ Level examination.
In addition, compared to those living in private residences, students living in HDB 1- to 3-room flats had higher apprehension levels. Being better off economically, students living in private houses could have had more opportunities to be exposed to IT. Some could have had computers and Internet access from home and were already familiar with computers and the Internet even before IT was introduced to them in secondary school.

The findings reinforce the need to bridge the digital divide so that the adoption of IT is more evenly spread and more will be brought on board the IT bandwagon as soon as possible. To this end, the widespread use of IT in schools and the cheap access to the Internet will help. The efforts by the Government and the community to bring IT to the grassroots should bear fruits.

**Internet influence**

While there is no fighting the tide of IT and the Internet, its invasion of our lives also meant infiltration of negative influences. Belief systems and values are in danger of being compromised as suddenly the population is offered a new window into the rest of the world. No more can we hide in the comfort of one society. The Internet has meant the merging of societal values in a world without boundaries. And with the good comes the bad.

For example, a recent poll on the Internet by *Project Eyeball* (19 Oct 2000) found that nearly half of the 235 teenagers polled said they had visited pornographic websites or have been propositioned on-line. A 15-year-old girl revealed that she had surfed for pornography several times a week for the past year. She said: “I think it’s an outlet for my raging hormones. Anyway, no harm done. I don’t do what the porn actors do.” She heard about on-line porn from her friends. She thinks she will “tire of it” soon. “I would die if my parents find out. But they don’t have to worry. I’ve got brains to think, you know. I won’t do anything silly.” And so she thinks and so we hope.

We know that some teenagers would rather ask the Net than ask their parents when it comes to sex. But as most of us who have used search engines also know, almost any innocent search would result in links to sex or sex related sites, most of which are pornographic in nature.

Indeed sex is the hot topic. *The Straits Times* (16 Oct 2000) reported that the word ‘sex’ is searched for more than any other word in Singapore, Malaysia, Taiwan, the Philippines, India and Hong Kong. A comparison between Lycos Asia and Catcha.com showed that ‘sex’ came out tops. So we all know that the problems and concerns are not confined to any one country or society.

In part to address this growing concern, sex education will be introduced officially into the Singapore classrooms next year (2001) for secondary 1 and 2 students who will watch a 36-minute sex-education video CD and discuss the topic with the teacher. There is also an interactive CD-ROM quiz. The sex education sessions will be conducted for at least three hours per year. The outcome of this venture will certainly be monitored.

The concerns are not just over pornography and sex. Things are being sold through the Net, including drugs. *The Straits Times* (23 Sep 2000) reported how an Internet savvy 18-year-old drug peddler met his match on the Net. The polytechnic student was arrested after he sold drugs to an undercover officer.
who posed as his ‘female’ Internet friend. He had agreed to meet the undercover agent to sell ‘her’ cannabis. This was the second case involving an arrest for peddling drugs over the Internet. The first was in July this year, an arrest of a 19-year-old youth for pushing ecstasy pills over the Net. The Police are aware of these covert activities and have set up special teams to monitor the Net for potential criminal activities.

Another area that has recently taken the youth scene by craze is the LAN computer game. LAN is in. Arcade is out. Youngsters are thronging LAN (Local Area Network) centres to fight each other in teams. *The Sunday Times* (1 Oct 2000) reported that major shoot-outs are taking place all over the island at S$2 - S$5 an hour. *Project Eyeball* (11 Oct 2000) reported that there could be 200 of such centres in Singapore in a year. They open and close as quickly. These Game centres could be ground for gang recruitment to boost their ranks. The Police are aware of the change, and anticipating a potential problem when these centres started a year ago, they have been keeping a close watch over them.

The Police are also monitoring the number of computer crimes which rose from 39 in 1997 to 185 last year. Some 75% of the accused persons are youth, some aged as young as 13 years. According to the Police, between January and June 2000, there were 127 computer crimes reported, mainly involving the use of another person’s Internet account and computer password without his permission, as well as hacking. The courts take a very serious view of such crimes and Chief Justice Yong Pung How has ruled that custodial sentences rather than probation would be the consequence that youths will have to face.

