Canadian Recommended E-learning Guidelines (CanREGs)
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The term “e-learning” is used to mean learning using both a computer and the Internet. E-learning products or services take various forms. They may be:

- Single courses and/or entire programs
- Entire courses and/or course units, lessons or components
- Aimed at individuals or entire groups in classes
- Instruction with or without various support services, such as access to a library
- Offered for credit at an education institution and/or for general interest without credit
- Very expensive, free of charge, or consistent with public education tuition fees
- Aimed at specific age groups and/or any age group
- Offered by public and/or commercial education and training agencies
- Really effective or of questionable quality

Both providers and consumers of distance learning want education and training products and services that are effective and efficient. The term “quality” is used to encompass these concepts.

There is a free market and a growing market in e-learning, with great variety in content areas and quality. Potential students have choices.

These guidelines are intended to help those who want to design, delivery, evaluate and purchase quality e-learning products and services for students and their sponsors or advocates.

The key features of these guidelines are that they are:

- **Consumer-oriented** – developed with particular attention to return on investment in e-learning for learners
- **Consensus-based** – developed through consultation with a balance of provider and consumer groups in Canada and beyond
- **Comprehensive** – inclusive of all elements of the learning system: outcomes and outputs, processes and practices, inputs and resources
- **Futuristic** – describing a preferred future rather than the present circumstances for design and delivery
- **Distinctively Canadian** – reflecting the highest of Canadian values and learning priorities
- **Adaptable** – best used for adult and post-secondary education and training, but adaptable to other levels of learning services
- **Flexible** – not all guidelines will apply in all circumstances
These guidelines are recommended by the following national and international agencies:

- Alberta Online Consortium
- Association for Media and Technology in Education in Canada
- Canadian Association for Community Education
- Canadian Association for Distance Education
- Commonwealth of Learning
- Licéf, TeleUniversité
- Office of Learning Technologies, Human Resources Development Canada
- SchoolNet, Industry Canada

Based on these guidelines, a **Consumer's Guide to E-learning** is available on all the following websites.

- AMTEC [http://www.amtec.ca/](http://www.amtec.ca/)
- AOC [http://www.albertaonline.ab.ca/](http://www.albertaonline.ab.ca/)
- CACE [http://www.nald.ca/cacenet.htm](http://www.nald.ca/cacenet.htm)
- CADE [http://www.cade-aced.ca/](http://www.cade-aced.ca/)
- CanLearn [http://www.canlearn.ca/](http://www.canlearn.ca/)
- SchoolNet [http://www.schoolnet.ca/](http://www.schoolnet.ca/)

The following guidelines are presented in order of importance to learning audiences.

For help to understand **education terms**, go to the glossary at:

- [http://www.canlearn.ca/English/help/glossary.html](http://www.canlearn.ca/English/help/glossary.html)
- [http://www.canlearn.ca/Francais/aide/glossaire.html](http://www.canlearn.ca/Francais/aide/glossaire.html)

For help to understand **technology terms**, go to the glossary at:

- [http://wombat.doc.ic.ac.uk/foldoc/index.html](http://wombat.doc.ic.ac.uk/foldoc/index.html)
E-LEARNING QUALITY GUIDELINES

1. Quality Outcomes from e-Learning Products and Services

1.1. The student / learner will acquire content skills and knowledge that are:

1.1.1. relevant to employment and/or the best thinking in the field
1.1.2. transferable between work and learning situations, i.e., employability, communication and technology skills
1.1.3. specific enough to lead to work or further learning opportunities, i.e., content or technical knowledge

1.2. The student / learner will acquire the learning skills necessary for:

1.2.1. successfully completing the course or program, explicitly
  · sources of information and retrieval processes
  · analytical and critical thinking
  · reading and writing skills in context
  · exam taking

1.2.2. continued lifelong learning, including:
  · a systematic introduction to the field of study
  · a comparative or contextual framework for viewing the field of study
  · generic or transferable skills

1.2.3. self-directed learning management, through:
  · creation of a portfolio of acquired skills and knowledge
  · awareness of personal gaps in skills and knowledge and relevant learning opportunities
  · exercise of good judgement in making personal learning decisions

1.2.4. effective and efficient use of Information and Communications Technologies (ICT), including:
  · information retrieval skills and quality assessment tools
  · communicating through, e.g., e-mail and attachments, chatrooms
  · creating through word processing, spreadsheets and graphics
  · ethics of computer-assisted information access and use
1.3. When finished, the student is awarded course credits or credentials that are:

