



F u t u r E d

....helping change learning systems in the future for the future

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**ePortfolio 2006 and Beyond -  
A Call to Action**

An ePortfolio, in simplest terms, is an **electronic portfolio of acquired learning** – knowledge, skills and abilities acquired through formal, non-formal, informal, accidental and incidental learning. It can be used by individuals to demonstrate learning and personal achievement, by educators and employers to assess ability and employment suitability, by agencies and businesses to show positive change and organizational achievement.

FuturEd has studied and promoted the ePortfolio since 1997. FuturEd research demonstrates that the ePortfolio is linked closely with:

- Human resources development and **Human Capital Management** – as the means of identifying and managing what a person and a group of persons knows and can do;
- **lifelong learning** – as the method of tracking and recognizing ongoing learning, as an incentive to the lifelong learning requirement;
- **Prior Learning Assessment** – as the outcome of the PLA process of exploring and determining an individual's non-formal and informal learning;
- **education and training at all levels** (K-12, PSE and workplace) - as a teaching tool (reflection as a basis for learning), as a learning management tool (e.g., project-based learning) and as an alternative form of learning assessment;
- **eLearning** – as a type of Knowledge Management, a part of a Student Information System and a potential form of "Usable Learning Object" repository;
- **learning organizations** – as a means of tracking and developing human capital and assisting professional development of employees within organizations across sectors;
- **community economic development** – as an inventory of collective community human capital assets;
- **future learning systems** that rely less on credentials and more on competencies in order to generate transparent and credible labour mobility;
- **cultural archiving** of traditional and indigenous wisdom;
- **social networking** and social capital development through the development and use virtual communities;
- **digital identity** and the creation of secure, private digital archives for all citizens.

This speaks to incredible array of ePortfolio uses, the complexity of the ePortfolio concept, and the vast, unrealized potential.

The ePortfolio has been formally defined as “a collection of authentic and diverse evidence, drawn from a larger archive representing what a person or organization has learned over time on which the person or organization has reflected, and designed for presentation to one or more audiences for a particular rhetorical purpose” (National Learning Infrastructure Initiative, 2003). There are two concepts in this definition, the digital archive and the purpose-driven presentation, we will examine each separately.

The term “ePortfolio” is used to encompass (1) tools, products and systems that can be used by (2) individuals, educators, employers and entire nations for the purposes of (3) describing, assessing, recognizing and using knowledge and skills acquired through all forms of learning with evidence that is digitally created, stored and managed through (4) practices that meet standards assure transportability, usability, and security. At it’s most simple, it may resemble a personal homepage or an electronic resume, and at its most complex, it may become a person’s digital identity. The understanding and application of ePortfolio concepts is very multifaceted and rapidly evolving, so let’s examine this complexity in February 2006 and speculate on where the field is going.

### **(1) Tools, products and systems**

To this point, tools associated with the ePortfolio have largely been:

- ⇔ **software applications** developed and marketed by commercial firms for use in specific markets, e.g., learning assessment for elementary, secondary or higher education; and/or
- ⇔ software applications acquired and adapted by agencies or institutions for their own specific purposes, e.g., course-specific learning records or employee skills assessment.

These applications have been developed from very different perspectives and applications, for example:

- digital storytelling tools to record changes, achievements and cultural artifacts by children, families and communities;
- learning assessment tools to demonstrate expected learning outcomes by students of all ages;
- digital inventory tools to assemble and display capabilities, with supporting evidence, by artists, athletes, businesses, agencies or communities;
- reflective learning tools to promote and support individualized learning through the thoughtful examination of experience;
- electronic tools for authentic assessment of learning in non-academic areas, workplace experience or informal training;
- management tools for student information systems and knowledge management systems;
- cultural archiving and media exploration by Aboriginal communities;
- quality assurance tools for comparison of product quality to standards of excellence or professional standards of accreditation.

There are as many tools and approaches as perspectives and applications, and this led ePortfolio experts, under FuturEd leadership, to set out quality criteria to promote transferability, usability and security of ePortfolios among and between ePortfolio application environments.

## PRIVATE and CONFIDENTIAL

These software applications or tools are imbedded in such industries as:

1. new media, e.g., as digital storytelling and digital archiving;
2. eLearning, e.g., as technological assessment and digital learning records;
3. ICT industries, e.g., as knowledge management software and digital communications;
4. human resources management, e.g., for recruitment, placement and advancement.

