

## the Naledi3d Factory "Interactive 3d Learning Objects" and water (2005)

**Purpose:** This second Virtual Multimedia Academy (VMA) content project had a number of objectives: to create locally relevant content on the topic of "water", to share this content locally, to explore and incorporate the concept of "Learning Objects" into the material and finally, for the five "country teams" (Ethiopia, Mozambique, Senegal, Sudan and South Africa) to explore ways of working together.



**Partner:**  
**UNESCO**

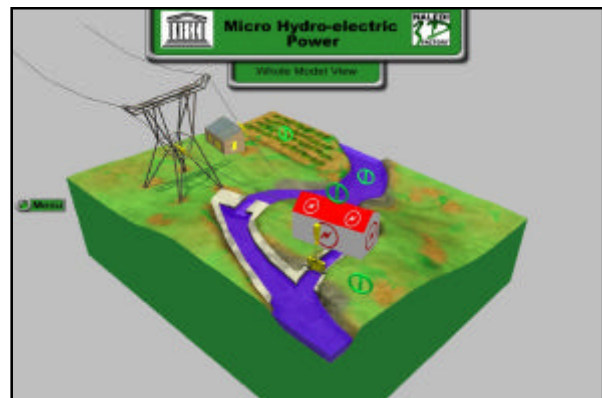
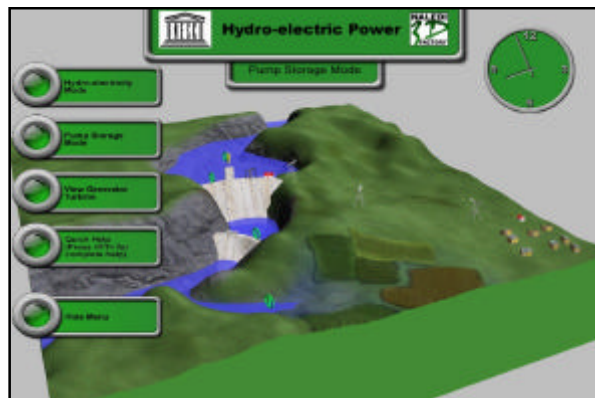


### In a Nutshell:

Using "water" as a theme, each of the five country teams selected topics relevant to local needs. The South African contribution was to develop three "Interactive 3d Learning Objects" addressing (1) how to build a pit-latrine (2) how hydro-electric power is generated and finally (3) maintenance aspects of the AFRIDEV pump.

### An "Interactive 3d Learning Object"... and it's localisation:

The work on Learning Objects led to the development of the "Interactive 3d Learning Object" which is a sub-set of Learning Objects. It is based on interactive three dimensional representations of real life objects, can be rotated, taken apart and inspected in a way that provides a rich and rewarding learning experience. The "Interactive 3d Learning Objects" can be built in such a way that the language elements (audio and text) can be easily modified (localised) by others to suit local needs. The procedures developed for this were evaluated and tested by Dakar University (Senegal) and Eduardo Mondlane University (Mozambique).



### The three "Interactive 3d Learning Objects":

- (1) The VIP (Ventilated Improved Pit) - its main features and major stages in construction.
- (2) Hydro electric power (HEP) - how power is generated and the differences between conventional, pump storage and micro hydro-electric power.
- (3) the AFRIDEV water pump - the main components, how the pump works and maintenance - of which one repair process was shown as a visually interactive procedure.