1.3.1. recognized by a relevant professional accreditation body and by employers
1.3.2. recognized by other education institutions – locally and internationally
1.3.3. of the same value as on-site delivery
1.3.4. transferable within programs and institutions, and between provinces/territories and countries

1.4. The learner experiences an adequate return on investment evidenced by:

1.4.1. course effectiveness, i.e., achievement of personal learning goals
1.4.2. course efficiency, i.e., best use of student finances, time and energy
1.4.3. satisfaction with processes and practices (#2 below)
1.4.4. adequacy of producer/provider inputs/resources (#3 below)

2. Quality Processes and Practices in e-Learning Products and Services

2.1. The management of students incorporates:

2.1.1. registration procedures that include:
   · a clear statement of expectations of learners
   · an orientation program/service for those desiring it, e.g., a demonstration course

2.1.2. intake and placement procedures that provide:
   · individualized program / career counseling
   · assessment and recognition of prior learning
   · appropriate placement

2.1.3. management of student records for:
   · documentation of student achievement in each course and at completion of a program
   · confidential treatment of records
   · student access to records

2.1.4. assistance with the technologies being used, i.e.,
   · the purpose of the technology(ies)
   · the etiquette involved
   · skills and knowledge required to manipulate and interact with the technologies being used
2.2. The delivery and management of learning includes:

2.2.1. approaches to learning that:
   - foster active learning
   - build on learner's strengths and acquired skills and knowledge
   - support interaction and the development of learning communities
   - increase learner control over time, place and pace of instruction
   - include assistive devices for persons with disabilities

2.2.2. instructional strategies that:
   - communicate expectations
   - provide prompt, constructive feedback to students
   - recognize the diversity of learners, learning needs, learning contexts, and modes of learning
   - incorporate an appropriate student-teacher ratio
   - deliberately use synchronous and/or asynchronous learning tools

2.2.3. scheduling and timetabling that is:
   - available as needed and when needed
   - flexible and responsive to learners
   - adequate and realistic

2.2.4. assessment of learning that is:
   - authentic, i.e., accurate representation of the contexts encountered in the field of study or in real-life tests faced by learners
   - against stated learning outcomes
   - frequent and timely
   - appropriate and responsive to the needs of the learners
   - in various forms such as written and oral assignments, self-assessment, demonstrations, portfolio assessment, and exams
   - competency-based
   - valid and reliable
   - conducted by trained assessors

2.3. Technologies – computers and other ICT – are appropriately used to:

2.3.1. engage and support learners
2.3.2. accommodate and promote individualization
2.3.3. create opportunities for students to do meaningful work
2.3.4. increase proficiency at accessing, evaluating and communicating information
2.3.5. improve student abilities to solve complex problems
2.3.6. nurture artistic expression
2.3.7. enable active engagement in the construction of knowledge
2.3.8. meet national and international standards for students with disabilities
2.4. Communications facilities, processes and practices provide:

2.4.1. contact between students and faculty, students and students, and the larger learning community
2.4.2. flexible opportunities for interactions and problem-solving
2.4.3. the opportunity for student collaboration
2.4.4. the opportunity for students to interact with experts in the field

3. Quality Inputs and Resources for e-Learning Products and Services

3.1. Intended learning outcomes are:

3.1.1. clearly stated
3.1.2. relevant, i.e., useful and appropriate for the intended learners
3.1.3. observable / demonstrable
3.1.4. measurable
3.1.5. achievable and realistic
3.1.6. appropriate to the rigor and breadth of the degree or certificate awarded
3.1.7. consistent with the mandate of the provider

3.2. Curriculum content is:

3.2.1. credible with sources identified
3.2.2. accurate
3.2.3. relevant
3.2.4. balanced and free of bias
3.2.5. updated consistently and routinely
3.2.6. documented
3.2.7. appropriate to the learning outcomes
3.2.8. culturally sensitive
3.2.9. consistent with current copyright laws in the jurisdiction of the provider

3.3. Teaching / learning materials are:

3.3.1. prepared by qualified content experts (author identified) working with qualified design experts (identified)
3.3.2. readily available
3.3.3. learner friendly
3.3.4. interesting in content and layout
3.3.5. well-organized
3.3.6. free of cultural, racial, class, age and gender bias
3.3.7. accessible to those with disabilities
3.3.8. free from errors
3.3.9. adaptable to learner needs and abilities
3.4. Product / service information for potential students is:

3.4.1. in writing  
3.4.2. clear  
3.4.3. current  
3.4.4. accurate  
3.4.5. comprehensive  
3.4.6. complete  
3.4.7. readily available