Until recently, ePortfolio tools focused largely on the presentation of information, with an archive of digital data that derived from the associated purpose of the presentation, i.e., the archive was created with the purpose in mind. However, new ePortfolio tools include digital environments for assembling and managing documents and all forms of media in a digital archive, and/or software applications for assembling and sorting portions of that archive for a particular purpose, e.g., applying for a job or seeking course credit. In the future, the archives will come first, with ePortfolios created when and as needed.

To this point, few **ePortfolio systems** have been developed, i.e., there are tools for production of ePortfolios but few tools for systematic reception and utilization of ePortfolios. Tools have been acquired by institutions and agencies, largely for use by ePortfolio creators – that is to say, tools are made available to students, for example, to present their acquired learning to teachers for assessment and credit. Few tools include a computer-based method of processing the digital presentation, i.e., processing can be very labour-intensive. Most recently, ePortfolio systems are being developed for use by “receivers” of ePortfolios as well, i.e., software applications that may be either one ePortfolio tool used by both creators and processors, typically standards-based ePortfolios and/or software applications that can pull what a processor might require from any ePortfolio tool by, e.g., a word search or a marking rubric.

In summary, the ePortfolio is about both process and product. ePortfolio tools help creators to identify and reflect on the outcomes of learning experiences, to produce archives and presentations. One particularly appealing part of the ePortfolio is the use of multi-media, i.e., the utility of audio files in demonstrating language or musical competence, the utility of video files in demonstrating skills, the use of social networking and blogging for establishing references.

### **(2) ePortfolio applications and users**

Creators of ePortfolios – both digital archives and digital presentations - can be individuals, organizations, even businesses – and they can be the receivers/processors as well.

Individuals may use ePortfolios for the demonstration of achievement and management of their own lifelong learning. Sometimes individuals create ePortfolios more as process than product, i.e., more for reflective learning than showcasing themselves. In their digital archives, they may assemble all the formal, digital records that exist about them and their learning created by themselves and/or created by others, e.g., health providers and police departments.

Educators may use student ePortfolios to assess student learning, the quality of courses and entire institutions. Trainers may use ePortfolios to assess prior learning, target training, and provide alternative credentials. And, like all others in the employment environment, educators may use their own ePortfolios for learning management and career advancement.

Employers may use ePortfolios for recruitment and placement purposes, especially in knowledge-based environments. More importantly, they can better utilize the entire inventory of skills and knowledge in their workforce in a fashion known as human capital assets management.

Entire nations may provide the opportunity for citizens to have a digital archive. This is a complex public policy area to be explored. It has been argued that, in a digital world, each person must be able to present him/herself digitally. From another perspective, there is a great deal of digital information “out there” for each and every person; and the personal archive becomes a place to assemble that information and take ownership of it. From yet another perspective, ePortfolio tools provide for transparency of credentials and work experience to enable recognition of foreign credentials and to promote labour mobility. There is vast utility to a digital archive and a digital identity for all citizens, as **an opportunity** and not a requirement.

### **(3) The new management of learning**

In the past, we've formally managed learning by awarding and expecting credentials; this has been the function of the formal education system and various professional bodies. Employers use credentials as an approximate proxy for acquired skills and knowledge, and have, until now, had few other efficient tools for assessing actual skills and knowledge that individuals represent. We now understand that people acquire skills and knowledge from that formal learning, from informal and non-formal learning in the workplace and the community, from accidental and incidental learning in travel and human relations, but until we had an ePortfolio, we had no tool for manage that learning effectively and efficiently. So my son, who hasn't finished school but who has had a very successful business, is still called a “dropout” in Canada where we continue to think that people without credentials are likely to be stupid or criminal. We need to manage learning differently.

The digital archive is the place to record learning from environments over a lifetime; the ePortfolio becomes a presentation drawn from the archive for a specific purpose. This gives recognition to all forms of learning, and more importantly, the opportunity to **use** all forms of learning for the good of the individual, community, enterprise or nation. A purported ePortfolio that contains only formal learning is a simple digital transcript. The ePortfolio can be an alternative credential for those without formal credentials, such as early school leavers, and for those without recognized credentials, such as foreign-trained workers.

The process of creating both an archive and ePortfolio is one of translating experiences to a set of skills and knowledge and providing supporting evidence. More explicitly, the process is one of collection, selection, reflection, projection and presentation of learning. Without evidence of these processes, a purported ePortfolio is a simple digital resume.

