

Chapter XXII

A Virtual Museum Where Students can Learn

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ABSTRACT

SEE, Shrine Educational Experience, represents an example of how Internet and multimedia technologies can effectively be exploited to deliver complex scientific and cultural concepts to middle and high school students. SEE (a project by Politecnico di Milano and the Israel Museum, Jerusalem) is based on a shared online 3-D environment, where students from four possibly different countries meet together to learn, discuss and play, visiting the virtual Israel Museum with a guide. The educational experience combines online engagement and cooperation to “traditional” off-line learning activities, spread across six weeks. Data from an extensive two-year-long evaluation of the project, involving over 1,400 participants from Europe and Israel, prove the educational effectiveness of this innovative edutainment format.

INTRODUCTION

SEE—Shrine Educational Experience—is an e-learning project based on a shared online 3-D environment, where students from different countries meet to learn, play, and engage in a high-level

scientific debate about the Dead Sea Scrolls, one of the major archaeological discoveries of the 20th Century. The Dead Sea Scrolls were written by a Hebrew community who lived in the archaeological site of Khirbet Qumran between 170 BC and 68 AD (Roitman 1997). They represent the

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earliest known version of books from the Bible, and a precious source to understand the roots of Western civilization.

SEE is the result of cooperation between the Politecnico di Milano and the Israel Museum, Jerusalem. As part of its educational mission, the Museum wished to make its large body of knowledge and artefacts upon the Dead Sea Scrolls accessible to the public at large, and to open issues of scientific research to a broader public, with respect to the small group of scholars to whom the discussion is usually restricted.

Thanks to Internet technologies, providing simultaneous access to users independently from their geographical location, (middle and high school) students from all over the world can visit the virtual Shrine of the Book (Figures 1-2), and

take part in discussions, games, and debates with international experts, discussing state-of-the-art research about the Dead Sea Scrolls.

Each SEE experience involves four classes of students between 12 and 19 years of age, located in different geographical areas: they meet, in the online virtual world, four times (over a period of six to seven weeks). Through the online meetings students get acquainted with each other, discuss, play, answer quizzes, present their social and cultural environment, etc. Students, in addition, cooperate off-line, under their teacher's supervision, studying background material (based upon interviews with leading international experts) and carrying on their own homework.

This innovative learning experience aims at four major educational goals:

Figure 1. A screenshot of the virtual Shrine of the Book, reproducing the wing of the Israel Museum where the Scrolls are preserved

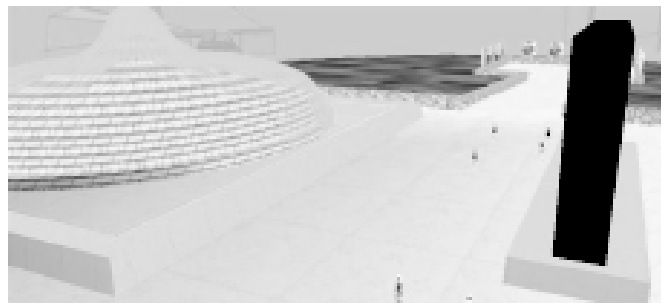


Figure 2. The real buildings of the Shrine of the Book at the Israel Museum, Jerusalem



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