Educational Theory (Epistemology)

Knowles
Adult Learning (Andragogy)

Andragogy is distinct from Pedagogy (child learning in Greek)
Knowles described adult learning in the 1980s
- he belived 'self-actulisation' was the prime objective in adult learning

Knowles made assumptions about adult learners:
Adults are more **self-directed**
Adults possess **personal histories** which are a resource for experiential learning
Motivation is directed towards socially **relevant learning**
Adult learners have an interest in immediate application of **problem-solving**

He also asserted that adults need to known the reason for learning something new, experience is an essential part of learning in adults

From this humanistic point of view the concept of self-directed learning (with teachers as facilitators) began to emerge.

Boggs (1981) took this theory further by stating that adult education experiences should enhance personal growth (i.e. experience promotes skill-development, postive self concept, alleviates biased thinking, promotes creativity, moves the learner closer to their full potential and so on)

Piaget
Constructivist Model of Learning

Constructivism is a learning theory centring around the theory that knowledge comes from an 'interaction between experiences and ideas'
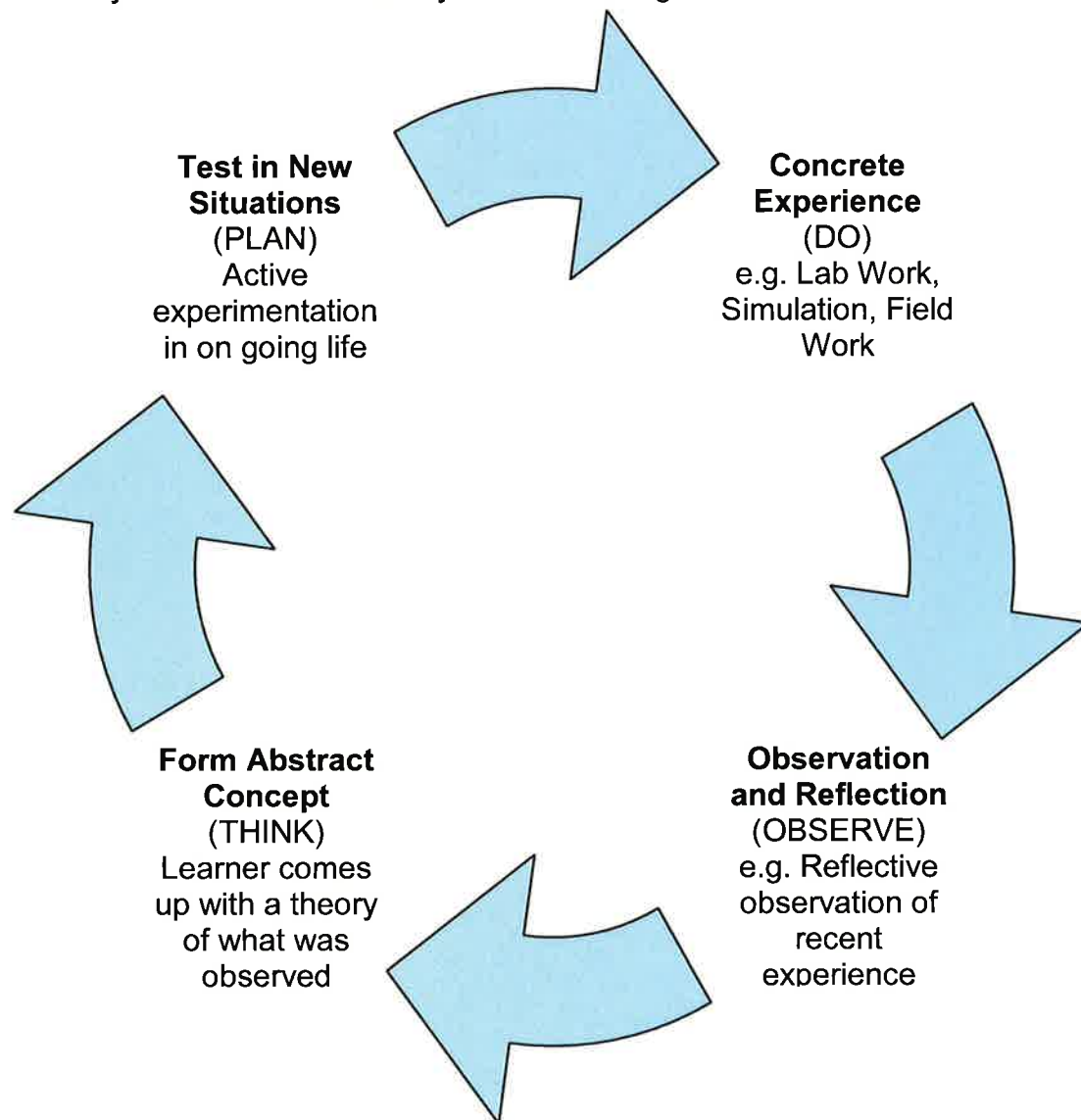
Piaget asserted that through accommodation and assimilation that learners construct new knowledge from their experiences. They incorporate the new knowledge onto an existing framework that doesn't change.

