Examples of Student Projects (2007-8)

Project Title	Project overview	Design features
Blood Pressure	To facilitate understanding of: Blood pressure, the relationship between pressure and flow, how high blood pressure is investigated.	Clinical scenario presented via SBLi and incorporating clinical data for analysis.
Lung function variation	A resource constructed in Wimba Create and based in WebCT for medical students, to facilitate the understanding of lung function variation, measurement and assessment.	A resource using online audio lecture (Macromedia Breeze). Analysis of individual and group experimental data using excel, and discussion and evaluation of data via Discussion Forum.
Protein Purification	A WebCT resource on the methods to purify proteins using fluorescent proteins as an example.	Online problems with data analysis (problems, graphs) including hints and 'how-to-do-it' instructions (pop-ups) based on 5 experimental procedures.
Awakenings: A Resource on Encephalitis lethargica and Parkinson's disease.	A scenario based resource that aims to improve students' knowledge of Parkinson's disease and Encephalitis lethargica. It is based on the research by Dr Oliver Sacks and the film Awakenings.	Includes video clips, case histories, lab/clinical data, imaging and film extracts. Assessment by quiz.
Morpho J Support Documentation	To provide support for users of Morpho J software, which has been developed for the Analysis of Organismal Form unit. This unit is taken by students from across the world, and is taught primarily via WebCT.	Constructed in Wimba Create. By using a series of screenshots and recording the actions taking place on screen, the functionality of the software has been described in a step by step guide.
Invasion	The aim is to introduce Level 2 immunologists to the concept of lipid kinase signalling within the innate immune system.	Scenario-based cartoon-style resource with problem solving focus (SBLi)
Peptide transporters: a Final Level problem	A resource to facilitate problem- solving	A paper-based problem converted to an online form with formative feedback, helpful hints, explanations and diagrams as `pop- ups'
Lymphocyte migration and in vivo cell imaging	A resource to support final level students studying immunology in 'Advanced Immunology' and 'Immune Response and Disease'.	Includes problem solving and calculations based on multi-photon intravital microscopy and video of lymphocyte movement.

Student Research Projects: Guidance on Practice in the Biosciences www.bioscience.heacademy.ac.uk/resources/guides/studentres.aspx