Chapter 3
Virtual and Interactive Learning (VIL) in Transformation and Imparting Education in the Digital Era

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ABSTRACT
Virtual and Interactive Learning (VIL) is one of the new directions for education. It aims at using the WEB, being a networked, anytime, interactive, high-capacity, and content-rich environment, to enhance and facilitate independent learning and teacher-student communication. It would eventually lead to a paradigm shift of learning style, from teacher-centered to student-centered. It is bringing hope to millions who had abandoned the dream of continuing education due to paucity of time and money. It makes learning much easier as one need not be physically present in the classrooms all the time. Through VIL students are anticipated to learn to analyse the problem situation, devise the problem solving strategies, solve the problems and evaluate the consequences, all of which are considered as high-order abilities required in this new era. VIL should be facilitated by the provision of real-life experience so as to bridge the gap between classroom learning and real-life experiences by enabling students to learn in a simulated situation similar to the real ones.

INTRODUCTION
Information and communication technologies are today playing a very important role in transforming the mode of imparting education. Virtual and Interactive learning (VIL) is one of the new directions for education. This approach aims at using the WEB, being a networked, anytime, interactive, high-capacity and content-rich environment, to enhance and facilitate independent learning and teacher-student communication. VIL would eventually lead to a paradigm shift of learning style, from teacher-centred to student-centred. It
is bringing hope to millions who had abandoned the dream of continuing education due to paucity of time and money. It makes learning much easier as one need not be physically present in the classrooms all the time. The traditional role of teachers as knowledge providers will be changed to that of learning facilitators, since students can learn from the wide repertoire of information enabled by the Internet.

Kiesler & McGuire, (1987) said that, “The result of interacting learning process will lead to internalized, long-term understanding.”

Hong Kong Education and Manpower Bureau, (1998), “Students are expected to learn through communicating, either in a real environment requiring personal contact or on the Web, and then construct and reorganize their own knowledge.”

According to Parker (1999), “The result of interactive learning can be new knowledge, re-organized knowledge, or simplify the awareness of a need for additional understanding.”

Students should not be seen as empty vessels or sponges that absorb knowledge imparted by the teacher (Akyalcin, 1997). Therefore, VIL should be facilitated by the provision of real-life experience so as to bridge the gap between classroom learning and real-life experiences by enabling students to learn in a simulated situation similar to the real ones. Learning as it normally occurs, as argued by Lave (1988), is a function of the activity, context and culture in which it occurs (i.e., it is situated). The physical context is referred to as the situation and this kind of learning is called situated learning. Situated learning is usually unintentional rather than deliberate (Lave & Wenger, 1990). The modern web technology enables the creation of simulated situations for students to explore as well as the communication convenience for students to interact. It is therefore an ideal venue for students to construct their knowledge. This is what a web-based teaching environment is for. Learning as it normally occurs, as argued by Lave (1988), is a function of the activity, context and culture in which it occurs (i.e., it is situated). The physical context is referred to as the situation and this kind of learning is called situated learning. Situated learning is usually unintentional rather than deliberate (Lave & Wenger, 1990). The modern web technology enables the creation of simulated situations for students to explore as well as the communication convenience for students to interact. It is therefore an ideal venue for students to construct their knowledge. This is what a web-based teaching environment is for.

OBJECTIVES

• Virtual and Interactive Learning enhance and facilitate independent learning and teacher-student communication.

• VIL should be facilitated by the provision of real-life experience so as to bridge the gap between classroom learning and real-life experiences.
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