Problem based learning emerged from Piaget's model as well as Harkness' meeting model. Environments should therefore be student centred lending themselves to actively engaging the learners. Though 'learning by doing' has been widely critised technology may allow delivary of ever more advanced activities for students.

David Kolb's Model
Learning Cycle and Styles
Experiential Learning Theory

David Kolb described a four stage cyclical theory of learning. This theory combines experience, perception, cognition and behaviour. Kolb also described the distinct learning styles he observed amoungst adult learners These included Assimilators ('logical theories'), Convergers ('application'), Accommodators ('hand's on') and Divergers ('range of information').
In Kolb's model based on his assertion that knowledge is created by the transformation of experience he desbribes a cycle of four stages (see below). In the cycle one can start at any of the four stages:

Test in New Situations
(PLAN)
Active experimentation in on going life

Concrete Experience
(DO)
e.g. Lab Work, Simulation, Field Work

Form Abstract Concept
(THINK)
Learner comes up with a theory of what was observed

Observation and Reflection
(OBSERVE)
e.g. Reflective observation of recent experience

In practice in Simulation

FROM KOLB:
- Do versus Think
- Feeling versus Logic
- Take in situation v 'deal with it'

Donald Schon
Reflective Practice Model

Donald Schon described 'Reflective Practice' in his writings in the 1980s. He asserts that continuous learning comes from the capacity to refect on actions. This is said to be one of the defining characteristics of professional practice.

Schon describes both 'reflection in action' and 'reflection on action' and he goes on to describe how professionals meet challenges of the workplace with an improvised method learned in practice.

In terms of models he developed a reflection model as follows:

Reflection in Action
- Thinking Ahead
- Analysing
- Experiencing
- Critically Responding

Reflection on Action
- Thinking through subsequent to situation
- Discussing
- Reflective Journal

This model appears to be applicable to multiple professional disciplines. Ultimately the aim is to enhance communication and decision making.

The process is self driven and should aim to be on going.

Bandura's Theory

Bandura discusses self efficacy. Caution to not reduce sense of self efficacy in students in the simulation lab. Judgemental versus Non-judgemental debrifing. Probably best to debrief with good judgement.

Harvard Debriefing

Go over what they did (everyone agrees what happens)
Go over what the facilitator thinks would be an alternative (frame) approach
I am curious what was going through your mind
Makes the debrief into a 'puzzle'

Pendleton's Rules give a structured approach to debrief:
- What went well?
- What would have gone better?
- What do you think if…. Etc

Maslow's Hierachy – ensure safety for participants

Educational Teaching

Feedback Tutorial Notes

Medical Education
Feedback: Described by Jack Ende in JAMA in 1983:

> ● In the setting of clinical medical education, feedback refers to information describing students' or house officers' performance in a given activity that is intended to guide their future performance in that same or in a related activity. It is a key step in the acquisition of clinical skills, yet feedback is often omitted or handled improperly in clinical training. This can result in important untoward consequences, some of which may extend beyond the training period. Once the nature of the feedback process is appreciated, however, especially the distinction between feedback and evaluation and the importance of focusing on the trainees' observable behaviors rather than on the trainees themselves, the educational benefit of feedback can be realized. This article presents guidelines for offering feedback that have been set forth in the literature of business administration, psychology, and education, adapted here for use by teachers and students of clinical medicine.
>
> **(JAMA 1983;250:777-781)**

