

# Standards for K-12 Distributed Learning in British Columbia



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## Preface

The proliferation of emerging electronic technologies and internet use has led to tremendous growth in online, electronic learning (e-learning) as an integral part of British Columbia's K-12 Distributed Learning (DL), and an increasingly important element of regular classroom instruction. The [Vision for DL](#) is to create a quality, dynamic and engaging learning environment that all students in the province can access. Instruction through e-learning methodologies offers possibilities for sophisticated, interactive, and engaging learning options that address the [ideals for a BC Graduate](#), and shifts the classroom and learning beyond brick walls and fixed schedules.

The standards in this document are intended to support educators in achieving these visions and ideals for students taking some, or all, of their learning online. A second document, *Standards for Digital Learning Content in British Columbia*, provides detail on the attributes and use of digital learning content. This document is intended to guide educators in developing quality learning opportunities and resources for the online, e-learning environment.

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## Creating the Standards

Distributed Learning (DL)<sup>1</sup> makes use of emerging educational technologies and the online or e-learning environment, and e-learning practices are rapidly finding their way into instruction in traditional as well as online schools. The *Standards for K-12 Distributed Learning in British Columbia* are intended to serve as a guide for educators providing instruction in DL schools and e-learning environments.

Development of the standards began with an environmental scan of published documents describing online learning quality and content development. Two working groups were created, one to develop standards for quality in a distributed learning program, and one to develop standards for digital learning content. Both working groups researched global standards and then chose a 'made in BC' approach that included involvement from DL school educators, education content providers, the post-secondary sector, and industry. Standards were then vetted through distributed learning practitioners, focus groups, and posted publicly for review and feedback.

The first "Distributed Learning Standards" were published in June 2006 and became part of the 2006/07 Distributed Learning Agreements signed between the BC Ministry of Education and Boards of Education offering DL programs. Refinements to the original document were made in spring 2007, and continued review was undertaken in 2008 and 2009 after the launch of the Ministry's Quality Review for Distributed Learning schools. The development of this document came through alignment of the existing DL Standards, the Quality Review process and documentation, and new international online learning standards from iNACOL<sup>2</sup>, ISTE<sup>3</sup>, and others. A review team was formed in May 2009 that included representatives from public and independent online schools, and BC content developers. Feedback was solicited from a broad audience of educators via discussion and comments on a private wiki dedicated to the standards revision through the fall 2009. This document emerged from that consultation.

Changes in this document, version 3.0, include:

- Reformatting of the document to emphasize teaching practice and leadership practice;
- Removal of statements relating to operations and governance as they now exist in government policy, legislation, or in the DL Agreement;
- Creation of new standards adopted from other standards documents ;
- Removal of digital content standards and placement of those standards in a separate document specific to online content development; and
- Expansion of the audience for the standards beyond DL educators to include regular school-based educators providing instruction in an online learning environment.

The standards in this document are based on the literature available at the time of publication, and existing practice in the province.

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<sup>1</sup> See Glossary for working definitions of terms

<sup>2</sup> <http://inacol.org>

<sup>3</sup> <http://www.iste.org/nets>

# Standards for K-12 Distributed Learning in British Columbia

## STANDARDS FOR INSTRUCTIONAL PRACTICES

### 1. Management of Learning

1.1 Course topics, goals, timelines, and expectations regarding assignments are communicated to students.

1.1.1 Students are provided access to required educational program information prior to enrolment.

#### *Supporting Evidence*

- Prospective students are informed of the skills required to be successful as distributed or online learners.
- Advance information about course requirements and resources is publicly available.
- A course and/or program plan and overview is available to students.

1.1.2 Each student has a clearly articulated student learning plan.

#### *Supporting Evidence*

- Student learning plans are on file for all active students.
- Registration processes include opportunities for students to complete a student learning plan or include reference to an existing student learning plan.
- The student learning plan references provincial and Board/Authority Approved learning outcomes and resources required to meet them.

1.2 Instruction to students about participation in activities, productive dialogue, and task expectations, as well as instruction to help students master content and achieve learning outcomes, is provided.

1.2.1 Students are provided support to be successful in an online learning environment.

#### *Supporting Evidence*

- Students are assessed for their ability to succeed in an online learning environment.
- Registration, advising, counselling, and program planning support are provided.
- Instructional support services and resources are available and communicated to parents and students.

- 1.2.2 Students are provided information about academic integrity and netiquette (internet etiquette) for lesson activities, discussions, email communications, and plagiarism.

