Radiographic Anatomy: artistic pedagogy

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Overview

- Traditional anatomy teaching methods challenged
- Evidence based teaching applied
- Impact of anatomy body painting for Diagnostic Radiographers
Traditional Anatomy Teaching

- Plastic models
- Dry/plastic bones
- Books
- Online resources
- Cadavers
- Radiographic images
- Didactic/Kinaesthetic
Teaching and Learning Issues

- Anatomy teaching can be ‘banausic, didactic, traditional, overly factual’ (Turney 2007)
  - Student engagement – attendance (McMahon 2006)
  - First year students – transition
  - Learning styles

- Deep learning versus surface learning (Biggs 1999)
  - Decay of anatomical knowledge
    - 90% falling to 37.5% within timeframe of programme (Hall and Durward 2009)

- Standards of Practice (HPC), Standards of Education (QAA), Curriculum Framework for Radiography (COR)
The Challenge!

We are educating Radiography students to image living human beings.

“They cannot be palpated, auscultated or usefully asked to change position”

John McLachlan et al 2004

‘To say that a man is made up of certain chemical elements is a satisfactory description only for those who intend to use him as a fertilizer.’

Hermann Joseph Muller, Geneticist & Nobel Prizewinner
Introducing Art

'The Anatomy Class at the Ecole des Beaux Arts'. François Sallé, 1888
The Evidence

Anatomy Body Painting in Medical Education

Finn GA, Fleming K, McLachlan JC, 2010

McLachlan JC, Durham University
The Logistics

- Classroom set-up
- Resources
- Time constraints
- Class size
The Logistics

- Culture change
- Consent
- Peer opinion
What do Radiography students get from body painting anatomy?

- Reinforces learning
  - Visual image of underlying structures
  - Questioning reference sources
  - Recognition of normal variants
  - Mistakes
  - Colours
What do Radiography students get from body painting anatomy?

- Professional approach
  - Peer physical examination
  - Communication
  - Empathy
Artefacts for Revision

Centre for Higher Education Practice Award
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Student's Comments

- Helped visualize the anatomy
- It just kind of sticks in your mind
- It's fun - the group gets together and has a good time ... that accelerates learning
- I think I will remember this during my exam
- I find it surprising their exact locations and actual size
- Helped identify on a person rather than on a skull
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References