



Exploring Our World: A Journey Through Space

Developing an Inquiry Model for
the Teaching of History Through
the Virtual Globe

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Characteristics of the New Inquiry Model: Democracy As a Way of Being

- A constructivist approach that fosters collaborative interpersonal-correction and verification.
- Provides accessibility to primary sources and resources for historical research.
- Encourages the building of historical arguments across cultures by building communities of inquiry.
- Promotes spatial visualization in the cognitive process.

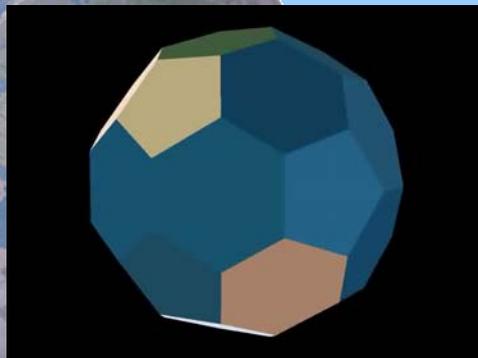
Engineering History...

- Spatial constructive approach
- Direct, rapid, accurate access and display for primary sources
- Support collaboration to build arguments across cultures and space



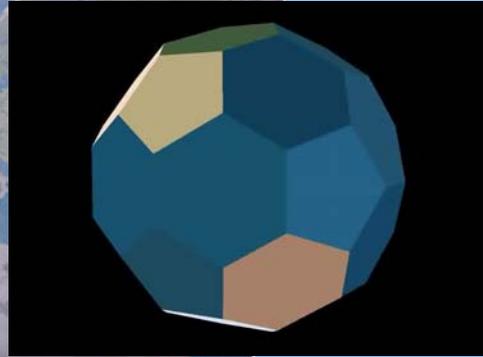
...Through the Virtual Globe

- The World In Your Hands
- A hexagon-based platform for the integration and visualization of global data
- Based on a mathematics that supports rapid, regular decomposition (ISEA3H Discrete Global Grid)



Technical Benefits of the Virtual Globe

- Spatial platform.
- Designed for P2P interaction.
- Supports rapid, accurate and repeatable access and display for multiple concurrent datasets:
 - Current - Earth Observation of UNESCO world heritage sites.
 - Archival – political boundaries and population data.
 - Distortion does not increase with latitude – serves Sweden as accurately as Italy, unlike conventional techniques.



Pedagogical Benefits of the Virtual Globe

- Creates environment for inquiry
- Facilitates higher order of thinking
- Enables alternative modes of learning
- Encourages the use of spatial imagery

Educational Aims

- Democratic education: understanding democracy as a way of being
- Acknowledging the relevance of education as a transformative process

The Inquiry Process Begins... Strategies to achieve the Educational Aims

Physical



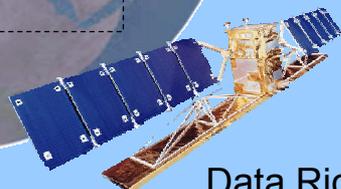
Collaborative



Launch Pad for Alternate
Media



Representative



Data Rich

Exploring the Turbulent World of the 1960's and 70's Physically

- *Where did the protests occur? How did the location affect the protests?*



Exploring the Turbulent World of the 1960's and 70's Though Alternative Modalities

- *Why did these protests begin? Have you heard about this?*
- *What were the main issues/concerns? Do you remember those close to you talking about this?*



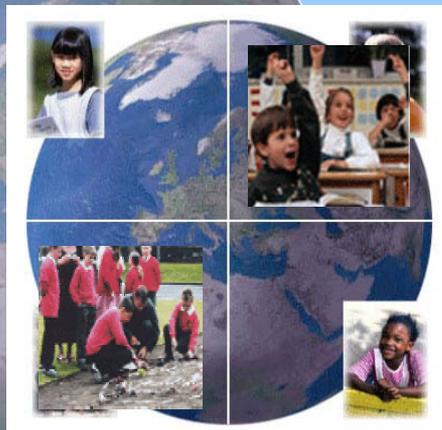
Exploring the Turbulent World of the 1960's and 70's Through Representation

- *How were the cities changing? What happened with schooling? Why were young people worried about the environment?*



Exploring the Turbulent World of the 1960's and 70's Through Collaboration

- *Why are so many young people involved in the protests in some places and not in others?*



Exploring the Turbulent World of the 1960's and 70's Through Data

- *Are there historical precedents for young people demonstrations in the 1960s? Why?*



Wrap-up

The Virtual Globe facilitates the building of a community of inquiry involving teachers and students across the world.

The Virtual Globe promotes spatial visualization without excluding other cognitive dimensions.

The Virtual Globe provides means to deal with discipline-based standards and constructivist pedagogy.

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Please contact Frank Huntley at fhuntley@GRIDS.ca for interactive versions of this presentation (many of the slides display video captures and simulations of the technology) or to answer further questions about the application of the Globe to education or other needs.