**Youth and cyberporn**

We do not want to be alarmists. Indeed, the anecdotal accounts highlighted by the newspapers tend to be a little more sensational in nature. But the reality is that as today’s parents confront IT and the Internet age, they are finding themselves way behind their children in keeping abreast with the changes and developments. And the availability of cyberporn has become a concern.

Psychologists and psychiatrists in Singapore have reported that they are starting to see cybersex addicts among their patients. Some experts dispute whether obsession itself is a major problem, while others say it is the habit that is the problem, not the Internet, which is only the medium of transmission. Some argue that the Internet is causing people to become isolated and cut off from real relationships, as they bury themselves in the Web. Others say they have found genuine relationships through the Net and rekindled old friendships as lost pals find each other. Be that as it may, the Internet has caused some concern as parents realise the level of access to pornography and negative influences though they are tentative about what needs to be done.

Last year, the Nanyang Technological University School of Communication Studies conducted two surveys to study the relationship between cyberporn and censorship among student and adults.\(^\text{14}\). We will share the findings of the Student Survey and contrast them with the findings of the Adult Survey - the responses from parents with children in school who are Internet users (n=88) are discussed.

\(^{14}\) “Cyberporn and Censorship” (Lui and Yeo, 1999/2000).
**Student survey**

For the Student survey, some 553 students (secondary 2 and 3) from eight schools filled questionnaires in the classroom setting in schools. A high percentage of student respondents (84%) were Internet users. These users had been using the Internet for an average of two years (23 months) and 80% have Internet access at home. Furthermore, the users were rather Internet-savvy.

**Table 5: Ability to perform Internet tasks**

<table>
<thead>
<tr>
<th>Ability</th>
<th>Ability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Send e-mail</td>
<td>83%</td>
</tr>
<tr>
<td>Print or save information from the Web</td>
<td>92%</td>
</tr>
<tr>
<td>Use search engines</td>
<td>79%</td>
</tr>
<tr>
<td>Participate in on-line chat sessions</td>
<td>82%</td>
</tr>
<tr>
<td>Download software, photos, videos and audio</td>
<td>80%</td>
</tr>
<tr>
<td>Set up a Web page</td>
<td>45%</td>
</tr>
</tbody>
</table>

Source: Cyberporn & Censorship 1999/2000

**Access to pornography**

Some 40% of the Internet users said they knew how to visit Internet sex sites and 30% had visited Internet sex sites (52% of the parents have visited Internet sex sites). Some 26% of students had visited sex sites more than a few times with 3% still visiting currently. Those students who visited Internet sex sites regularly, did so about eight times a month, spent 70 minutes during each visit, and had visited for about one year. (14% of the parents said they were still visiting sex sites regularly).

**Table 6: Pornography and sex sites**

<table>
<thead>
<tr>
<th></th>
<th>Students</th>
<th>Parents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visited Internet sex sites</td>
<td>30%</td>
<td>52%</td>
</tr>
<tr>
<td>Still visiting Internet sex sites</td>
<td>3%</td>
<td>14%</td>
</tr>
</tbody>
</table>

Source: Cyberporn & Censorship 1999/2000

Some 58% of students who have viewed sexual materials in the off-line media have also visited Internet sex sites. And 22% of the students who have not viewed sexual materials in the off-line media, have visited Internet sex sites. More alarmingly, only 11% of parents thought that their children visited Internet sex sites with a third of the parents admitting that they did not know of the situation.
Table 7: New levels of access

<table>
<thead>
<tr>
<th></th>
<th>Students</th>
<th>Parents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not viewed sex material off-line but have visited sex sites</td>
<td>22%</td>
<td></td>
</tr>
<tr>
<td>Think children visit sex sites</td>
<td></td>
<td>11%</td>
</tr>
<tr>
<td>Don’t know if their children visited sex sites</td>
<td></td>
<td>33%</td>
</tr>
</tbody>
</table>

Source: Cyberporn & Censorship 1999/2000

Parental involvement

Of the student Internet users, 83% never or rarely used the Internet together with their parents. Only 3% did so often or very often. Of the parents with children in school, 62% never or rarely used the Internet with their children. Only 6% often or very often used the Internet with their children. Some 53% of the students never or rarely talked to their parents about their Internet activities. Only 15% talked to their parents about their on-line experiences often or very often.

