

Virtual Reality in Education: Irish and American Students Meet on the Virtual Frontier

As part of a unique educational environment created by students and teachers at Newman School, in an exclusive partnership with Microsoft Corporation, Irish and American students will use multi-user virtual reality technology to facilitate trans-Atlantic meetings. This avatar-based system provides an unprecedented learning opportunity for high school history students. Historical role-playing will facilitate an exchange in which students at Isidore Newman School in New Orleans, Louisiana learn about the conflict in Northern Ireland, and students at Sutton Park High School in Dublin learn about the legacy of the American Civil War.

As society and technology change, so do educational methods. As the industrial revolution created larger, more population-dense cities, schooling changed from a largely in-home process to an in-class process. Now, with the silicon revolution, children are learning with the aid of computers. Biology books come with multimedia CD-ROMs, and digital encyclopedias outsell their traditional counterparts. As desktop computers have become more powerful, virtual reality is beginning to make its first contributions to K-12 education.

Over a year ago at Isidore Newman School, history chair Mark Cowett wanted to put the new computer facilities to good use in the history curriculum. He worked with a computer teacher who was conducting a role-playing experiment with his 10th-grade class using Black Sun's virtual worlds and multi-user technology. He had his students design alter egos, which they embodied as avatars in these virtual worlds, and report back on their experiences in cyberspace.

At Newman School, the team is now using the publicly available V-Chat software to create avatars that allow students and teachers to explore conflict resolution. In their history class, students are studying the origins of the Civil War and researching historical figures they find particularly interesting. Their research culminates as they assume the roles of Abraham Lincoln, Harriet Tubman, John Brown, Frederick Douglass, or other historical figures. Avatar-enabled historical role-playing allows students to become actively engaged in historical narratives that normally remain trapped on the pages of their textbooks.

Halfway around the world, Irish students are engaged in a parallel experience. Students from Sutton Park High School confront a different legacy. After decades of bitter conflict, Nationalists and Loyalists are still at war in Northern Ireland. Sutton Park students are becoming another cast of characters: Joseph Collins, Daniel O'Connell, and Oliver Cromwell.

Sometime this spring, an exciting meeting will occur. Sutton Park history students will enter a virtual world populated by Newman students role-playing historical figures from the Civil War. The Irish students will become historical journalists, conducting trans-Atlantic interviews with Newman's articulate and knowledgeable avatars. They will piece together complex historical narratives from the conversations they have with the student experts at Newman School. These reporters will produce newspaper-like Web pages as accounts of their virtual meetings and learning experience.

Students in both schools will discover a shared historical bond through learning about the travels of abolitionist Frederick Douglass. In 1845, he

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traveled to Ireland to lend support to the Irish emancipation effort. Some even referred to Douglass as the "Black O'Connell of the United States." Douglass' visit to Ireland gave him an international perspective similar to that which students at Newman and Sutton Park will gain from their contemporary trans-Atlantic journey.

Students from New Orleans will in turn interview the Irish students' historical avatars and hear first hand accounts of the Irish Civil War. This interaction will stimulate discussion of important historical themes including civil war, religious tolerance, slavery, freedom, conflict resolution, and international relations. Sharing local conflicts with a global audience will stimulate fresh perspectives on how to promote social justice.

The chief advantage of online interactive education is that multiple schools can participate. This allows conflict resolution scenarios to be explored using the same virtual world with new avatars. Furthermore, college students who have done sufficient research could supervise discussions or even assume the historical roles. The fact that the world is freely open allows for younger students to learn from the older students. Also, by gaining knowledge of different figures, students earn the right to assume that figure's avatar.

The goal of this project is to address the historical specificity of global conflict and integrate cutting-edge technology with subject-area knowledge by employing multi-user virtual environments for historical role-playing. Today we are addressing the conflict in Northern Ireland: tomorrow schools around the globe will meet in cyberspace to explore the historical roots of conflict.