

# EMBEDDING ART IN HISTOLOGY TEACHING: VISUAL THINKING STRATEGIES (VTS) TO ENHANCE VISUAL LITERACY

Lisa K. Akison<sup>a</sup>, Jordon Patti<sup>a</sup>, Louise Ainscough<sup>a</sup>, and Kay Colthorpe<sup>a</sup>

Presenting Author: Lisa Akison (l.akison@uq.edu.au)

<sup>a</sup>School of Biomedical Sciences, The University of Queensland, St Lucia QLD 4072, Australia

**KEYWORDS:** biomedical teaching, visual thinking strategies, histology, observational skills, visual literacy

## BACKGROUND/AIMS

Histology is a visually challenging subject for novice students. Visual thinking strategies (VTS) uses the viewing of art to improve visual literacy in classroom settings (Housen, 2002), including medical programmes (Reilly, Ring, & Duke, 2005), but has not been evaluated in histology. This project assessed the impact of VTS on students' observational skills, perceptions of histological images, and practical report marks.

## METHODS

Participants were third-year biomedical students ( $n=133$ ) studying histology in 2021. Students were shown a novel histology image and wrote their observations (pre-VTS). An experienced VTS facilitator guided students through an approximately 20-minute session exploring a never-before-seen artwork. After the VTS-activity, students were shown a new histology image and wrote their observations (post-VTS). Pre- and post-VTS descriptions were scored for measures of observational richness and compared. Responses to open-ended reflective questions were analysed by inductive thematic analysis. Report marks were compared with those from a previous year.

## RESULTS/CONCLUSIONS

While there was no significant effect of the VTS activity on the students' pre-/post-VTS descriptions, nor on their practical report marks, 46% of students reported that VTS changed how they viewed histological images and improved their observational skills. This study suggests that a one-off VTS activity at the beginning of a histology class can benefit students' experience of unfamiliar microscopic images and improve enjoyment of this challenging subject.

## REFERENCES

Housen, A.C. (2002) Aesthetic thought, critical thinking and transfer. *Arts and Learning Research Journal*, 18, 99-132.

Reilly, J. M., Ring, J., & Duke, L. (2005) Visual thinking strategies: a new role for art in medical education. *Family Medicine*, 37, 250-252.

Proceedings of the Australian Conference on Science and Mathematics Education, The University of Western Australia, 28-30 September 2022, page 12, ISSN 2653-0481