nQuire: supporting Inquiry Based Learning

Eloy Villasclaras, Mike Sharples, Eileen Scanlon
edvf2@openmail.open.ac.uk, mike.sharples@open.ac.uk, eileen.scanlon@open.ac.uk
Institute of Educational Technology (IET)

Outline

nQuire is a tool for Inquiry Based Learning (IBL) that guides users along a series of activities to scaffold their investigations. Through nQuire, users can create their own personally relevant questions and try to answer them.

With the integration of nQuire into The OpenScience Laboratory, new opportunities arise to create inquiries around scientific tools such as iSpot, Virtual Microscopes, and the remote telescope PIRATE.

Objectives and challenges

Educational objectives:
• Create engaging and effective IBL activities in distance learning environment.
• Understand the role of collaboration and user communities to support IBL.

Technology objectives:
• Understand the requirements for authoring and management of user-created inquiries.
• Develop common data exchange protocols between scientific tools and nQuire.
• Ensure new scientific tools integrated will be interoperable with nQuire.

Inquiry Based Learning cycle

Moon Rock Explorer inquiry

The Moon Rock Explorer inquiry demonstrates the new possibilities of the integration of nQuire and The OpenScience Laboratory.

• Explore samples of Moon rock, using the Open University’s Virtual Microscope.
• Pose scientific questions, collect data to answer them, and reach conclusions.
• Share questions, data, doubts and expertise in an open user community.

Moon soil studied in the Moon rock Explorer inquiry
(photograph courtesy of NASA)