Of the parents, some 40% never or rarely talked to their children about what they did on the Internet. Only 26% talked often or very often to their children about their on-line experience. Thus, communication between parents and children about on-line experiences seems to be lacking.

Table 8: Parental involvement

<table>
<thead>
<tr>
<th></th>
<th>Students</th>
<th>Parents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never/rarely used Net with parents/children</td>
<td>83%</td>
<td>62%</td>
</tr>
<tr>
<td>Often/very often used Net with parents/children</td>
<td>3%</td>
<td>6%</td>
</tr>
<tr>
<td>Never/rarely talked to parents/children about Net</td>
<td>53%</td>
<td>40%</td>
</tr>
<tr>
<td>Talked to parents/children often about Net</td>
<td>15%</td>
<td>26%</td>
</tr>
</tbody>
</table>

Source: Cyberporn & Censorship 1999/2000

What about rules and trust?

Some 61% of the students reported that their parents did not set rules on their Internet use and 15% said their parents set rules but they sometimes or almost never followed. Students whose parents did set rules, and said that they followed them most of the time, constituted only 24%. On the other hand, 65% of parents reported that they did not set rules on their children’s Internet use. Of those who did set rules, 83% believed that their children followed the rules most of the time. What a perception gap!
Table 9: Rules set and not followed

<table>
<thead>
<tr>
<th></th>
<th>Students</th>
<th>Adults</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents did not set rules over use of the Net</td>
<td>61%</td>
<td>65%</td>
</tr>
<tr>
<td>Rules set but did not follow</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>Rules set and followed</td>
<td>24%</td>
<td>83%</td>
</tr>
</tbody>
</table>

Source: Cyberporn & Censorship 1999/2000

In general, parents trusted what their children did on the Internet. Some 63% reported that their parents had a lot of trust in them, and 33% said that their parents had some trust in them. (Parents’ response to these questions were 63% and 34% respectively)

Perhaps, it was due to the trust that a high proportion of parents never or rarely used the Internet together with their children, never or rarely talked to them about Internet experiences and did not set rules on their Internet use. Or could it be that parents trusted their children in part because they knew no better or lived in the belief and/or hope that all will be well given the passage of time, or that their children will mature and grow out of it? Or that parents, while being uncomfortable, did not know what to do about the discomfort? The Parents survey showed that they (56%) were not very confident in supervising their children’s use of the Internet though they were very concerned (49%) or somewhat concerned (34%) that their children could be exposed to sexual materials on the Internet.

Table 10: Rules, trust and supervision

<table>
<thead>
<tr>
<th></th>
<th>Students</th>
<th>Parents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents did not set rules over use of the Net</td>
<td>61%</td>
<td>65%</td>
</tr>
<tr>
<td>Parents trust their children’s use of the Net</td>
<td>96%</td>
<td>97%</td>
</tr>
<tr>
<td>Parents not confident with supervision</td>
<td>56%</td>
<td></td>
</tr>
<tr>
<td>Parents concern over exposure to sex over the Net</td>
<td>83%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Cyberporn & Censorship 1999/2000

In summary, the survey findings show:

1. Both parents and students have visited or are visiting sex sites, bypassing the existing regulatory framework to access pornography on-line. Almost a quarter of the students who have not viewed sex material off-line have visited sex sites.
2. Parents generally do not use the Internet with their children. Communication between parents and their children about their on-line experience is lacking.
3. Parents generally trust their children in the use of the Internet and do not set rules on their children’s use of the Internet.
4. Though parents are concerned that their children may be exposed to sex materials on the Internet, they are not confident with their supervision over this.
These findings reflect a general feel that parents are struggling with the new goggle box – the Internet.

Help from Government and people sector

A cautionary note is in order here. Just because we mention the surveys that address cyberporn does not mean that Net pornography has overwhelmed Singapore. We are merely highlighting some concerns and bringing attention to the efforts to deal with these concerns. And these concerns have certainly not been left unchecked. The Government and parents themselves have started the face off. We will mention a few programmes being undertaken.

