Immersive Learning Theory: As a Design Tool in Creating Purpose-Built Learning Environments

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INTRODUCTION

This article explores an application of immersive learning theory in an Australian secondary school. The emphasis in this study is on the development and implementation of a learning environment that encompasses four essential learning elements: immersion, engagement, agency, and risk (Blashki, Nichol, Jia, & Prompramotes, 2007; Nichol & Blashki, in press). The following documents the impact of a "purpose-specific environment" (Blashki, 2000) created at Karingal Park Secondary College (KPSC) and referred to as the max learning space. The max learning space ("The Max") was constructed, both physically and pedagogically, upon the precepts of immersive learning for year 7 students to enhance and support their initiation into secondary school learning.

The max learning space was established at KPSC to create engaging, immersive, and interactive learning experiences for students, assist them in the transition from primary to secondary school, and enhance and support the development of a range of skills such as independent inquiry, higher order thinking and "interpersonal reasoning and social interaction" (Kirkely, 2004, p. 321). Such an environment is expected to more appropriately prepare students for their future tertiary study, social and work experience, and lifelong learning rather than the traditional classroom setting.

Immersive learning aims to employ a learner-centred approach that supports learners to participate directly and implement engaging and interactive learning activities. The underlying philosophy of immersive learning emerges from, and is inspired by, a number of seminal theoretical approaches, including: Piaget's constructivist theories that view learners as active participants in the construction of knowledge (Newby et al., 2000; Savin-Baden, 2000); Papert's constructionist approach which focuses on social engagement among learners in sense making activities (Harel & Papert, 1991); Vygotsky's emphasis on building social cultural activities to achieve effective learning (Newby et al., 2000; Vygotsky, 1978); and Maslow's assertion that humans naturally need to learn and strive to increase their intelligence. In addition, the immersive learning model builds upon Boekaert's (1997) self-regulated learning that places the learner in control, the American Psychological Association's (APA) (1993)learner-centered principles which acknowledge the learner's active role, and Bandura's (1977) social cognitive theory which perceives learning as a three-way interaction among the environment, personal factors, and behaviour (Ainley & Patrick, 2006; Bandura, 2001; Bonk & Cunningham, 1998).

In application, immersive learning has been implemented with great success in higher education (Blashki, 2000; Blashki & Nichol, 2006). Blashki has established various studio environments incorporating immersive learning principles at both Deakin and Monash Universities in Melbourne, Australia, and results indicate increased motivation, retention rates, and performance.

However, researchers are still in the nascent stages of exploring this innovative theory, and there are many complex and interesting issues still to explore**.** To research these issues will not only enrich the field of understanding of teaching and learning practice, but also benefit implementations which connect theory, research, and practice. Moreover, there has been little work in the

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ways in which secondary students might benefit from this innovative learning theory. This article aims to focus on exploring a purpose-built interactive learning environment at KPSC. More specifically, this article will examine the use of immersive learning as a design tool in creating the physical learning environment, and the ways in which such a learning environment might impact on teaching and learning.

BACKGROUND

Learning environments are instructional strategies. Teachers' choices about the types and organization of learning environments are choices about what and how students will learn. (Norton & Wiburg, 2003, p. 271)

The Max immersive learning environment was funded by a grant from the State Government and the design was developed by a collaborative team comprising of the teaching staff that would use The Max, and the research team. Completed in early 2007 for the incoming year 7 students at KPSC, the environment was named "The Max" because of the maximum benefits it was believed it would have for the students. The physical architecture of this space reflects design principles governed by the four immersive learning principles discussed in detail later. The physical space is open and, more importantly, without imposing structures or boundaries as impediments to the free flow of space, an important and active part of the teaching/learning process. It was important that the physical environment supports and reflects the values of the research and teaching team; an opportunity for active, interactive, and social learning practice.

The arrangement of furniture and other resource materials in The Max is nonlinear, often appearing to more traditionally oriented teachers as "random" and "chaotic." Students and staff co-operatively determine the placement of furniture and so forth "on the fly" or according to the demands of the current activity. At any one time approximately 100 students will be participating in a variety of different subjects: math, integrated studies, science, literature, and so forth, with each group comprising of approximately 20 students dependant on the student's willingness to participate and staff selection. In the initial session students are introduced to the pedagogic concepts in plain language and are encouraged to take "ownership of the learning space." While the space accommodates at least 100 students at any time there are only 25 computers set up in the space. This is to emphasize that the technology is merely a tool in the same way as books, pencils and paper, and not to be relied upon to do the "thinking" for them. Each student has been allocated a user name and password in order to conduct research, or work collaboratively with one or more students to explore a topic. They do not need to sign in to access these computers, and they can use the technology at any school time (including after class) to access these facilities. All computers are connected to the World Wide Web, thus students have free access to the Internet. In one corner of The Max is a television and VCR set, which serves the dual purpose of teaching resource and recreational pastime. During work time students need to request to use it if it is not related to work currently being undertaken.

Throughout the space there are many areas students can post their work: notice boards, whiteboards, and walls around the space are available for students to use for display. These displays comprise of not only print, but also pictures, booklets, newspapers, maps, students drawings, and charts. Student work is everywhere. In addition, there are two specific corners which display the results of competitions: one based on student's self-evaluated reading score (a poster indicates the appropriate levels) and one based on a staff record of students who exhibit appropriate behaviours such as providing help to others or by contributing to the community (The "star of the week" and a picture will be posted on the wall).

As Norton and Wiburg (2003, p. 258) suggest, a quick survey of a learning space "gives one a good indication of the kind and quality of literacy being produced." The setting of The Max ensures that students have easy access to all learning materials and tools but also encourages sharing, collaboration, and group activities. Moreover, similar to Blashki's "studio environment," The Max also aims to bring students into a community and establish stronger connections between "experience, knowledge and practice" (Blashki, 2000).

WHAT IS AN IMMERSIVE LEARNING ENVIRONMENT?

An immersive learning environment is a space for explorative play; a *learning* space rather than a *teaching*

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