Learning and Transfer of Learning Through Group Interaction

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Positron Emission Tomography

Source: wikipedia

Physical Models

Cart activity
Light activity

Group Teaching Interview

Format:
- Use of worksheet
- Minimal teacher intervention
- 21 Participants (9 groups)
  - 10 Females, 11 Males
- Algebra-based physics
  - Biology, Animal science majors
Students’ Consideration of Factors for Locating Events

- **Brightness**
- **Time**
- **Size**

Student Performance: Locating Hidden Events

- **Individual Interview**
- **Group Interview**

Students’ Transfer of Learning to PET

- **Spontaneous Transfer**
  - Automatically relate physical model to PET
- **Semi-Spontaneous Transfer**
  - Relate physical model to PET after being asked general question
- **Non-Spontaneous Transfer**
  - Relate physical model to PET after being asked specific question

Transfer from Models to PET
Instructional Implications

- Encourage peer group interaction to help students...
  - explore a variety of approaches
  - build on each other’s ideas to solve problems
  - activate peers’ appropriate reasoning resources to learn and transfer learning

Thank You!!!

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