Ende's Suggestions
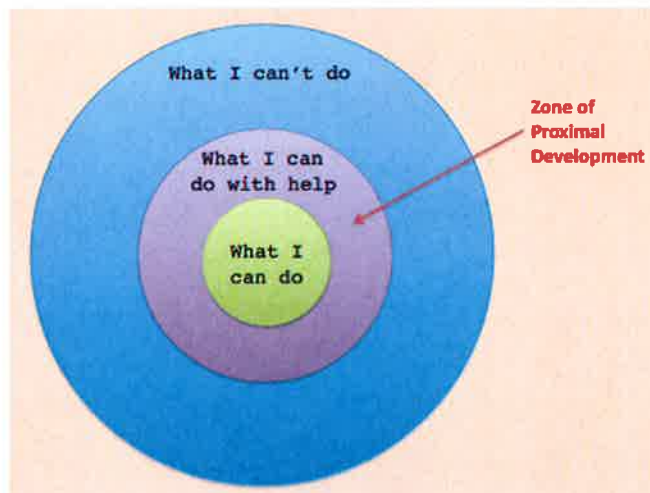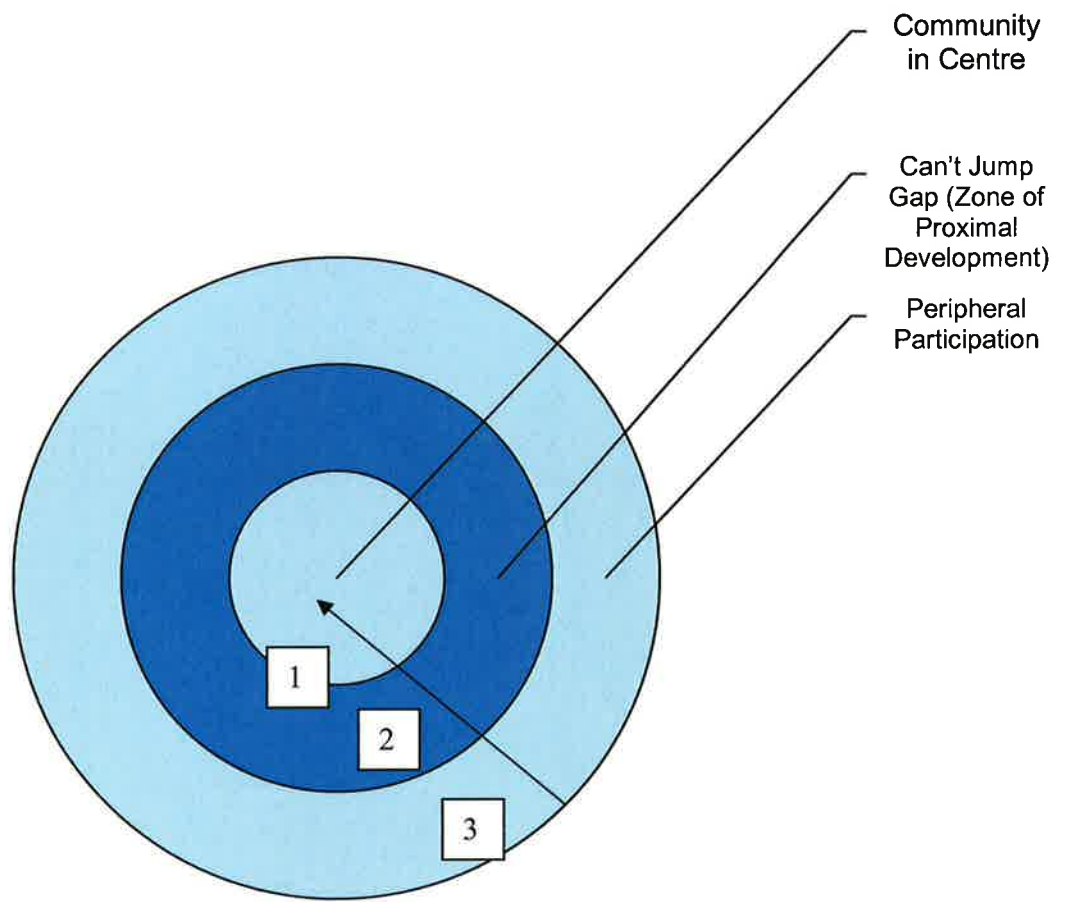
Guidelines for Giving Feedback
Feedback should be undertaken with the teacher and trainee working as allies, with common goals
Feedback should be well-timed and expected
Feedback should be based on first-hand data
Feedback should be regulated in quantity and limited to behaviors that are remediable
Feedback should be phrased in descriptive nonevaluative language
Feedback should deal with specific performances, not generalizations
Feedback should offer subjective data, labeled as such
Feedback should deal with decisions and actions, rather than assumed intentions or interpretations

Feedback – General Concepts

How is Feedback Different to Teaching?
- Closing the Gap
- Observation of Student
- Not Interuptting
- 2 way dynamic Concersation
- Requires Student Lead
- Gets the student to 'Make a Commitment'
- Adult Learning
    - Prior Knowledge
    - Practical
    - Commitment / Motivation

Vygotsky's – Described the Practice of Learning through the concept of the 'Zone of Proximal Development' which may be relavant to the aims of Feedback:

Community in Centre

Can't Jump Gap (Zone of Proximal Development)

Peripheral Participation

1

2

3

What I can't do

Zone of Proximal Development

What I can do with help

What I can do

Feedback	
Good Feedback Examples	Bad Examples
Verbal Elaboration	Non Specific Praise
Student in Charge	Teacher Focused
Get a Commitment from the Student	
Encourage Self Assessment	
Use of the word 'because'	Unqualified Statements
Positive and Negative Feedback is effective (use reasoning) Praise is okay but needs to be specific and explain why	Potential to gain or reduce confidence
Targeted at Behaviour or Professional Issues	Targeted at the person
Delayed for Complex Issues Immediate for Task related Issues	

Goals of Feedback
    Aims
    Understanding
    Gap Knowledge

Process of Feedback
    Which step was difficult to?
    Rationale for why to change
    Small Steps

Other Issues
    Checking
    Follow up

The Hidden Curriculum

- The so called Hidden Curriculim may refer to the pressure for students to conform, the focus on pleasing superiors (at the expense of the patient, if necessary)
- It is relevant to Feedback process, uncover issues by asking the students about their attitudes

In 1998 Hafferty suggested focus on:
- Institutional policies
- Evaluation activities
- Resource-allocation decisions
- Institutional "slang

Examples of 'Cultural Effects' of Seniors on Junior Staff:

"See one, do one, teach one." "Trust no one." "Keep 'em alive until 6:05." "You either have 'it' or you don't."

Hafferty FW Beyond curriculum reform: confronting medicine's hidden curriculum. Acad Med. 1998 Apr;73(4):403-7.