eLearning and Coach Education: Finding the Right Fit

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Session Objectives

By the end of the session participants will be able to:

• Discuss the levels at which eLearning tools can be integrated into coach education
• Determine when eLearning is an appropriate solution to address coach education needs
• Compare the advantages and limitations of different eLearning tools
• Summarize the factors that need to be considered when using eLearning in coach education
Careful planning and design is the cornerstone of successful eLearning.
Finding the Right Fit

Depends on the appropriate combination of:

• Learning objectives
• Target audience
• Learning philosophy
• Selection of tools
• Activities
• Instructional design

Is it more effective than F2F education? Not a good question
Reflection

- Why are you here?
- Where does your interest lie in eLearning?
- What are your eLearning objectives?
- What is your target audience and what are their needs?
- How do you/your organisation believe coaches learn?
The eLearning Bandwagon

- eLearning is becoming more pervasive
  - 59% of organisations have implemented an eLearning system
  - 28% plan to do so soon (Ark Group, 2006)
- We are seeing eLearning in
  - Corporate training
  - Government
  - Universities
  - High schools
  - Medical education
  - Healthcare education
  - Coach education
  - . . .
Role of Technology

Before 1980 technology was seen to have 3 roles:

- Computers as tools to support learning (e.g., word processing, calculations)
- Tutors to deliver instruction (e.g., drill and practice)
- Technology as “tutee” (e.g., learning to program computers)
BUT . . .

• Adult learners have changed
  – Multiple careers, new skills, lifelong learning
  – Busy lives with multiple responsibilities
  – Live in society of “immediacy”

• Coach education needs
  – Need well-prepared coaches
  – Need to meet athlete needs but have diminished resources
  – Need easy access to quality education

• Change is needed . . . but which strategies will serve today’s educational goals?

• Technological advances have opened new opportunities
Trends that will Impact Education

- Wireless
- Merging of technologies
- Developments in portable devices (laptops)
- High speed
- Visual immersion
- AI

How can eLearning help?
Advantages of eLearning

(Ark Group, 2006)
Advantages of eLearning

- Interactivity
- Motivation
- Learner satisfaction
- Address different learning styles
- Unique instructional capabilities
- Support for new pedagogical approaches
- Teaches technology skills as well as content
- Enrich courses using tools and techniques familiar to learners
- Provide standardised training
Adopting eLearning

• Just because you can doesn’t mean you should!
• Educators must develop their own sound rationale for using technology in education, based upon the unique contributions of technology to teaching and learning
  – Has benefits over current practices (not just an innovative “add on”)
  – Addresses a pedagogical challenge
  – Addresses learner needs
  – ROI
eLearning Concerns

- Lack of F2F contact
- Attitudinal barriers
- Reduced facilitator-learner interaction
- Lack of depth
- Ability to teach physical skills
- Getting learners to enroll
- Upfront costs
- Lack of standards and validated models
- Lack of resources for developing online learning
- Development is time consuming
- Technical support
## eLearning vs Online Information

<table>
<thead>
<tr>
<th></th>
<th>Instruction</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Purpose</strong></td>
<td>Gain skills via practice and feedback</td>
<td>Improve comprehension</td>
</tr>
<tr>
<td><strong>Audience</strong></td>
<td>Narrow target audience</td>
<td>Broader target audience</td>
</tr>
<tr>
<td><strong>Content</strong></td>
<td>Purposely limited</td>
<td>Broad to meet wider audience needs</td>
</tr>
<tr>
<td><strong>Activities</strong></td>
<td>Support learning and transfer</td>
<td>Quickly locate information</td>
</tr>
<tr>
<td><strong>Multimedia</strong></td>
<td>Use when needed to improve learning</td>
<td>Use when needed to improve comprehension</td>
</tr>
<tr>
<td><strong>Assessments</strong></td>
<td>Test, performance, on-the-job performance</td>
<td>Survey, multiple-choice questions</td>
</tr>
</tbody>
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Adapted from the eLearning Guild’s Handbook of e-Learning Strategy (2007)
Defining eLearning

• General term referring to the development of knowledge and skills through the use of Information and Communication Technologies (ICTs) to support interactions

• Refers to education in all contexts (F2F → hybrid → online)
  – Podcasts, wikis, learning objects etc used to support F2F teaching
  – Replacement of some F2F components with eLearning components
  – Fully online courses where the participants are separated by distance and time

• It is not an “all or nothing” approach
How do Coaches Learn?

