

Mc Nulty, Brendan, 1997, The role of visual literacy in student learning: an investigation with special reference to engineering.

ABSTRACT OF DISSERTATION

Visual literacy as defined Hortin is 'the ability to understand and use images, including the ability to think, learn, and express oneself in terms of images'. It is an integral part of our education system but it is either ignored or misunderstood by many teachers. One of the most important elements of education is the ability to interpret what we see. A teacher will always try and present information to the students in a way that will maximise student learning. However, the way in which each individual student interprets that information can be unique to each viewer. The subject of Engineering is heavily dependent on the use of images as a means of instruction and this is often implemented by means of the overhead projector.

The proper use of colours and cues in an image can enhance the learning potential of an image. If used in the wrong combination, the result can be a reduction in learning by the viewer. Results from three class groups showed that all colour images or all black and white image produced effective results in the students' answers but when the same image was presented using a combination of black and white image and colour cues it produced unsatisfactory results.

Choosing the appropriate image for a class is important. It has been shown that an image that is too simple loses the viewers' attention, while one that contains too much detail can be distracting. In Engineering, the image that would appear to be best suited would be the schematic type drawing that does not contain the complicated detail of a photograph but contains sufficient detail to keep the viewer interested in looking and repeatedly scanning the image.

When examining students by means of a written paper, students who received a colour image on their answer sheet generally answered better than those who received a black and white image. The students who viewed either a full colour transparency or an all black and white transparency did better in test than those who viewed a transparency made up of both colour and black and white.

The AH2 (Anne Heim) is a general reasoning test that is often used to stream pupils entering schools. When the students' AH2 results were correlated against the results obtained from the tests using the overhead projector it was found that there were not correlations between the two results. The findings suggest that pupils do not get a true representation of their potential abilities simply by means of a general reasoning test.