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Just Another Electric Circus?

Meeting Standards for K to 12 E-Learning Classroom Resources

Until recently, electronic learning resources have included multimedia, integrated learning systems, web content, and digital text. Typically, teachers used these resources as additional supports to classroom instruction. Now, we are seeing the development of new, complex E-learning resources that will address broad classroom curriculum and instruction issues. They will likely use the Internet and integrate multimedia, data collection, and web content into complete packages that teachers can use to support student achievement. In fact, some predict that E-learning resources will eventually replace the traditional textbook.

Some of you might ask what advantages electronic learning resources have over traditional print resources. Teachers are finding them more flexible for teaching and learning. Electronic media (print, video, audio, software, and systems) are being integrated to create a more dynamic learning experience for children and better information for teaching. Electronic resources, especially those delivered via the Internet, will be very flexible, up to date, and easy for teachers to use in their classrooms.

The goal is to use electronic media to support teachers in their daily practice so that they can better serve their students. But how easy will it be for the ordinary teacher, who has basic computer skills like word processing and e-mailing, to adapt to and use new electronic resources? As with any new curriculum, teachers will need appropriate training, but an effective E-learning resource should be teacher-friendly and easy to incorporate in the classroom setting. Any effective learning resource must respect the fundamental values of teaching. How will teachers be able to sift through all the new products and choose the best resource for their classrooms? That's where Curriculum Services Canada (CSC) comes in. CSC is the Pan-Canadian standards agency that evaluates learning resources.

The two most important components of any effective resource are *curriculum correlation* and *inclusiveness*. You really can't have one component without the other. Teachers want resources that support the curriculum and advance the learning of their students. They also want their students to be understanding and tolerant of differences in their classmates and in other people. A strong resource in mathematics, for example, might suggest, by its illustrations and examples, that only one gender is capable of mastering mathematics. CSC saves the teacher time by evaluating the material and posting it on our web site at www.curriculum.org, complete with a detailed synopsis of its strengths and a link to our e-commerce site to access the resource itself.

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Although each of the tools we use to evaluate a resource is customized to suit the particular product or material, they have many things in common. For all resources, paper or electronic, our professional evaluation teams first look for *accuracy, relevance and currency of content* and carefully study the ways that *teaching and learning strategies* are presented in both the student's and teacher's materials. The resource must reflect accepted *best practices* and *current educational theory* and include a *variety and range of material that is audience appropriate*. We also look for *assessment and evaluation practices* to ensure that there are guides for the student and teacher and that, again, there is a range and variety. Next, we examine the

format. Whether it's paper-based or electronic, our evaluation teams must be satisfied that *the medium is appropriate to the learning outcomes or expectations* and is the best choice for successful mastery. And finally, we look at the *ethics* of the resource, checking, for example, for any misrepresentation of content or conflict with the goals of education.

What more does the CSC look for in an E-learning resource? We have different tools depending on the type of format. We look for different things in a web site, a CD-ROM, an Internet networked resource, and so on. We have found that the *organization* of the medium is particularly important in E-learning resources. We want the resource to allow *intuitive use* by the student. If it takes more time to figure out how to use the resource than to actually engage in the learning, then it is unacceptable. Teachers just don't have the time to be helping each of 20 to 25 children log on. We look for *organizers* in the resource, things like menus and icons to enhance navigation. We also look for lots of *interactivity,* like students being able to share materials.

The term user-friendly has been overused, but it is absolutely crucial when we evaluate electronic learning resources. If a student can't get the resource to download or to operate without technical problems, learning takes place, but not the learning that the teacher intended. We look for lots of *user-friendly attributes* like pages displaying quickly and correctly, on-screen prompts for easy navigation, a schematic or a map to show how to move through the web site without problems.

Another important difference between a textbook and an electronic learning resource is the capacity for continuous updating. This means that we need to ensure that it can also be continuously evaluated.

When CSC evaluation teams have completed and posted a review of a conventional resource on our web site, we date the review to let the user – usually a teacher or student – know when the resource was recommended for use. Most of these resources are textbooks or completed resources and will change little, if at all, during the term of their authorization and use.

With E-learning resources, we need to go one step further. E-learning resource developers can add new content, revise existing content, or delete ineffective content virtually at will. We need to ensure that there is a mechanism that allows us to evaluate the "existing" content of an E-learning resource today,

but not limit the ability to "improve" it dynamically in the electronic world. To meet this new demand, CSC "evergreens" our review process for E-resources as the material changes. If material is added, deleted or enhanced after our evaluation date, by agreement the developer must notify us, and we will review the changes. This is a constant process, just like student evaluation that is ongoing and fluid.

To complement our evaluation services, we are upgrading our training division, and soon we will be able to give online support to teachers who have discovered a resource they're not sure of. We can give them advice on the basic criteria of any resource and connect them to a subject expert who will consult online on the merits of the content. We also encourage every teacher in Canada to say to a developer or publisher, "Has your product been reviewed by Curriculum Services Canada?" If it hasn't, the teacher can point them in our direction. We expect that, within five years, every teacher will recognize our *"CSC Recommended"* seal on learning products and insist on it before they use them.

Everyone involved in curriculum development should recognise that our teachers face a very dynamic environment. Educating children is now a lot more complex than in the past. There is a growing emphasis on student achievement, along with rigorous curriculum and assessment standards. CSC is committed to helping teachers discover the benefits that comprehensive E-learning resources can bring to them as professional educators of children. We'll do our part to make sure that this is an easy, effective, and productive experience for Canada's teachers.

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Au fur et à mesure que les enseignants découvrent de nouvelles ressources électroniques pour leurs élèves, il devient de plus en plus impératif de pouvoir évaluer ces ressources de façon fiable. C'est le défi qu'a relevé le groupe Canadian Curriculum Services en élaborant une méthode d'évaluation des ressources électroniques et sur Internet afin d'aider le personnel enseignant à choisir un matériel approprié à leurs objectifs pédagogiques.

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Kathryn McFarlane, a former teacher and senior executive at TVOntario, is presently Executive Director, Curriculum Services Canada (CSC), a not-for-profit, charitable organization that evaluates and supports the evaluation of learning resources through teachers' awards, e-commerce access, and training and development. CSC is the parent organization of Ontario Curriculum Centre—the evaluation service in Ontario; The Curriculum Foundation—awarding teachers across Canada with development funds; and pdstore.com—providing free access to a wide range of reviewed and recommended learning resources. www.curriculum.org