• Two radically different approaches to teaching and learning are prevalent in education.

  Constructivist
  vs.
  Directed

• Both directed and constructivist methods are based on the work of renowned learning theorists.
Differences in Philosophy

**Constructivist (inquiry-based)**
- Learning occurs when knowledge is constructed in the mind – unique to each learner and shaped by background, exp’ce, aptitude etc
- Teaches how to learn, rather than facts
- Learners participate in activities that are meaningful to them – given choices
- Criticised for being too unstructured and inefficient

**Directed instruction (objectivists)**
- Grounded in behaviourist learning theory
- Learning is transmitted knowledge – knowledge exists outside the mind
- Teacher-directed, structured – learners have limited choices
- Criticised for being too rigid, instructor-centred, boring
Learning Theories and eLearning

- eLearning strategies differ dramatically depending on which of these approaches is adopted.
- Each are valid and each can meet different needs.
## Difference in Processes

<table>
<thead>
<tr>
<th></th>
<th>Constructivist</th>
<th>Directed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teacher roles</strong></td>
<td>Facilitator, resource, partner</td>
<td>Transmitter, expert, direct skill development</td>
</tr>
<tr>
<td><strong>Learner roles</strong></td>
<td>Collaborator, develop competence, learn different content</td>
<td>Receiver, demonstrate competence, learn same content</td>
</tr>
<tr>
<td><strong>Curriculum characteristics</strong></td>
<td>Projects that foster skills concurrently</td>
<td>Teach sequence of skills – lower level to higher</td>
</tr>
<tr>
<td><strong>Learning goals</strong></td>
<td>Growth from where the learner began</td>
<td>Mastery of specific skills in a specific sequence</td>
</tr>
<tr>
<td><strong>Types of activities</strong></td>
<td>Group projects, hands-on, product development</td>
<td>Lecture, demonstration, seatwork, testing, worksheets, individual work</td>
</tr>
<tr>
<td><strong>Assessment strategies</strong></td>
<td>Portfolios – may differ across learners</td>
<td>Tests, quizzes – universal across learners</td>
</tr>
</tbody>
</table>
Your Experiences?

- What eLearning have you done?
- What made you do it?
- What made it effective/ineffective?

- What would you expect from a quality eLearning experience?
It’s not “bleeding edge” technology . . .

. . . the technology is in place
eLearning Tools

- Discussion forums
- Application sharing
- Teacher Tube
- Social networking
- Chat
- Podcasts
- Email
- Microblogging
- Polling and survey tools
- Learning Management Systems (LMS)
- Learning objects
- You Tube
- Audio conferencing
- Blogs
- Instant messaging
- vBlogs
- Game-based activities
- RSS Feeds
- Video conferencing
Customised eLearning

• Blank slate
• Develop your own
  – Look and feel
  – Activities
  – Communication tools
  – Database
• Lots of freedom
• Determine how and when learners access content
• Requires a lot of technical expertise
• Harder to make changes
• Example (non-facilitated, no social interaction)
Learning Management Systems

- Virtual learning environment
- Delivers, tracks, and manages eLearning within one tool
- Student enrolment
- Contains communication tools and activities
- Requires less technical expertise
- Wide selection (1500+)
  - Blackboard
  - Moodle
Welcome to an exciting new era for Canadian Swimming!

With the launch of the E-learn system, the Canadian Swimming community will have access to online training resources for coaches, officials, swimmers and volunteers.

eLearning Updates

How does the eLearning site work?

The eLearning site is built on a Learning Management System called Moodle. Moodle has over 500,000 users around the world, including major universities, corporations and training agencies. Click here for a brief introduction on how the Moodle system works.

What courses have been launched?

The launch of the eLearning site will see the first set of Skills Coach coaching courses launched. Additional courses for other roles will be launched throughout the upcoming season(s).

How do I get Skills Coach certified?

With the launch of the new eLearning system, many coaches are wondering how they go about getting certified at Skills Coach. Select the link below for a short presentation on the steps required for certification.