PAGi

Since its formation, PAGi has reached out to some 9,000 parents through its activities. The membership base stands at 300. In its first year, PAGi has spearheaded a significant number of activities to spread the on-line safety message and to empower parents on how they could guide their children on the safe and discerning use of the Internet. PAGi worked with Childnet International in the United Kingdom and CyberAngels in the United States to put together a public education programme tailored for local parents.

It has conducted On-line Safety Workshops to inform parents of the potential of the Internet, ways in which children could use the medium, on-line dangers, and precautions to take for a safe and enjoyable surfing experience. The programme educates parents about user empowerment tools such as the Family Access Networks services (FAN) offered by the ISPs. It also conducted multi-lingual workshops to reach parents who are more comfortable using their mother-tongues.

PAGi has also built an on-line community of parents, through the PAGi website (www.pagi.org.sg), which hosts a discussion forum where parents can exchange views and ideas on on-line safety concerns. The site has tips for parents and a list of positive sites for children, which is being extended with the help of its volunteers. PAGi gives talks at schools and community centres and also participates in exhibitions to promote the on-line safety message further.

PAGi has made the promotion of positive content a focus for the year 2001. The Internet Content Rating Association (ICRA) invited PAGi and other international on-line safety organizations to develop third party templates based on descriptors/vocabulary used by service providers to self-rate their content. PAGi is planning to develop third party templates for children from 8 to 12 years old, as children at these ages are most impressionable.

PAGi has also offered to provide a list of positive sites to correspond with the templates. These templates and the list of positive sites will be incorporated in the revised RSACi rating system operated by ICRA. Parents can then choose which third party templates they would like to adopt.
Next year, PAGi together with the National Internet Advisory Committee (NIAC)\(^{15}\), and supported by the SBA will be holding the world’s first International convention on on-line safety in February next year. Dubbed “Safe Surfing 2001” (www.safesurfing2001.com), this convention provides a platform for companies and community groups to come together to share their experiences and ideas on promoting online safety. Local and overseas participants who are concerned about the increasing number of children using the Internet for education, communication and entertainment, can look forward to discussions on online safety practices around the world. Another highlight is an exhibition with a display of advanced services and applications for ensuring safety on the Internet.

PAGi is also planning the Best Sites Awards to spur the development of positive content for children and create awareness of on-line safety issues. This will take some of the focus away from talking about undesirable sites, and bring focus on to good ones and get parents and children excited in taking the Internet journey together. To encourage family surfing, PAGi has created a ‘Family’ category so that parents and their children can work together towards better understanding of the positive uses of the Internet. Their joint efforts will be showcased at the Safe Surfing 2001 public forum. The Awards are open to individuals, schools, families and community groups.

**Manual on parenting teenagers in the Internet age**

Another effort to help parents navigate in the world of the Internet is undertaken by the National Youth Council (NYC), a Government department looking after the development of youths in Singapore. As Singapore has no natural resources, its people are the most important resource and the Government is sparing no efforts to help our youths keep on the right track.

An Inter-Ministry Committee on Youth Crime (IMYC) was set up in 1995 to monitor the trends among youths and youth-related crimes, as well as to take prevention actions to keep youths from crime and rehabilitate young offenders. The NYC serves as the secretariat to the Committee chaired by Minister of State for Law and Home Affairs, Associate Professor Ho Peng Kee. Members of the IMYC include senior representatives from the Ministry of Home Affairs, the Ministry of Community Development and Sports, the Ministry of Education, the Singapore Police Force, the Subordinate Courts, the Prisons Department, the National Council of Social Services and the NYC.

Realising the need to tackle the potential ills of the Internet, the IMYC appointed TOUCH Community Services (TCS), a voluntary welfare organisation in Singapore earlier this year, to prepare a manual to help parents manage parenting issues surrounding the use of the Internet. The focus is deliberately placed on teenagers as these are the ones whom parents have the most difficulties reaching. It is an attempt to keep a balanced approach towards the use of the Internet by providing those who talk to

\(^{15}\) NIAC was formed in 1996 and acts as an independent body to advise and assist the SBA on Internet policies. Comprising a wide cross-section of representatives from industry, community and academia, the NIAC’s main focus is the protection of the young from inappropriate content, while promoting wider use of the Internet.
parents, such as the family educators, counsellors and social workers, with some tools to increase their awareness of the Internet and its use.