*Supporting Evidence*

- Expectations, roles and responsibilities of the parent, student and teacher are written and communicated to students.
- Privacy policies are clearly stated.

- 1.3 Students are helped to identify areas of contention on course topics, clarify their thinking about course topics, focus discussion on relevant issues, and explore new concepts in the course.

*Supporting Evidence*

- Communication from teachers in correspondence and online forums provides guidance and clarification for students to assist their learning.
- Course design incorporates opportunities for students to engage in higher-order thinking, critical-reasoning activities, and thinking in increasingly complex ways.
- Teachers assist students in identifying bias in point of view.

- 1.4 Appropriate student resources, learning materials and content that meet the highest standards for quality and student usability are selected and/or developed.

*Supporting Evidence*

- Content meets the *Standards for Digital Learning in BC*.
- Learning resources selected meet BC IRP requirements.
- Content is used in accordance with the Canadian Copyright Act, and any other legally recognized licenses and permissions.

- 1.6 Assessment strategies and tools make the student continuously aware of his/her progress in class and mastery of the content beyond letter grades.

*Supporting Evidence*

- Formative assessment with descriptive dialogue is frequent and ongoing.
- Summative assessment is completed when required to allow for an evaluation of a student's progress in achieving the learning outcomes.
- Assessment materials provide the teacher with the flexibility to assess students in a variety of ways.
- Assessment uses appropriate technologies, is consistent with the BC Performance Standards, and supports learning by guiding instruction.

- 21st Century assessments, as identified by the [Partnership for 21st Century Skills](http://www.21stcenturyskills.org/)<sup>4</sup>, are utilized.

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<sup>4</sup> <http://www.21stcenturyskills.org/>

## 2. Fostering Social Learning

2.1 A sense of belonging and community for students is fostered.

### *Supporting Evidence*

- Students are provided access to a community of learners.
- Students have opportunities to work with peers on an ongoing basis.
- Group work activities are incorporated into instruction.

2.2 The development of a sense of community among course participants is encouraged.

### *Supporting Evidence*

- Networking software is available to initiate and engender community.
- Students have frequent opportunities to provide feedback on their learning experience as well as peer's.

2.3 Student expression in online discussion is supported and builds a sense of collaboration.

### *Supporting Evidence*

- The learning environment supports active engagement between and among students and teachers through asynchronous and synchronous strategies.
- Teachers actively monitor and encourage student engagement.
- Strategies are in place to encourage engagement of all students in their learning program, including consequences for non-participation.

2.3 The use of a variety of communication strategies, including online strategies, for social interaction among students and teacher is fostered.

### *Supporting Evidence*

- Regular teacher/student and student/student interaction occurs through a variety of means such as face-to-face, online synchronous and asynchronous communications, telephone, text/audio/video exchange, or instant messaging.
- Student learning programs make use of, and students have access to, school, district, and/or community-based sponsored curricular and extra-curricular activities or events (e.g. clubs and sports teams).
- Teachers use onsite or online real-time, live instructional strategies.

### **3. Stimulating Cognitive Processes**

3.1 Student interest in course issues and content is fostered, while the development of new perspectives through student reflection is supported.

*Supporting Evidence*

- Teachers use a variety of instructional approaches appropriate to intended learning outcomes and audience.
- Students are provided a variety of ways to engage with, and reflect on, content.
- Students are encouraged to submit reflections using a variety of communication tools.

3.2 Teachers create processes and content that foster student engagement.

*Supporting Evidence*

- Teachers incorporate group work into program instruction and as a part of ongoing assessment.
- Students are supported as active participants in their learning program, and demonstrate responsibility for their own learning.

3.3 Students are encouraged to use a variety of information sources, techniques, and approaches to solutions when exploring problems.

*Supporting Evidence*

- Information literacy and communication skills are incorporated and taught as an integral part of the curriculum.
- 21<sup>st</sup> Century Skills are emphasized in the course.

# Standards for K-12 Distributed Learning in British Columbia

## STANDARDS FOR LEADERSHIP PRACTICES

### 4. Planning for Learning

4.1 A shared vision for distributed learning and e-learning is created.

*Supporting Evidence*

- Schools and organizations offering distributed and online learning programs have a rationale and vision for the program.
- Management staff include distributed learning programs in their review process.

4.2 The creation and implementation of group goals is fostered, direction is set, and activity is monitored and evaluated.

