

EDUCATIONAL APPROACHES TO TEACHING STRUCTURE AND FUNCTION IN BIOLOGY

Graham R. Parslow

Russel Grimwade School of Biochemistry and Molecular Biology, The University of
Melbourne, Victoria 3010, Australia

gparslow@unimelb.edu.au

There is no simple or single correct formula for good teaching, because every sincere teacher can inspire students to work and learn. This talk will trace personal experiences with traditional blackboard lecturing, projection technologies (slides, overhead projections and video projectors) and audio technologies. The technologies we now use began as discrete boxes, but as computing power has grown those boxes have been incorporated into just one box. In looking at this history there was never a time of bad teaching and this tells us that all technologies work in their time and place. I began teaching structure using large physical models of DNA, lysozyme and haemoglobin. These physical models now lay unused in storage rooms because computers render numerous structures in high detail and allow powerful manipulations, such as instantly stripping a protein structure to a ribbon outline. The success of teaching depends not only on using technology, but on appropriately blending lectures, tutorials (including problem based approaches) and laboratory work. Some examples of teaching will be chosen for illustration.