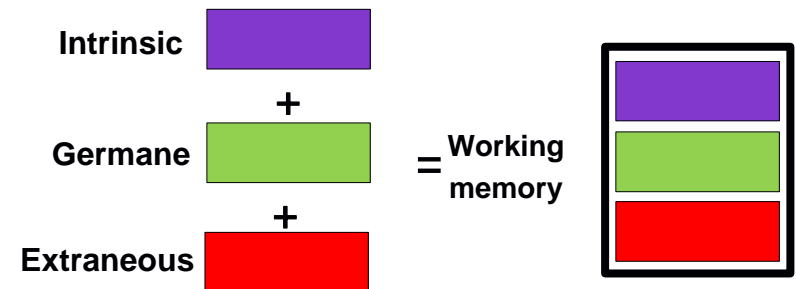
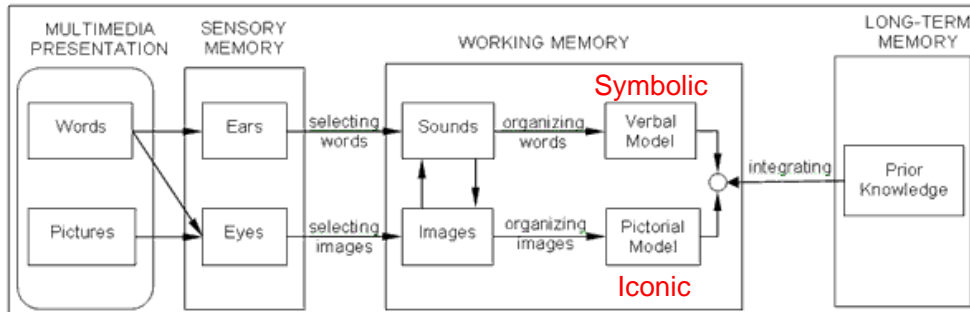
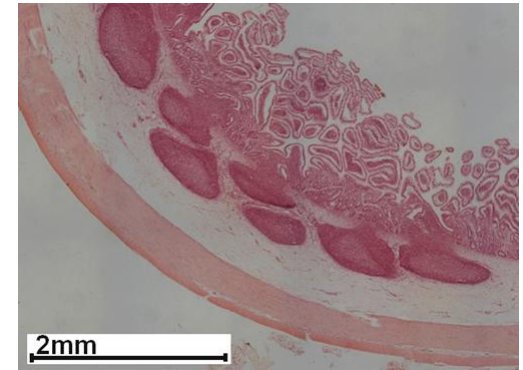


Investigating the use of images in assessment

Dr J Holland*, Ms M Flood, Dr A McGarvey, Prof R O'Sullivan, Prof T Pawlikowska



#iNME2017



RCSI

Jane Holland

Prospective Study design

➤ Think-aloud protocol

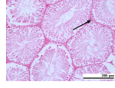
- ❖ Interviews with 30 students
- ❖ 14 Multiple Choice Questions
 - ❖ Textual vignettes
 - ❖ Visual images within some stems
 - ❖ Essential / non-essential

Q1. Diabetes insipidus is a condition in which the urine cannot be concentrated, so huge amounts of water are excreted, and the person must drink copiously to compensate. This condition is typically caused by disease or damage to which of the following structures?

- Adrenal medulla
- Anterior pituitary
- Hypothalamus
- Pancreas
- Renal cortex

Q2. What is produced by the cells indicated by the arrow in the image to the right?

- Alkaline phosphatase
- Aldosterone
- Insulin
- Testosterone



Q3. Endocrine cells manufacture hormones, which are then exported to act on receptors at distant sites in the body. Which of the following organelles plays a significant role in the manufacturing of these hormones within the cell?

- Endoplasmic reticulum
- Golgi apparatus
- Mitochondria
- Nucleus
- Vesicles

Q4. While attending the obstetric clinic, you see and examine a number of ladies attending for their routine pre-natal visit. Which of the following hormones is produced by the placenta during pregnancy?

- Follicle stimulating hormone (FSH)
- Growth hormone
- Human Chorionic Gonadotrophin (HCG)
- Luteinising Hormone (LH)
- Prolactin

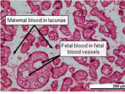


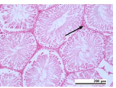
Fig 3 of 6

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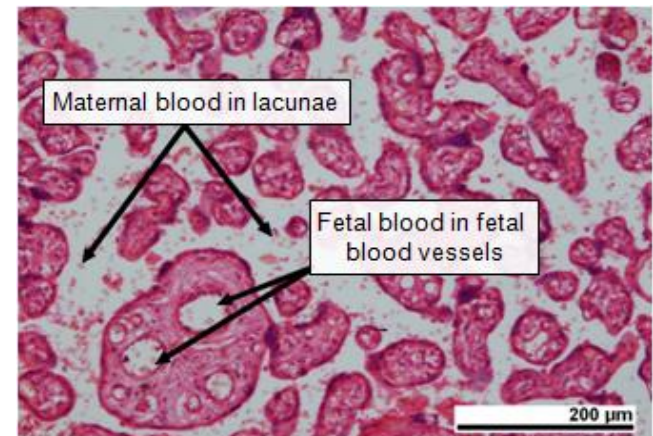
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Results to date

- Quantitative (CTT) item analyses
 - ❖ No difference between item types
 - ❖ Text / essential image / non-essential image

- Qualitative
 - ❖ 15 interviews coded to date (vA) – (work in progress!)
 - ❖ Influence of images on cognitive processing
 - ❖ **Verbalisation**
 - ❖ Essential vs. non-essential images
 - ❖ Verbalised / mentioned image
 - ❖ **Test-taking behaviours**
 - ❖ Option elimination
 - ❖ Premature closure