3.5. Learning technologies are appropriate to:

3.5.1. the field of study or subject matter content and skills  
3.5.2. the intended learning outcomes  
3.5.3. the relevant characteristics and circumstances of the learner  
3.5.4. cost and benefit for the learner  
3.5.5. provide multiple representations of content  
3.5.6. enable concept mapping within the learning environment  
3.5.7. make available real-world situations and simulations  
3.5.8. provide assistance, guidance and communications to the learner

3.6. Learning materials and delivery reflect sound technical design so that they are:

3.6.1. navigable  
3.6.2. easily updateable and frequently updated  
3.6.3. complemented by multimedia, rather than distracted by them  
3.6.4. inclusive of “live” links to relevant and previewed documents subject to copyright law  
3.6.5. reliable  
3.6.6. sensitive to bandwidth constraints of students  
3.6.7. compliant with current technology and ICT standards
3.7. Appropriate and necessary personnel include:

3.7.1. instructors / teachers / professors with
   - recognized qualifications in the subject area
   - teaching experience at the relevant level (e.g., secondary, adult)
   - relevant work experience and/or current knowledge in the field
   - appropriate skills to teach online

3.7.2. content support persons, e.g.,
   - course / academic counseling
   - library staff
   - tutors and mentors

3.7.3. process support persons, e.g.,
   - technical support
   - learning skills support
   - career planning and employment counseling
   - problem-solving

3.7.4. program management accountable for:
   - student management and students’ rights
   - learning management
   - technology planning and utilization
   - recruitment and selection of appropriate personnel
   - planning and evaluation of all aspects of the product/service
   - responsiveness and flexibility to the student and to changing learning requirements
   - maintaining links within the education and business communities
   - research and continuous improvement
   - financial viability and continuity

3.8. Learning resources, in addition to teaching materials, are:

3.8.1. varied
3.8.2. easily accessible
3.8.3. copyright authorized
3.8.4. relevant
3.9. A complete learning package includes:

3.9.1. course description
3.9.2. learning objectives
3.9.3. assessment and completion requirements
3.9.4. information about the instructor(s)
3.9.5. learning/lecture notes and additional learning resources
3.9.6. course activities and assignments
3.9.7. quizzes and examinations
3.9.8. access to answers for questions/quizzes
3.9.9. a framework for portfolio development

3.10. The comprehensive course package (all materials and technologies) is:

3.10.1. appealing in appearance
3.10.2. user-friendly
3.10.3. customizable
3.10.4. inclusive of all institutional services and activities (registration, payment, advising, tutorial assistance, library services)
3.10.5. complete
3.10.6. reviewed and evaluated routinely

3.11. Evidence of program success through routine review and evaluation of:

3.11.1. course content and objectives
3.11.2. learning materials
3.11.3. instructional design
3.11.4. instruction and instructors
3.11.5. student learning and student achievement
3.11.6. policies and management practices
3.11.7. operational procedures
3.11.8. customer satisfaction
3.11.9. learner support services
3.12. **Program plans and budget** include:

- 3.12.1. written policies for all aspects of the course/program
- 3.12.2. an adequate budget to achieve stated program goals
- 3.12.3. enabling legislation (public education / private enterprise)
- 3.12.4. financial and administrative commitment to the continuation of a program for a period sufficient to enable students to complete a degree/certificate
- 3.12.5. integration of e-learning with the institution’s overall policy framework
- 3.12.6. a technology plan defining technical requirements and compatibility needed to support the learning activities
- 3.12.7. security of systems to ensure the integrity and validity of information shared in the learning activities
- 3.12.8. a requirement for ongoing professional staff development

3.13. **Advertising, recruiting and admissions information** includes:

- 3.13.1. pre-requisites and entry requirements
- 3.13.2. the curriculum overview
- 3.13.3. specific delivery format
- 3.13.4. course level and credit points
- 3.13.5. course length and degree requirements
- 3.13.6. types of assignments and grading methods
- 3.13.7. learning assessment procedures and evaluation criteria
- 3.13.8. all fees: registration, tuition, books and materials, equipment, other
- 3.13.9. institutional regulations: residency requirements, workload requirements, extensions, grade appeals, withdrawals and refunds, costs and payment policies
- 3.13.10. the nature of the faculty/student interaction
- 3.13.11. entry-level technical competence and skills
- 3.13.12. technical equipment requirements, and availability of rentals
- 3.13.13. academic support services and learning resources
- 3.13.14. technical support services
- 3.13.15. program success from evaluations
- 3.13.16. financial aid resources
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