

Evaluating haptico-visual observation and drawing (HVO&D) as an educational approach

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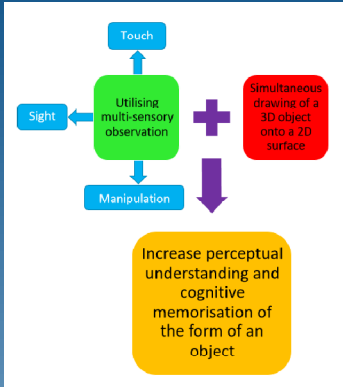
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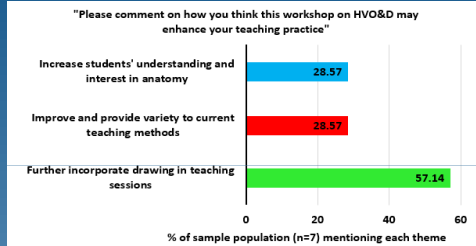
HVO&D

Combination of observation, touch, visualisation and drawing



Rationale

Strong basis for important relationship between development of observational skills and anatomy learning using artistic learning approaches^[1-8]

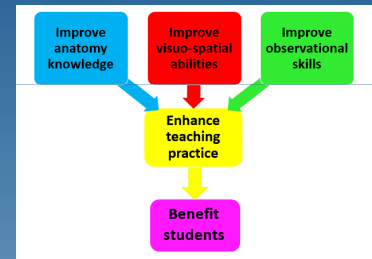


Educators would value HVO&D for exploring integration of drawing into anatomy teaching

Pilot evaluation

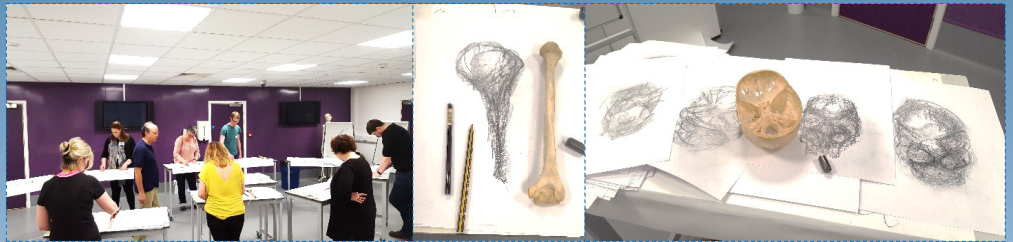
- HVO&D workshops for educators and students
- Mixed-method survey and experimental approach
- Pre-post tests; Likert type and free text questionnaires and focus group
- Statistical and semi-quantitative thematic analysis

Intended outcomes



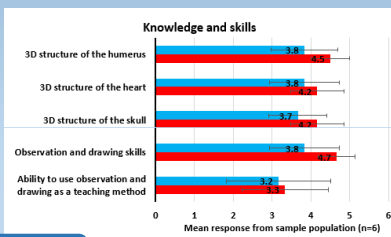
Workshops

HVO&D workshops were facilitated by Leonard Shapiro and were held for anatomy educators at Newcastle University in May 2017 and for medical students at University of Cape Town (UCT) in August 2017

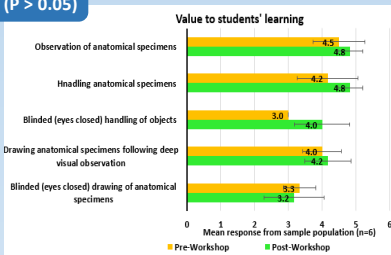


Participants used HVO&D to appreciate 3D form of anatomical structures including the humerus^[3] and skull

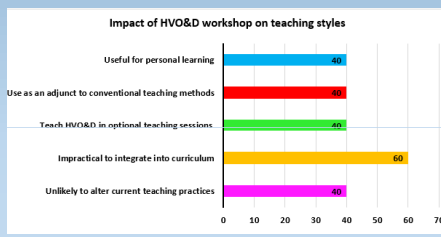
Educator perceptions



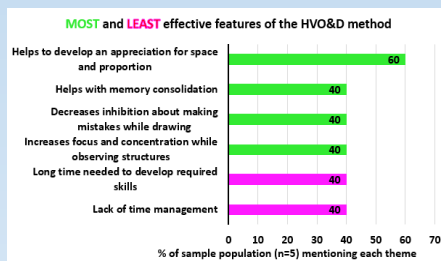
All items NS (P > 0.05)



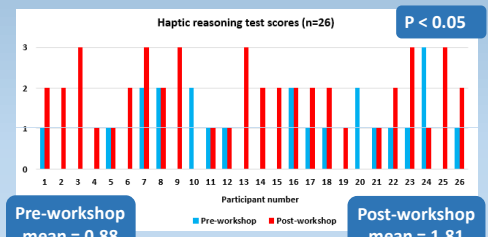
Increases in reported knowledge, skills and perceived value of HVO&D for learning were not significant



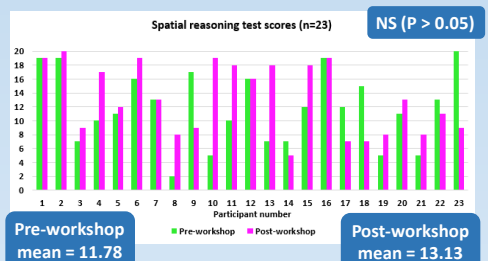
Educators perceive theoretical advantages but identify potential challenges in curricular integration



Experimental findings



Significant increase in pre-post haptic reasoning test scores of educators and students (Combined data from Newcastle and UCT workshops)



Summary

- HVO&D could enhance anatomy learning through improving haptic reasoning
- Aim to repeat with larger sample following test and questionnaire validation
- Further explore theoretical basis and evidence supporting HVO&D in learning
- Investigate potential for combining aspects of ORDER⁽⁹⁾ and HVO&D

Acknowledgements

The authors wish to thank all workshop attendees for their participation. This work was funded by a Newcastle University Faculty of Medical Sciences (FMS) Unit for Educational Research, Development & Practice (ERDP) development grant and a Newcastle University Student Wellbeing Vacation Scholarship. Ethical approval for the work was granted by Newcastle University and University of Cape Town.

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