*Supporting Evidence*

- The school uses student and provincial-level data to improve program quality.
- Educators consider student and provincial-level data when refining the e-learning program choices and experiences for students.
- Educators monitor student level data to improve instruction, student achievement and program completion.

4.3 Administration process, budget, and staffing are sufficient to support e-learning.

*Supporting Evidence*

- The majority of funds generated through student enrolment are used to support the e-learning program and obtain resources for it.
- Where special program funding applies, there is evidence of additional services or support provided to students.
- The school is appropriately staffed to support student demand.

4.4 Site, equipment and learning resources are sufficient to meet the e-learning standards.

*Supporting Evidence*

- School and organization infrastructure supports e-learning requirements.
- Required hardware and software purchases and upgrades are completed on a regular basis.
- Content development support, and resources for content selection are provided.

- Resources to support unique needs of students in an online learning environment are available.

4.5 Management staff identifies a lead educator to support teaching and learning in an e-learning environment.

*Supporting Evidence*

- Responsibility for distributed learning and e-learning programs is assigned to a senior-level manager.
- Management staff meet with teachers to discuss improving e-learning program quality.
- Senior-level managers and school leaders participate in provincial meetings, workshops, conferences and activities supporting e-learning.

## 5. Supporting Instruction and Learning

5.1 High performance expectations for staff and students are set.

5.1.1 Instruction reflects current best and promising practices that support quality learning experiences.

### *Supporting Evidence*

- Teachers demonstrate competencies in using data from assessments and other data sources as information to modify instructional methods and content, and to guide student learning.
- Evidence-based research is used to guide and influence the selection of instructional strategies.
- Teachers examine and adapt their instructional practice to maximize the benefits of the online learning environment.
- Student achievement shows progress towards high academic results.
- Regular surveys of student satisfaction are taken and the results made public.

5.1.2 An exam invigilation policy is in place.

### *Supporting Evidence*

- Students are supervised by appropriate personnel when participating in summative assessments.
- Students participate in, invigilated provincial-level standardized testing, provincial exams, and national and international assessments or their equivalents.

5.2 All teachers are qualified and trained, and instructional support is provided for staff.

5.2.1 Teachers have sufficient qualifications, skills and knowledge to effectively meet legislative requirements and the *Standards for K12 Distributed Learning in BC*.

### *Supporting Evidence*

- A member of the BC College of Teachers assesses and evaluates student progress.
- Management staff acknowledge the skill sets, processes and resources required to deliver quality e-learning programs and support educators in meeting them.
- Recruitment processes are designed to select teachers familiar with teaching and learning in an e-learning environment, or ensure that new teachers receive adequate training in online teaching.

5.2.2 A comprehensive staff development program exists that provides instructional support for staff.

*Supporting Evidence*

- The school provides access to professional learning opportunities relevant to distributed and online learning.
- Teachers are informed about, and engaged in, new and emerging practice.
- Teachers are provided training and support specific to instruction in an e-learning environment.

5.3 Staff are assisted in the creation of processes and content that foster student engagement.

*Supporting Evidence*

- Training and time is provided to staff to support them to adapt and modify learning activities to meet individual needs and learning styles.
- The school places a high value on group work as an integral part of instruction and assessment..
- Strategies are designed to support students as active participants in their learning program.

## 6. Communicating About Learning

6.1 Structures that foster collaboration in an e-learning environment are created.

### *Supporting Evidence*

- Discussion forums are evident and student postings are part of the assessment strategy.
- Project-based group work is integrated into the teaching and learning process.
- Two-way communication between and among teacher and students is evident.

6.2 Productive relations with parents and the community are created.

### *Supporting Evidence*

- Communication between parents and the school is ongoing and frequent.
- Parents are provided with program information and expectations, and given the opportunity to provide feedback on their child's learning experience.
- Strategies are in place to engage parents in their children's learning.
- Consultative meetings and two-way dialogue between parents and teachers occurs during such times as enrolment and reporting.
- Parents know about and have the opportunity to be involved in school planning and activities.

6.3 Teacher and student accomplishments are recognized and celebrated.

### *Supporting Evidence*

- School communication features individual teachers and students.
- Public events recognize student progress and teacher accomplishments.

