



The
University
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Sheffield.

How do Children Learn?

Possible Lessons for Health Education

Grace Hoskins BSc, PGCE, PGDip, MEd

Who am I? Positionality

- Joined the School of Education at the University of Sheffield in September 2005 as Initial Teacher Training tutor.
- Worked with KICK-OFF and WICKED diabetes programmes.
- Worked in 5 different 11-18 schools in a range of roles including Head of Science, Lead Teacher for Science and Senior Management.
- Personal interest

What I want to cover

- Introduce some theories about how children learn and start to think about the implications these ideas have for teaching
- Apply these ideas to health education
- Reflect my experiences of working with two diabetes education programmes
- Start to think about what best practise might look like

What is learning?

- How do *you* define learning?
- How do *you* learn best?

Learning Theory Paradigms

Behaviourism

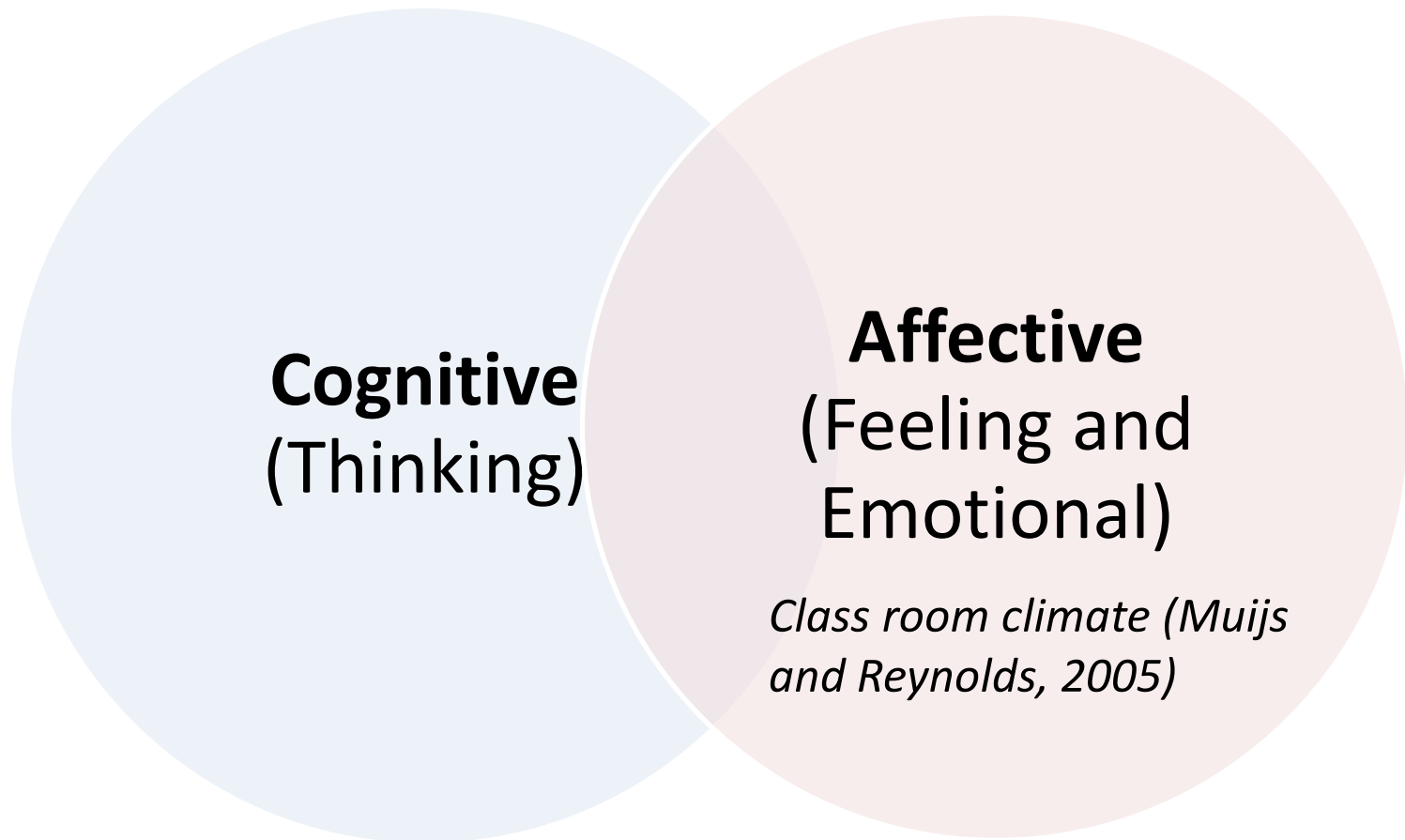
- 'Cause and Effect'
- Advice, rules etc. act as verbal stimuli
- Affect behaviour (Skinner, 1985)
- Acquire knowledge from outside resources
- Mimicking, copying behaviour -> social learning theory (Bandura, 1977)

Constructivism

- Learn from doing and experiencing things
- Constructing knowledge and understanding from this (Glaserfeld 1991)
- Personal or Social (Matthews, 1997)
- Zone of Proximal Development (Vygotsky, 1978)

Cognitive Vs Affective domain

(Wellington and Ireson, 2008)



Depth of learning

(Biggs, 1991)

- Shallow

Superficial, rote, little engagement

- Medium

Engagement, leading to understanding/appreciation

- Deep

Engagement, leading to deep understanding and possible behavioural change

How do we know if learning has taken place?

Assessment

- Summative
- Formative
- ✓ Diagnostic
- ✓ Assessment for Learning (Black and Wiliam, 1998)

Health education

- What are we wanting to achieve?

Understanding of condition and treatment

Changes in behaviour

- How can we do this?

Observations from my experiences

KICK OFF: 11-16 years old (Knowles and Price, 2009)

- Observations of the week long courses
- Discussions and de-briefing with Educators
- Interviews with children and Educators
- Final focus group with Educators

Conclusions

- Tough and emotional
- Balance of difficult topics and energy levels
- Language and terminology and Numeracy were barriers to learning
- Difficult to assess learning
- Optimum group size 6-8
- Venues
- “It’s not the knowledge; it’s changing their behaviour that’s difficult.”

WICKED: 17 – 24 year old (Beer, Bottrell and Whitehead, 2012)

- Advising on pedagogy for course
- Observations of the week long courses
- Discussions and de-briefing with Educators

Conclusions

- Social aspect important
- Keeping 'safe'
- Visual tracking of blood results had impact
- Need for diagnostic assessment
- Difficult to assess learning

Some possible implications for future education programmes

- Children learn in a variety of ways and at a variety of times. Intervention needs to reflect this.
- Affective domain
 - Building up relationships
 - Emotional aspect of having diabetes
 - Making environment as pleasant as possible
- Social opportunities are useful – how can this be taken forward?
- Diagnostic/Assessment for learning
- Clarity and realism about the aim of the intervention – depth of learning

- Drawing on expertise/working collaboratively
- Will we ever know if the intervention was *worth* it?

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