### **(4) Effective and efficient ePortfolios**

The successful use of ePortfolios and implementation of ePortfolio systems, including digital archives and tools for end-users, will require attention to making them effective and efficient. The first time students are told they can't take their ePortfolios with them to the next level of education or to the workplace, they will question the value of investing time and effort in creating a second ePortfolio. The first time employers receive an abundance of ePortfolio applications for one job, they will question the wisdom of the process. Recognizing the pitfalls, groups of experts are creating technical standards for interoperability and transportability of ePortfolios and digital archives, i.e., removing the barriers. More importantly, ePortfolio experts worldwide have asserted the critical importance of personal ownership of one's ePortfolio, secure storage and access, affordability and utility to ensure ROI. To contribute to making ePortfolios effective and efficient, at FuturEd we have led in the development of internationally recognized ePortfolio Quality Standards and an ePortfolio quality checklist, a Consumer's Guide for making informed choices between ePortfolio tools and services, an ePortfolio consultation and training service, countless presentations and papers. But without panCanadian collaboration, ePortfolios will not achieve the immense potential for positive, proactive change in the management of learning, human capital and social capital. Many Canadians will have opportunities to create ePortfolios as students or trainees, but what is needed is the service that makes the ePortfolio transportable across learning and working environments. I founded and Chair LflfA to do that – to ensure that ePortfolios are lifelong tools.

## A Call to Action

***An ePortfolio for Every Citizen! One ePortfolio for Life!*** Since 2004, these have been the rallying cries of the Learning Innovations Forum d'Innovations d'Apprentissage (LifIA) and the European Institute for eLearning (ElfEL) in their combined, worldwide advocacy and research efforts.

*One ePortfolio for Life* means that a person should be able to carry his/her ePortfolio for a lifetime, from school to work to retirement; i.e., there should be no need to recreate one's ePortfolio; there should be return on the initial investment in an ePortfolio. With the rapid proliferation of ePortfolio initiatives and competing interests, there is an urgent need for collaboration between ePortfolio initiatives; informed and impassioned leadership on a nation-wide basis.

By *An ePortfolio for Every Citizen* we really mean that every citizen should have the opportunity to create and maintain a digital archive – a place on the Internet to collect and use digital materials created by oneself and others, a place to create and manage both social and human capital assets, a place that is owned by the individual, unquestionably secure, and accessible only by whomever the individual allows.

There is no need to choose one ePortfolio tool or approach. ePortfolio tools and services will morph and improve over time, ePortfolio tools will be created and used for a vast array of purposes.

There IS a need to create an online environment where all citizens can create, maintain and use their digital identity to advantage. To be effective, it cannot be a commercial service ultimately controlled by business interests, and it cannot be a government service that reminds people of Big Brother; it must an environment managed by a national non-profit agency that cuts across all the separate applications in education, employment, citizenship and community learning. The service must be trusted, professional and accountable to individual users. It must be useful, reliable, and engaging.

On behalf of Canadians, LifIA stands ready to provide that ePortfolio service. LifIA is licensing the most cutting-edge ePortfolio environment and creating a secure and enduring ePortfolio hosting service. LifIA will ensure that all Canadians have access to a digital archive and ePortfolio presentation tools that account for all their learning and create effective transitions between school, work, community and lifelong learning. Already, LifIA is the only body providing leadership and collaboration, and we believe that national, visionary leadership is necessary to ensure that the ePortfolio world does not become fragmented and competitive. But LifIA cannot do it alone.

### **Here's where we start:**

1. Create your own ePortfolio. Contact LifIA or FuturEd. We'll help you. You'll be amazed at how much you know and can do, beyond what your formal credentials and work experience say about you. You'll be impressed at the uses you will find for your digital archive. You'll be ready to manage your career and your lifelong learning agenda.
2. Wherever you can, support programs to ensure that all teachers, instructors, professors and trainers in Canada have ePortfolios. The implementation multiplication factor with their students and clients will be phenomenal.
3. Put your support behind policies and practices that aim to give all Canadians their own digital identity – their personal, private, secure online space for digital archiving over a lifetime. Ensure that Canadian data is stored in Canada. Ensure opportunity for each and every citizen.
4. Think Big. There are multiple, interrelated uses for something as simple as the ePortfolio. Find your place and your role in the worldwide ePortfolio momentum. Think Positive. Canadians are asking for creative and visionary leadership. Take Action. Please.