Just released in Singapore this month, this Manual also provides a broad overview of the Internet as a resource as well as point out some of the potential potholes in the information highway. It helps parents keep aware of Net knowledge and skills that can be acquired and gives them some wholesome and safe cyber tips so that they can effectively guide their children in cyberspace.

For example, there is a section that walks parents through in deciding when to grant Internet access to the children. There is also a section surfacing the issues and concerns with regard to the Internet, a section on the cyber crime scene and what the Police are doing. And of course, there is a section with tips to help parents manage the difficulties in handling the issues of use and misuse of the Internet.

**Parenting and communication**

The crux of the matter lies in whether the parents have established good communication with their children. If that is in place, the family values can be passed on effectively. Such parents will find that they will manage fairly well. So we are back to communication as the foundation. To build good rapport and communication, parents need to get on the Net, surf with their children, learn from them, and be good role models. Parents have each other for support in this quest. They can band together and share their journeys as PAGi is providing this forum.

The extended family is a resource which is seldom tapped. For example, where a parent is seen to be too restrictive, an aunt, uncle or a grandparent, can step in to help in the mentoring process, but not so that the parents can abdicate responsibilities. However, tapping on the extended family must come with a clear understanding of the desired family values to be reinforced. Otherwise, the children will be very confused.

The surveys mentioned earlier have already revealed that parents, while being concerned that their children are exposed to materials on sex on the Internet, are themselves also ‘checking out the forbidden fruit’. Such double standards communicate very confusing family values.

Through the Manual, parents are challenged to be as cool as their children but they are also reminded that their teens are watching their behaviour all the time. In short, parenting on-line is no different from parenting off-line. The problem is nailed down to communication and how well they connect with each other.

Well, counsellors too advise that the solution to raising children in the cyber era is found in parenting and communication. But we have heard that before. Our parents did that too. So what is so different? While the exhortations remain unchanged, we are now realising that we cannot raise our children the same way our parents did.

To begin with, our parents’ rein over us was extremely tight when we were kids and then when we turned teenagers, they began to let go. But that freedom did not always come with the knowledge of the good and bad, and more importantly, the not so good and not so bad. So when we were let loose, we fumbled along trying to figure things out for ourselves and bumbling along in making choices and
decisions. That has not been too disastrous in the past because in the Asian context, the family was still fairly intact and bonds were strong so the letting go did not, in most cases, result in overwhelming problems.

But in today’s context, this age-old method of parenting does not work. Children are more inquisitive. They know more at a much younger age. They begin to reason even before they get into nursery school. Children cannot be raised using the old tried and tested methods. They will not just shut up when told to. In the Internet Age, children have to be taught from young to discern and parents cannot over protect them. Parents must reason with them and be brave enough to exert authority when their children break rules. But first, parents must set boundaries and communicate these boundaries, early.

Second, when we were young, our parents controlled us and kept us from the bad guys by keeping us at home. That, in a way, helped us stay on the straight and the narrow path. Today, children are kept at home, in front of the computer with the parents literally putting the key to pornographic material into their children’s hands - Pornography is just a mouse click away.

**Youths as change agents**

So do we lock the computer up and throw the key away? That is not really an option as the children, especially the youths can get access elsewhere!

There is a potential way around this challenge. The IT Receptivity Survey that we referred to earlier revealed another telling finding. The study showed that friends, as peers, were most effective in influencing students' receptivity to IT. They have a positive effect on the students' affinity levels and helped them form favourable attitudes about the personal benefits of IT and the benefits of IT to other people. Friends also lowered IT apprehension levels. More interactions with friends about IT made students feel more comfortable and confident around IT.

This means the youth are themselves the best change agents. As a second phase to the Parent’s Internet Manual project, TCS is currently working with the IMYC and NYC to prepare a series of roadshows for secondary students to persuade them to help themselves.

