- share information using a range of information and communications technologies
- locate, gather and organize information using appropriate technology and information systems
- access, analyze and apply knowledge and skills from various disciplines
- observe and record date using appropriate methods, tools and technology
- plan, design or carry out a project from start to finish with well-defined objectives and outcomes"

Conference Board of Canada.
Employability Skills 2000+.
<http://www.conferenceboard.ca/nbec>
15 Dec 2000.

Technology integration does not just happen. Even today I am amazed at the new graduates coming from the Faculties of Education who lack technology skills. If the teacher does not have a comfort level, the technology gets ignored and the students miss the opportunity. Thus the need for a systematic, sequential approach to ensure that expectations are clear and that students have learning opportunities.

It is not difficult to come up with the kinds of skills which should be covered in an ICT curriculum. A review of current curriculum documents, done electronically using key search terms, quickly starts to build a solid database of technology expectations. Another solid starting point to consider would be the OSLA *Information Studies* document. Additional lists of expectations and standards abound on the Internet.

Some Web sites have been created by individual schools or boards and are used to publish their specific expectations, but my favourite sites are ones which show a broader regional or national approach. Some of the deeper thinking and societal growth described at these sites can truly spark you to want to make it happen for your students too! Both the NCREL and the ISTE-NETS sites are American in content but well developed, and worth a look.

The North Central Regional Education Laboratory (NCREL), a nonprofit education research organization, compiles a list of essential skills needed for success in the 21st century and has updated it annually since 1995. <http://www.ncrel.org/engauge/>

The National Educational Technology Standards Project

"Due largely to economic and social changes driven by the dramatic growth of the Web and E-commerce, today's world is different … our students need schools that reflect those differences. A well-developed, forward-thinking vision in such schools emphasizes:

Digital Age Literacy
- Basic, scientific and technological literacies
- Visual and information literacies
- Multicultural literacy and global awareness

Inventive Thinking
- Adaptability, managing complexity and self-direction
- Curiosity, creativity and risk taking
- Higher-order thinking and sound reasoning

Effective Communication
- Teamwork, collaboration and interpersonal skills
- Personal, social and civic responsibility
- Interactive communication

High Productivity
- Prioritizing, planning and managing for results
- Effective use of real-world tools
- Ability to produce relevant, high-quality products"

NCREL
<http://www.ncrel.org/engauge/skills/skills.htm>

The International Society for Technology in Education (ISTE) published the National Educational Technology Standards (NETS) project in April 2000 and updates the site regu-