Where do I go for help?

Swimming Canada and the Canadian Swimming Coaches and Teachers Association have dedicated help to support the NCCP coaching program.

NCCP Administrator - Carol Vadeika - nccp@swimming.ca
Welcome to the ACER MOODLE

The Moodle has been developed as an online resource for ACER members and for projects managed by ACER.

We hope you find this useful and welcome your comments on how to improve this new facility.

In order to view content on the Moodle you will need to be logged in. Some areas allow guests to view the content, and you will be able to login as a guest.

Other areas will require you to register and create a user profile for the site as they are restricted to, for example, people working on specific projects.

An area on 'How to Use the Moodle' has been created, which will give you an introduction to making the most of the Moodle.

User policy
Welcome to VIU's Fully Online Courses

in collaboration with BCcampus

Site Announcements - NEW POST!

Course categories

Fall 2008
CREW420: Experimental and Speculative Fiction Workshop (M. Bowering - F08W01)
MED113: Emerging Digital Technologies (M. Soules - F08W01)
PHED380: Women in Physical Activity and Sport (E. Eby - F08W01)
QUME185: Introduction to Business Computer Applications (M. O'Shea - F08W01)
QUME185: Introduction to Business Computer Applications (M. O'Shea - F08W02)

Search courses: 

Go
Building Interactivity

- Different types of interaction
  - Learner-learner
  - Learner-facilitator
  - Learner-content
- Polls
- Assessment
- Game-based learning activities
- Asynchronous: email, discussion, listservs
- Synchronous: IM/chat, audio and video conferencing, application sharing
Web 2.0

Web 2.0: the “social web” – the user is in control of the content

- Social networking sites - MySpace and Facebook
- Video sharing sites - You Tube and Teacher Tube
- Blogs - webpage with regular entries/commentaries that is usually maintained by one individual
- Microblogging – short text messages (e.g., Twitter, status update)
- Wikis - collection of webpages that anyone with access can edit
Web 2.0

- Podcasting – distributing multimedia audio and video files over the Internet using the RSS format; these can be played back on mobile devices and personal computers
- RSS – Really Simple Syndication is a web feed format used to publish frequently updated content
Technology is Just a Tool

- Technology is not a panacea
- Technology alone has little relevance in the effectiveness of enhancing education – it is how it is used that is important (Clark, 2000)
- Successful eLearning requires the marriage of learning and technology
- Each piece of technology has its own characteristics and these will determine how it can be used to enhance learning
Importance of Instructional Design

- eLearning requires careful attention to planning and design
  - Unlike an instructor, eLearning cannot adjust to learners “on the fly”; there is no opportunity for clarification if the learners do not understand the concept. Learning must be carefully thought out ahead of time

- Instructional design
  - Is the systematic approach to planning and producing training to ensure learning objectives are met
  - Grounded in learning theories
  - Gives structure to the learning
  - Ensures pedagogy is driving the use of technology and not the other way around
Instructional Design Models

- ADDIE (Florida State University, 1975)
- Dick and Carey Model (1978)
- Kemp Design Model (Morrison, Ross, & Kemp, 2003; Kemp, 1994)
- Robert Gagné’s ID Model
- Backward Design (Wiggins & McTighe, 2000)
The Steps

1. What is the pedagogical challenge?
   - Why do you need to develop an eLearning resource?
   - What is the pedagogical challenge you are trying to meet?
The Steps

2. What is the target audience?
   - Who is the learning for? (Age? Education? Literacy? Current knowledge?)
   - What technology will the learner have available? (Computer? High-speed Internet?)
   - What previous experience do they have with this topic and with using technology?
   - What are the learner needs?
   - How motivated are the learners?
The Steps

3. What are the learning objectives?
   • What do you want the learners to be able to do at the end of the learning event?
   • Are the learning objectives relevant and integral to other elements in the curriculum?
The Steps

4. What are the logistics?

- Is the learning fully online or blended?
- Will learning be facilitated?
- Do you need to track learner progress?
- Do you need to build in a learner and/or eLearning evaluation?
- Does the site need to be password protected?
- Do learners need/want anonymity?
- Will learners have access to any necessary software?
- What are the long-term needs of the project?
The Steps

