

## Approaches to Interprofessional Teaching and Learning

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**Do you know about how People Learn?**

Start by completing this task

**Individual Task**

**What sort of strategies or approaches do you use in your teaching sessions?**

## Introduction to teaching approaches

- Over the last thirty years or so we have moved steadily away from teacher-centred (or transmissive) teaching towards student-centred teaching
  - The two notions might be seen as different ends of a spectrum rather than entirely different things
  - While teaching will always involve transmitting information, the point is that we have shifted the essential question in teaching from
    - *What have I got to say?*
    - to
    - *What do the students need to know ...or to hear?*
  - Note that student-centred doesn't mean letting the students lead or decide what they want to do; it means that the teacher thinks clearly about what the students need in order that they might learn best

## Current ideas on learning

- Learning is about making meaning
  - As learners we don't just Hoover up a load of facts...
  - ...we turn them into larger interpretive and explanatory structures
  - Our teaching should help students see past the individual data to develop meaning
  - "...the learner's perspective defines what is learned, not what the teacher intends should be learned" (Biggs 2003 p12)
- We can't lever meaning into students – they have to be involved in making their own meaning
  - In order to learn, people need not just to be told things, but to engage with the subject matter under discussion
- Students have to actively learn and rehearse ideas – ie not just by receiving information but by doing something with it

## **First level of activity is writing things down**

Many teachers are aware of the way students listen and write notes in lectures...

## **Second level is exploring and rehearsing ideas and information**

- Repetition and repackaging by teachers helps
- Using in-class exercises
- Assignments, to extend student thinking
- ...and students engaging with ideas off their own bat

## **Nothing new under the sun...**

Tell me and I Will Forget;  
Show Me and I May Remember;  
Involve Me and I Will Understand.  
*Confucius (450 BC)*

## **Introducing principles of interprofessional education**

There are many facts which students will require if they are to realize their interprofessional competencies. It will follow that you will need to prepare different types of materials and allow students to absorb many of the facts. How might you prepare different types of IPE learning materials?

How will you organise these materials in a way that's makes sense.... Read on.

## Constructive alignment

Biggs (2003) promotes an approach called constructive alignment, which involves:

- *Starting with learning intentions* - what is it you want the students to know or do?
- Then organising the teaching exercises and resources so that these outcomes are achieved, by allowing students to actively learn...
- ... and assessing the students so that you can see to what extent the learning intentions have been achieved,

### **The different elements of the teaching environment become consistent...and hence aligned**

The 'constructive' aspect refers to what the learner does,

- which is to construct meaning through relevant learning activities.
- the fact that we have to construct meaning and not merely soak it up is one reason why learning often takes time, and doesn't happen as soon as we are told something once

'Alignment' refers to what the teacher does,

- which is to set up a learning environment that supplies the learning activities appropriate to achieving the desired learning outcomes
- assessment is an integral part of the learning, not something bolted on at the end

#### **Example: this session's learning outcomes**

At the end of this session participants should be able to:

- Describe current developments in theories of learning and teaching
- Apply developments in learning and teaching theory to their own practice
- Assess the utility of these ideas in terms of their own practice

**Exercise:** Can you apply the idea of constructive alignment to any teaching you do/have done? (See if specifying learning outcomes affects the type of teaching exercise you construct, and whether this has a knock on effect in how you assess student learning)

## **Student learning: Introduction to learning styles (& their critique)**

The starting point is that humans are complex beings who can set about learning in a whole number of ways...

...and that the way we tackle different tasks can be described as belonging to one (or more) category of 'learning styles'.

### **Exercises:**

Go to the following websites and read about different learning styles e.g.

David Kolbs Model (1884)

Honey and Mumford's Model (1982/3)

Fleming's VAK/VARK Model (2009)

Compare and contrast these Models

What overarching principles would you use for IPE?

## **Honey & Mumford's Learning Styles**

This is one of the best known (and most commercialised) of learning styles models. It was developed in 1982 and links strongly with Kolb's learning cycle.

As Coffield et al (2004) note, research findings have become increasingly critical, particularly on the issue of variance. Nevertheless, it provides an easy to understand framework that can be of value as a developmental (if not a diagnostic) tool.

**ACTIVIST** – as the word states these people like to be busy and pro-active in their learning. They are happy engaging with others and may often be leaders in driving group learning forward. They are poor at thinking issues through and can get bored if the tasks are not motivating.

**REFLECTOR** – as the word describes these people think and go onto be good reflective learners. In this way they analyse situations that may lead to new learning after they have taken place. They tend to be focussed on any task, they may not be natural leaders in driving the learning forward and cannot make instant decisions as they need time to think things through.

**THEORIST** – again as the word states they link learning to a theory or explanation. When learning they will apply all possible types of explanation and drive this thinking towards a theory to explain the new learning. As such they learn mainly alone and often find dealing

with any emotional content in a learning situation difficult. They prefer learning that is organised and structured and not spontaneous and subjective.

**PRAGMATIST** – as the word states these learners are practical people who like to solve problems. They like to experiment and work things through to solve puzzles and answer problems. They are naturally happy with any theoretical underpinnings only if they can go onto solve the problem in a practical situation.

