

Using Visual Thinking Strategies (VTS) in the Dental curriculum to enhance critical thinking.

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VTS is about the connection between visual perception and thought; “visual thinking”. Identifying what we see is an act of cognition. We think even as we process images. VTS is a novel teaching and learning strategy using visual art to teach critical thinking (Arnheim, '72). With origins based on the 5-stages of Aesthetic Development model aligned to Piagetian cognitive development (Housen, 1992), it has been widely used in education but more recently introduced into medical education in the US and UK (Naghshineh et al, 2008). VTS aims to develop enhanced observation and reasoning skills in the clinician, using the multiple perspectives gained from group sessions in aesthetic development (Housen, 2002).

In 2012, The Cork University Dental School and Hospital introduced VTS in one module of the first year undergraduate dental and dental hygiene programmes. Using two classroom teaching lessons, students were exposed to structured viewing of art work and photography designed to stimulate discussion, sharing of views and awareness of multiple observations, inferences and interpretation of a shared object. The reflection on the art work is facilitated by structured questioning, pointing to the elements seen, paraphrasing and non-judgmental group discussion, leading to evidence supported observations. The classroom lessons were followed by one visit to the Crawford Gallery in Cork to explore VTS in an alternative context. As part of the introduction to VTS in the dental curriculum, a qualitative assessment was conducted to assess the writing samples collected before commencement of VTS and after completion, to evaluate the advancement of students' critical thinking.

References

Arnheim, R. *Toward a Psychology of Art*. Berkeley and Los Angeles: University of California Press, 1972.