The idea is to bring an adaptation of the Parent’s Internet Manual to the schools where the teens are and spread the word that they can be a positive influence to their peers and indeed be positive peer mentors in the Internet age. Rather than let this be a self-realisation process which is left to chance, the roadshow will visit secondary schools to proactively share this empowering message: “You can make a difference to the Internet scene”. The proposal is to begin with secondary one students as this is a prevention and pre-emptive programme and there will be four to five years of follow-through in the same school with these students.

The roadshows will involve a talk on why there is a need to be a positive influence and how to do it and still be cool. This is important as teens want to be with the ‘IN” thing and ‘COOL”. The intention here is to invoke a realisation on the teen that he does not need to be rude and obnoxious in a chat room to be cool. That he and his friends can enter a chat room and moderate the discussions and be a positive influence to how the discussion proceeds and progresses. That cyber crimes are very real and the
Consequences of the misuse of passwords and hacking are also very real etc. The work on this second phase will begin next year.

Conclusion

We have in the foregoing attempted to take you on a quick tour of the Internet world in Singapore, specifically providing a peek into the Internet world of the youth. There is no doubt that all sectors of the Singapore population are being urged to take the trip on the information highway. Efforts are abound to help as many as possible and efforts are afoot to make sure that people are not marginalized in this great march forward.

In the future, there will be many more surveys to be conducted to determine many trends. There will be many more projects undertaken to keep the beast of the Internet at bay. We have mentioned earlier the survey result of students and parents visiting sex sites and that some are still continuing in this activity.

The flip side of the coin should be made known as the survey also revealed that nine in 10 of those (students and parents) who visited Internet sex sites no longer do so. Perhaps, they have grown tired of it? So is self-regulation alive in Singapore? One would hope so. Certainly strong and good family values will help this process.

And if you need convincing that the picture is not so grim, here are some more survey findings to show that youths are not always caught up with the Net. A survey of youth activities and interests carried out for the NYC16 showed that about a third of the 600 youths polled were most interested in outdoor sports and 23% most interested in popular entertainment. Only 7% of the youths indicated that they were most interested in computer-related activities. From a list of 84 activities, a third of the youths surveyed indicated that they had surfed the Net in the past six months.

When asked for the three best like activities, only 4% indicated Net surfing as one of the three, with the Net losing out to watching movies, listening to music, shopping, gathering with friends, watching TV/VCD and even swimming. And when asked to indicate what new activities they would be interested in in the next one year, the Internet was not listed. The youths preferred outdoor thrills such as travelling, scuba diving and tennis. Among the youths who were not involved in any activity in the past six months, even if they were given free time, three in 10 youths would chat with friends and one in four would sleep or nap!

This should prompt a quick bell in us all. Instead of getting caught up with lamenting over the ills of the Internet and over react in response to the potential problems surrounding the misuse of the Net, another way to tackling the Net’s challenge is to look at providing alternatives to the Net as a life style. The youths have themselves told us so!

As for those of us who have to deal with the problems involving the Internet and our children, we would like to share with you the truth of this statement: The best filter – for anything, not just for

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16 A survey on youth activities and interests (Yeo and Chow, 2000).
pornographic and BAD sites – is the one in you and me! So we can all make a difference. And in the lingo of the Net chatters, gtgn. ttyl. (got to go now, talk to you later).

With that, thank you for your patience.

End

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**Biography:**

Miss Toh Su Fen is the Special Assistant to the Executive Director of TOUCH Community Services, a leading voluntary welfare organization in Singapore. Miss Toh prepared the contents of the first national resource package on “Parenting Teenagers in the Internet Age” for educators, social workers and counsellors. The manual, commissioned by the Inter-Ministry Committee on Youth Crime, has just been released in Singapore. Miss Toh is also a volunteer with the Parents Advisory Group on the Internet, a voluntary organisation helping Singapore parents to empower them to help their children be discerning and responsible in using the Internet. Miss Toh has some 20 years’ experience in journalism and corporate communications in the government sector. Miss Toh has a Bachelor of Science degree from Singapore. She is a lawyer, trained in England and Singapore. She also holds a Master of Laws from London.