5. Identify content and learning activities

- What content and learning activities will enable the learning objectives to be met?
- Follow principles of adult education
- What content do you have already? Can it be used/adapted? Do you need input from SMEs?
- What activities do you use in a face-to-face setting? Can these be adapted? What does eLearning allow you to do differently?
- What activities will promote interaction and collaboration?
6. Identify learner support mechanisms
   • How will you provide support to the learners during this learning experience? Technical support? Learning support?
     o Help desk/Help line
     o Learning triads
     o Orientation to technology (face-to-face, e-Venture)
     o “How do I...?” forum
7. Create a RoadMap

- How will you structure the learning resource (modules/sections)?
- What learning objectives will be addressed in each section?
- How will you meet the learning objectives (identify content and activities)?
- What elements will be mandatory?
The Steps

8. Design the interface
   • Consider the target audience when designing the look
   • What is the look of the resource and how does it fit in with the objectives? What is the “story”/metaphor for the learning resource?
The inukshuk (plural: inuksuit) will serve as a metaphor for your journey through this learning experience. An inukshuk is a stone marker used by the Inuit of the Canadian Arctic. In the 19th century, inuksuit in the form of human beings, called *inunnguaq*, started to become popular. The significance of the inukshuk in this resource comes from its many meanings and symbolisations, some of which you can see below.

Inuksuit are central to navigation and provide travellers with directions—an arm or a leg may suggest a direction. They act as a compass or a guide for a safe journey. In this resource they will guide you in your journey to greater knowledge. They may also be seen as guides for the person at the end of his or her life journey.
The Steps

9. Develop the materials

- Write the text-based content. Pay attention to language level and chunk the material appropriately
- Develop the activities, including assessments
- Develop multimedia (audio, video) and other resources (e.g., printable PDF documents)
- Develop online support materials (netiquette principles, tips for how to learn online, instructions for using the eLearning resource)
10. Ensure content meets learner needs
   • Beta test the content to ensure it meets learner needs and is written in appropriate language
11. Create storyboard

- Arrange media and content in a way that will facilitate learning most effectively
- Create a storyboard that illustrates how the content will be laid out within the resource. This process will further help with content chunking and ensuring pages are not content intensive
- Create a site map if navigation of site is complicated (concept mapping software helps)
- The storyboard is your way of communicating what you want the resource to look like to the programmer
Section 3: How to recognize pain

You chose Facial Expressions.

In the box below, type in a facial expression that could be a sign someone was in pain. For example, you could type "grinning". Click submit when done. Repeat until you have identified eight common facial expressions that might show a patient/resident was in pain.

Choose another area

**Terry:** Once the user has clicked submit if they have a correct answer it will be revealed in the boxes below (e.g., frowning). If not, it would say "Try Again" - they get three wrong answers before the correct answers are revealed. See attached document (Family Feud) for correct answers to be displayed as well as correct variations of it. This is modelled off a Family Feud type game: http://www.gamefools.com/onlinegames/free/FamilyFeud2.html so have a look for how it can be made more fun.

Clicking on "choose another area" takes them back to slide 4. They have access to this button either once they have completed all 8 boxes or have made 3 failed attempts and been shown the correct answer of what is in the eight boxes. At this point the next and back buttons are not functional.

The purpose of this exercise is for the learners to become aware of the indicators of pain.
The Steps

12. Program the resource
   • Create the online version of your learning resource
   • Review and make any necessary changes
The Steps

13. Develop an implementation plan

• How will you advertise to learners?
• How will you motivate learners to enrol?
• Will there be rewards/recognition for learners?
• When and how will you launch the program?
• How will you provide support to the learners?
The Steps

14. Implement
  • Deliver the eLearning resource to your target audience

15. Evaluate
  • Conduct formative and summative evaluations of the eLearning resource

16. Refine
  • Make any necessary revisions based on a comprehensive evaluation

17. Widespread dissemination
  • Share with others in your community
Last Thoughts

- eLearning increases accessibility, learning flexibility, interactivity, and opportunities for learning
- eLearning requires careful attention to instructional design and pedagogical planning
- Time commitment
- eLearning is not a panacea – it is not for everyone nor for everything
- Need for technical support and training for both learners and facilitators
- Upfront financial commitment

(Abrami et al., 2006)