

## **A STRATEGY TO ENCOURAGE FACULTY MEMBERS TO DEVELOP ONLINE COURSES IN AN ACADEMIC ENVIRONMENT**

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### *Abstract*

The faculty members in an academic setting sparingly used computers and Internet resources to accomplish various tasks in different courses. The primary goal of this paper is to describe a strategy that would increase the professors' confidence in relation to educational technology and would encourage a representative mentor group of professors to make effective and efficient use of Web-based instructional technology and resources in the teaching process.

### *Introduction*

Ample Web-based resources, technologies and media installed at the author's site, the Royal Military College of Canada, were not used either efficiently or effectively to enhance teaching on site or at remote locations. The mission of the Institution was to educate and train officer cadets and commissioned officers for careers of effective service in the Canadian Forces.

The faculty members sparingly used computers and Internet resources to accomplish various tasks in different courses. Students were experimenting with these resources, but used them improperly in their working process. The author developed a training program to help faculty to introduce educational technology in their teaching process. Professional programs were created to improve technological skills and helped the faculty personnel to integrate Web technologies into their teaching process.

Investigation through interviews with colleagues revealed that the professors liked to receive adequate training and support for their teaching in the classroom and at remote sites. The results of the investigation showed that the professors became frustrated with the use of the Internet and often relied on other colleagues for technical help. They were less motivated and more hesitant to use computers and the Web, often giving up.

### ***Description of the problem***

The author believed that Web media and technology should be used simultaneously in the teaching and learning processes, i.e. there should be an equilibrium between the left-hand side (teaching) and the right-hand side (learning) of the equation with respect to the uses of Web resources in the curriculum. If the professors were using Web media in the delivery of course contents, the students should be learning how to integrate these tools into their learning process and vice versa. The technological delivery platform for the curriculum is ineffective if the students are frequent users of Web resources and technology in their learning process; whereas, professors do not know how to integrate these media into their teaching process. Based on the author's experience in using technology in teaching for several years, the author firmly believed that Web media and technology had to be in equilibrium if the institution wanted to effectively deliver the curriculum.

The author examined the academic portfolio of several professors and discovered that more than 80% of the members of the regular academic staff had projects funded by various research agencies. Research was a high priority at the college, and evaluation of a professor's performance was based largely on research and publications. Professors could not afford to spend much time building Web-based courses and they were not rewarded with lump sum grants for this purpose.

Standard software programs such as Office 97 and Internet browsers, such as Netscape, were installed. On the other hand, Web-based software for creating instructional materials for the Web were non-existent, and Internet resources such as chat servers and clients were not installed to allow students to work collaboratively at a distance, especially when they were studying in their quarters at night and over the weekend. The delivery media focused on the professor rather than on the student. The intellectual learning framework and cognitive learning style were locked into a course's or a professor's predefined frame. In several courses, students could not explore different forms of learning content and issues.

### ***Why use the Web as a training platform***

Institutions will have to adapt to new digital technologies if they want to survive in the 21st Century (Goldberg, 1997). The Internet will force traditional institutions to change their traditional delivery mechanisms. Learning will shift from the traditional


classroom to the open virtual learning room with connectivity and interactivity. “To avoid leaving current faculty behind, a stronger emphasis on faculty development will emerge ... and the Web will become the biggest library,” said Goldberg. With the introduction of new media and technology for learning and teaching, Institutions have begun to enrich their once impersonal lecture classes using E-mail, discussion groups, and personal Web pages.

The author of this research paper trains faculty members and students in a similar educational technology setting. If the students are exposed to the World Wide Web, they will act as lab assistants to professors who would benefit from this resource. The students could assist instructors who fear the Web’s instructional technology, feel unmotivated, or lack the time to use these resources to build multimedia prototypes for classroom demonstration.

Ritchie and Hoffman (1997) felt the Web, with its constant change in technology, provided a dynamic platform wherein sound instructional design principles could be incorporated to present professors and students with a more intuitive, interactive, and easy-to-use medium. A visit to various Web sites on the Internet indicated that several of them were built on sound instructional design principles. The author of this paper incorporated good instructional design principles in the Web training prototype. Web-based technology presented a challenge and promising framework for training faculty.

After reviewing possible solutions and ideas described in the literature, the author decided to use an optimal combination of strategies to demonstrate how Web-based instructional technology and media could benefit course content delivery on site and at a distance, thereby enhancing teaching outcomes. The author implemented a Web-based training system with instructional technology and resources to acquaint professors with basic Internet tools and media. The author of this proposal introduced an instructional strategy with a constructivist approach in a collaborative learning environment.

Before the implementation phase of the training program started, the author developed a Web-based training prototype that included three major phases: basic Internet concepts and communication media, Web page creation and Web search engines, and integration of Web media in the teaching and learning process. The author and the lab assistant tested the Web training prototype very intensively to assure high reliability and fidelity during the field implementation. The author verified the Web training contents on

 weekly basis to ascertain that there were no broken hypertext links between Web pages on the Intranet.

Most of the people to be included in the target training group were at approximately the same computer skill level, due to the basic training acquired in the previous years at the College. Therefore, each participant brings with him/her basically the same skill and knowledge in the technology area. All equipment and software used in the training lab during the implementation period of the training program was also of the same type. Access to the Internet and Intranet site will be achieved in exactly the same manner during the training period.

Motivation was high among the participants to complete this training, as proper use of the institution Web resources and technologies for teaching and learning. Also, promotional opportunities should abound to those who were successful in completing this training. Interest levels would vary only when conducting Internet research for classroom teaching/learning enhancement or educational resources. For this instruction, collaboration among peers will be utilized for this project. The continuing education by distance learning phase of this training would take individual aspects into account.

Given the operational objectives for the learners and the teachers, the instructional strategies need to be diverse and robust. In the context and background development of this practicum, a Web-based virtual training was supported by workshops, collaborative technological media and personalized tutorials were explored for a better learning environment. The strategy moved away from the traditional rule-based, procedure-oriented mode to a more dynamic, interactive learning mode.

The author's focus during the delivery of this Web professional development program was on: collaborative learning through knowledge construction, computer-mediated communication, multimedia teaching prototypes; and transformative instructional design. Taken together, these comprise the major elements of computer-supported collaborative learning that I experimented during the implementation stage of this training program. They encompassed the adoption/diffusion and formative evaluation of communications-information technology based learning environments in my setting.

The training results indicated that Web-based instructional technology had to become an integral part of the curricula in modern academic Institutions, as the author's, to prepare students to become lifelong learners. In fact, the author found that advice and experiences of the authors cited in the reference section were very relevant and pertinent for this project. Their findings and similar experiences helped this author understand

some of the results and conclusions of this Web Professional Development program.

### ***Conclusion***

The Web-based training prototype provides a nice platform for training faculty in Colleges and Universities for the following reasons: make it accessible to everybody; just-in-time training; portability and flexibility; easy to use/develop training prototypes (Replication model); online training; collaborative and user-friendly environment. During their training and professional development programs, faculty learn how to develop effective online course using a Web-based approach to enhance teaching outcomes.

There is a great need for today's professors to use modern technological tools when instructing today's learners. The faculty personnel has to improve their skills in using Web media into their working process due to constant changes in educational technology. The creation of virtual classrooms on the Internet requires on one hand, the professor to integrate Web media in his/her teaching process, and other the hand, the learners to use it in his learning process.

### ***References***

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