## **Pask**

Pask (1988) defines a learning style as a 'predisposition' to adopt a particular learning strategy. He identifies the following:

**Holist** – the learner with this learning style prefers to form a global view of what is to be learned and to make relations between aspects of it;

**Serialist** – this style is one where the learner prefers to take a step-by step incremental approach.

## **Models of Learning Styles**

For over 20 years, learning styles has formed a fundamental part of the recognition of and course adaptation to the diversity of learners that enter the HE sector. The intuitive appeal of such an approach is reflected in the plethora of learning models available and the commercialisation of some of them. The critical review carried out by Coffield et al (2004) is one of very few comprehensive studies of learning styles and their use. Of the 71 models of learning styles identified, 13 are explored in detail.

As Coffield et al note (2004:11):-

"The kinds of instrument developed, the ways in which they are evaluated and the pedagogical implications for students and teachers all flow from ... underlying beliefs about traits."

## **Nature or nurture?**

It is important to establish whether an individual's "traits and abilities" are derived from 'nature or nurture'?

- **Nature** - learning styles "...are constitutionally based and relatively fixed"
- **Nurture** – learning styles "...are more flexible and open to change"

If the former applies then a student's learning style is likely to be "...something fixed and relatively stable over time" (2004:3). As Coffield notes this could not only give rise to "labelling" but also may "...promote a narrow view of 'matching' teaching and learning styles that could be limiting rather than liberating" (2004:3). Alternatively, if learning styles are more fluid then the learning environment is likely to have a significant impact. Based on such beliefs, it is possible to view a learning styles instrument as, "... a diagnostic tool that encourages a more self-aware reflection about strengths and weaknesses" (2004:4). As such they can provide the basis for a continuing dialogue between teacher and student about their learning.

## Categorising learning styles

Coffield et al's paper (2004) identifies a continuum of learning styles between...

- **Fixed self** – where learning styles are primarily defined by genetic traits and
- **Flexible environment** – where learning styles are subject to change

## Families of learning styles

Based on such distinctions, Coffield et al (2004) derive a continuum between these poles, featuring five "families" of learning styles:

- **Constitutionally based**  
Dunn & Dunn, Gregorc  
"Learning styles and preferences are largely constitutionally based including the four modalities: visual, auditory, kinaesthetic, tactile";
- **Cognitive structure**  
Riding  
"Learning styles reflect deep-seated features of the cognitive structure, including 'patterns of ability'";
- **Stable personality type**  
Apter, Jackson, Myers-Briggs  
"Learning styles are one component of a relatively stable personality type";
- **Flexibly stable learning preferences**

Allinson & Hayes, Herrmann, Honey & Mumford; Kolb, (Felder & Silverman)  
“Learning styles are flexibly stable learning preferences”;

- **Beyond learning styles**

Entwistle, Sternberg, Vermunt, Pask

“Move on from learning styles to learning approaches, strategies, orientations and conceptions of learning”.

## **Health warning!**

Any learning styles tool can only give an indication of an individual's or group's learning preferences IN A GIVEN CONTEXT

- It is possible that the same task undertaken at two different times will be handled in different ways by the same person.
- Labelling students can be counterproductive. Learning Styles should not be used as a student screening tool or diagnostic.
- Learning styles are best used as an indicator of strength and weakness (ie areas that students could beneficially work on). Encouraging people to use a range of learning styles develops them – we do not want students artificially to limit themselves to ‘their’ style.
- Learning styles are also more useful as a way of helping us develop our teaching rather than a way of categorising students.
- If someone does not agree with the assessment of her/his preferences, trust that individual's judgment over the instrument results.

## Learning Approaches

Among those categorizations of style that are regarded as more theoretically sufficient is Entwistle's notion of 'deep', 'surface' and 'strategic' learning.

This conceptual tool sits quite neatly alongside constructivist ideas.

- Student's approach to the task of learning helps set
  - level of engagement with the subject and
  - quality of learning (learning outcomes) achieved

*'Without exception ... (research studies) show that deep approaches to learning were more likely to be associated with higher quality learning outcomes', Prosser & Trigwell (1999:4)*

- These approaches describe ways students relate to particular L&T episodes; they are not fixed or innate characteristics.

### Deep learning

- Student attempting to understand and seek meaning;
- Identified by things like critical evaluation, synthesis, analysis;
- Based on solid grounding of factual information, but crucially these are used to develop meaning;
- Internalised learning by student.

*Good teaching encourages students to move towards deep learning*

### Surface learning

- Student trying to complete a task, but with superficial level of thinking about the material and facts learned without putting them into a meaningful structure
- Learning done to meet external demands such as exams
- Rational response if the teaching doesn't require deep learning - opens possibility of surface teaching

*Good teaching is about minimising surface learning approaches*

## **Strategic approach to learning**

- Students trying to achieve the highest grades.. by putting consistent effort into studying and preparing and organising for study effectively
- Learning done to maximise extrinsic returns
- Student alert to assessment requirements and criteria
- Work geared to perceived preference of lecturers

*Good teaching aims at bringing learners into deep engagement with material*

*(adapted from Light G & Cox R (2001, p 49).*

## **However**

We are not simply setting up a hierarchy of worth wher deeply- engaged students are' better' than others

- Depth of engagement does not map simply onto ability of performance
  - E.g. a well ordered or competent surface learner may; i) achieve more or ii) be difficult from a poorly ordered or low ranking 'deep' learner.
- Good students will probably blend deep with strategic approaches to learning (according to the context of course)

## References and further reading

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