Virtual-U: An Example-in-Practice

Chris Groeneboer, Denise Stockley, & Tom Calvert * School of Computing Science, School of Computing Science, Faculty of Education, Simon Fraser University, Burnaby, B.C. Canada V5A 1S6 groen@cs.sfu.ca,, dstockle@sfu.ca, tom@cs.sfu.ca,

*This work was done collaboratively, and order of authorship is not a reflection of contribution.

Virtual-U is a World Wide Web-based networked learning environment customized for the

design, delivery, and enhancement of post-secondary education and industry-based learning. One

of the design goals is to provide a flexible framework to support pedagogies based on principles of

active learning, collaboration, multiple perspectives, and knowledge building, and to support

varied content areas and instructional formats. The framework consists of tools to support core

activities including course design, individual and group learning activities, knowledge structuring,

class management, and evaluation.

The Virtual-U project is comprised of a multi-disciplinary team of educators, HCI

specialists, engineers, computing scientists, database designers, instructional designers,

implementors, instructors, learners, and researchers. The system is currently being field tested at

15 universities and industries across Canada to deliver courses from a variety of fields.

The beta release included the following integrated tools:

Vgroups Conferencing System: Gives instructors the ability to easily set up collaborative groups and define structures, tasks and objectives. Any user can learn to moderate conferences and to create subconferences.

Course Structuring Tool: Enables instructors to create complete courses online without programming knowledge. Templates prompt the instructor for relevant information such as weekly overviews, required readings, grading standards and group conferencing assignments. The tool automatically places the course syllabus on the WWW for access by all students enrolled in the course.

Gradebook: Manages the database of students' grades for each course delivered with Virtual-U. The gradebook displays text and graphical representations of student performance including personal grades and distribution of marks for evaluated activities.

System Administration Tools: Assist the system administrators in installing and maintaining Virtual-U. These include functions such as creating and maintaining accounts, defining access privileges and establishing courses on the system.

Upload Features. Allows instructors and learners to send multimedia files from their local machines to the Virtual-U server. Learners electronically submit their assignments, and the instructors organize and comment on these submissions