

# Chapter XXI

## Using Virtual Learning Environments to Present Different Learning Blends

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### ABSTRACT

*This work is concerned with the evolution of blended learning supports for university students in moving from early Virtual Learning Environment (VLE) platforms and supports that were designed and facilitated by academics to those platforms designed commercially (particularly Blackboard) and developed using a mixture of commercial, collaborative, and e-learning supports. The chapter is an examination of a range of issues including production of learning resources and student learning approaches. It concludes by highlighting the importance of innovation and variety in the learning blend with increased reliance on digital collections and for learning approaches student experiences were evaluated as positive when undergoing problem-based approaches and were seen as stimulated to engage with e-learning materials based on the structure and operation of action learning sets.*

### INTRODUCTION

This chapter is concerned with providing a research perspective on the introduction, use and effectiveness of Virtual Learning Environments (VLEs), learning resource supports and experiences of applying these as blended learning sup-

ports for modules, and programmes in universities. Some experiences of how student feedback can inform design of the learning blend and the effects on student learning experiences in business higher education are relayed, as they have developed in this millennium.

The objectives of the chapter are:

- To communicate case outlines of developments in digital information technologies for learning in Liverpool Business School, part of one of the UK's largest universities, Liverpool John Moores University, as a means of exemplifying issues within the general sector. The target audience is digital information technologies (DIT) researchers, academics, and practitioners (designers and architects of VLEs, resource material authors, and online tutors).
- To illustrate the evolution and advances in technology commensurate with student needs over a period that has seen the transition from file servers, to Web platforms for student learning designed by academic staffs evolve to commercially designed Web platforms
- To use clear and current examples, case applications and illustrations throughout the chapter in an effort to tie the material to real world practice and thus provide interest and better understanding for the researcher and practitioner
- To provide an outline of current research and thinking to enable holistic overviews of strategy, process and blend design for researchers and practitioners who work with digital information technologies

The chapter contributes to a foundation for developing resources and implementing digital supports as they contribute to blended learning environments. It will demonstrate how academics and students behave, relate and learn in digital media and how instructors can promote blended, problem-based, and action-oriented learning. The work will outline the development of ICT-related knowledge as we have entered this millennium, to demonstrate how 'digital' learning processes and supports can be used to help academics and students meet the challenges of post-modern society characterised by norms, multi-tasking, resource developments, use of e-books, and sustainability

of the learning resource. The chapter presents a researcher with a range of currently used approaches in design, learning resource issues, and learning approaches in the practice relating to Digital Information Technologies, which will be supported with theoretical underpinnings.

## **BACKGROUND**

Problem-based approaches to learning (PBL) have a long history of advocating experience-based education. Psychological research and theory suggests that by having students learn through the experience of solving problems, they can learn both content and thinking strategies. The process requires that the teacher acts to facilitate the learning process rather than to provide knowledge. The goals of PBL include helping students develop flexible knowledge, effective problem-solving skills, self-directed learning skills, effective collaboration skills, and intrinsic motivation. There is considerable research on the first three goals of PBL but little on the last two (Hmelo-Silver, 2004, p. 235).

Action learning approaches were originally proposed by Revans. There are various useful books, Revans (1983), but, like all powerful methods, the principle and the process are very simple and serve to direct the energy and expertise of the participants. The action learning approach is a process of disciplined small group discussion. The groups typically are no smaller than four members and no larger than seven members. Group members share a context; typically:

- They may come from the same type of organisation
- The material is always live and highly relevant to all concerned
- Action learning is learning from experience
- The group agrees to meet over a period of time

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