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## Appendix One: Glossary of Terms

For the purposes of this document, the following definitions are provided:

1. *Course*: An accredited unit of curriculum.
2. *Curriculum*: Covering an overall concept, curriculum is approved and specific content that covers knowledge, skills, and attitudes as prescribed learning outcomes, generally offered by an institution such as a school or university as a course.
3. *Digital Learning Content*: Assembly and aggregation of discreet, digital (or electronic for display on a computing device) learning objects designed to meet intended learning outcomes. Content is a specific package of material for use in an overall curriculum.
4. *Distributed Learning*: Distributed Learning (DL) takes place when a student is primarily at a distance from the teacher, whether he/she is at home; or connected to teachers from another learning facility<sup>5</sup>.
5. *E-Learning*: The use of educational technologies to support distributed, or online learning.
6. *Instructional Design*: Systematic method of planning, developing, evaluating and managing instruction to ensure competent performance by the learner.
7. *Learning Content*: Assembly and aggregation of discreet learning objects designed to meet intended learning outcomes. Content is a specific package of material for use in an overall curriculum.
8. *Learning Object*: A learning asset or assets designed to address an intended learning outcome(s).
9. *Learning Outcomes*: The prescribed learning outcomes set the learning standards for the provincial K-12 education system and form the prescribed curriculum for British Columbia. They are statements of what learners are expected to know and do at the end of an indicated grade or course.
10. *Performance Standards*: A set of provincially-approved classroom assessment resources developed and tested by educators, which describe levels of achievement in key areas of learning. The standards focus exclusively on performance assessment. In performance assessment learners are asked to apply the skills and concepts they have learned to complete complex, realistic tasks. This type of assessment supports a criterion-referenced approach to evaluation and enables educators, students, and parents to compare student performance to provincial standards.
11. *Standards*: Document descriptions that have received a stamp of approval or accreditation from an authorized body. Standards tend to go through a relatively slow evolution, are conclusive and complete, and are criteria specific. A standard is a “must”.

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<sup>5</sup> [http://www.bced.gov.bc.ca/dist\\_learning/](http://www.bced.gov.bc.ca/dist_learning/)

12. *Synchronous/Asynchronous*: Learners can collaborate through a variety of communication and conferencing tools in real time allowing them to connect at a single point in time, at the same time (synchronously), or in a series of independent exchanges over a period of time allowing them to connect together at each other's own convenience and own schedule (asynchronously).

*Communication tools* are used to send messages<sup>6</sup>, files<sup>7</sup>, data<sup>8</sup>, or documents<sup>9</sup> between people and hence facilitate the sharing of information.

Examples include:

- a. e-mail (asynchronous)
- b. instant messaging (synchronous)
- c. faxing (asynchronous)
- d. voice mail (synchronous)
- e. Web publishing<sup>10</sup> (asynchronous)

*Conferencing tools* are used to facilitate the sharing of information, but in a more interactive way.

Examples include:

- data conferencing — networked PCs share a common "whiteboard"<sup>11</sup> that each user can modify (synchronous)
- voice conferencing — telephones<sup>12</sup> allow users to interact (synchronous)
- video conferencing (and audio conferencing) — networked PCs share video or audio signals (synchronous)
- Internet forums<sup>13</sup> (also known as message boards or discussion boards) — a virtual discussion platform to facilitate and manage online text messages (asynchronous)
- chat rooms — a virtual discussion platform to facilitate and manage real-time text messages (synchronous)
- electronic meeting systems (EMS) — a conferencing system built into a room. The special purpose room will usually contain a large screen projector<sup>14</sup> interlinked with numerous PCs. (synchronous)

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<sup>6</sup> <http://en.wikipedia.org/wiki/Message>

<sup>7</sup> [http://en.wikipedia.org/wiki/Computer\\_file](http://en.wikipedia.org/wiki/Computer_file)

<sup>8</sup> <http://en.wikipedia.org/wiki/Data>

<sup>9</sup> <http://en.wikipedia.org/wiki/Document>

<sup>10</sup> [http://en.wikipedia.org/wiki/Web\\_publishing](http://en.wikipedia.org/wiki/Web_publishing)

<sup>11</sup> <http://en.wikipedia.org/wiki/Whiteboard>

<sup>12</sup> <http://en.wikipedia.org/wiki/Telephone>

<sup>13</sup> [http://en.wikipedia.org/wiki/Internet\\_forum](http://en.wikipedia.org/wiki/Internet_forum)

<sup>14</sup> [http://en.wikipedia.org/w/index.php?title=Screen\\_projector&action=edit](http://en.wikipedia.org/w/index.php?title=Screen_projector&action=edit)

## Appendix Two: Working Groups and Reviewers

### *Delivery Standards Working Group (2005)*

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