

Learning in Higher Education

Learning in Higher Education is an

- Effortful (deliberate, willed)
Controlled largely by conscious effort
- Planned
Given effort, what is done depends on planned actions
The student's methods of learning
Their study skills,
Their theory of how to learn
E.g. re-reading notes in a panic OR
"teaching" a friend
- Activity
It doesn't just happen: it is planned and managed
It consists of a complex assembly of actions
It is regulated by judgements about whether the student "knows" it now.

Benefits to learners from processing

One theory is that we learn (only) by doing:
particularly mental doing i.e. (re)processing.

So: the more detail, the more mental processing;
and the more of that, the more learning.

So doing exercises / assignments is good for learning:

- Generating your own answers will be much better for you than just listening to others'.
- Writing the answers out will be better for you than just thinking about them.
- Writing them out well enough to show them to someone else (e.g. the teacher) will be better for you than just writing a sketchy note for yourself.

N.B. All of these have some benefit; so it is easy to fool yourself that you don't need to do more. It's true: you have learned something useful without it. But have you "really" learned? is it enough? was it "deep" learning?

What counts as learning? (in HE)

- Cole: our society almost defines learning as recall (not recognition, not procedural skills)
(And as individual not team performance)
- Putnam: socially distributed knowledge
(what is gold? water? Flu? Statistical significance?)
- HE is NOT any one thing: the type (not just the content) of knowledge taken as defining varies across disciplines
- Study skills: learning how to learn (for lifelong learning), as well as learning content
- Deep and shallow learning
Learning for a specific test task; or just trying to understand.
- Perry: learning what knowledge IS

Types of depth as structure of the knowledge

Understanding, or deep learning, is never complete.

Some types of connection to make to approach it:

- Concept to example: can you produce examples?
- Concept to personal experience (feelings, perceptions,...). This is about how a concept or theory shows up in evidence and experience.
Although evidence may decide between theories, a more general issue for learners is to learn how an idea connects to any evidence at all: what does it mean for experience? What is "force" in the world? What is the difference between pain and discomfort?
- Concept to concept: alternative theories of the topic [Perry]. This will be about rival claims to truth.
- Concept to contradictions, inconsistencies, ...
What things actually or potentially conflict with a given concept or theory?
- Enlightenment / relevance / validity:
What prior questions does this answer; what useful problems does this theory solve?

Deep and shallow learning: aspects

- The structure of the knowledge itself, the kinds of link between bits of what you know.
- The goal of the learner (for this topic): e.g. to understand (deep learning) or to learn \approx to do some specific task e.g. pass a test (shallow learning).
(Intrinsic vs. extrinsic motivation.
Approach vs. avoidance goals.)
- Method (or "strategy" or "approaches"): learning styles, activities. How the learner goes about understanding / learning this topic.

What measures they use to regulate their learning e.g. aim for grades? for doing all the problems in the textbook? for that inner feeling of understanding? [Snyder]

- And all of these may apply differently to different topics of learning for the same learner — but almost all the literature assumes they are pervasive traits.

Belenky et al.'s feminist development of Perry

Belenky, M.F., Clinchy, B.M., Goldberger, N.R. & Tarule, J.M. (1986)

Women's ways of knowing:

The development of self, voice, and mind

- **Silenced:** unable to know.
They don't believe any learning is possible or useful to them.
- **Connected learning vs. unconnected.**
Science as unconnected knowledge: you shouldn't know or care who believes this, or how it is useful to them.
Connected: knowing the inter-personal aspect of beliefs as part of knowing the ideas. Stress synthesis rather than true/false debate "hypotheses".

Aspects of the issues uncovered by Perry

One view of Perry is that, whatever criticisms of his views and work may be made, he has identified a crucial area of concern. My current view is that in fact there are three independent issues here.

1. Part of the subject content: you learn for any topic whether it is one on which everyone agrees, or that there is no agreement, or that there are well known dissident views; what the main alternative views are, and the status they have.
2. **Critical thinking**: a generic cognitive skill that in principle can be applied to anything, though in practice partly depends on content knowledge (you can't argue about alternatives without having learned what the reasonable alternatives are, and what the relevant evidence is).
3. **Personal development**: (perhaps closest to Perry's original spirit). Education, as opposed to mere training, should include qualitative personal development. One aspect of this could be developing personal decisions on how to judge your own learning. (ethics? Identity?)

A Perry type C approach to Perry's theory

Black & White claim A student suggested that there is a self-contradiction: that Perry asserts his theory as the only view or truth on the topic: that a given learner is either type A or B or C (or actually, one of his 9 stages in the detailed stage model).

Alternative theories Actually, in the lecture, I tried to present alternative views of the topic: learner attitudes / views of the nature of knowledge.

a) **Perry**: it's a persistent character trait that an individual applies to all topics and knowledge.

b) **Kuhn**: it's a trainable cognitive skill; again, applicable to all topics, though presumably only if the learner chooses to do so or finds it useful for that topic.

c) **Possible new view**: it varies, even in a single individual, with the topic. It is more like part of the knowledge: have you learned (been taught) alternative views or not? The standing of each such view? Evidence or reasons for and against each?

Status: All plausible and believed by some; this lecturer prefers (c).

Evidence: Perry provided evidence for his view (his interview study); and subsequent student studies here have shown individuals' views depend on the topic, which is evidence against Perry and perhaps for (c). But perhaps I'm guilty of skipping this and presenting in a B&W manner?

Aspects of a learner's views at 3 different points on the Perry spectrum

	Student in position A	Student in position B	Student in position C
Student Role	Passive acceptor	Realises that some responsibility rests with the student. But what? And how?	Sees student as source of knowledge or is confident of finding it. Debater, making own decisions. Wants to explore contexts; seeks interconnections.
Lecturer's Role	Authority, giving facts and know-how	Authority, where there are controversies, wants guidance as to which the lecturer favours.	One authority among others. Values views of peers. Teacher as facilitator or gateway.
View of knowledge	Factual; black and white; clear objectives; non-controversial; exceptions unwelcome.	Admits 'black-and-white' approach not always appropriate. Sees no way to choose between alternative views. Feels insecure with these uncertainties.	A matter of competing views or theories, with different supports. Evidence, not just conclusions, an important part of knowledge. Enjoys creativity, scholarly work.
View of exams	Regurgitation of 'facts'. Exams are objective. Hard work will be rewarded.	Quantity is more important than quality in demonstrating maximum knowledge.	Quality is more important than quantity. Wants room to express own ideas, views.
Student confidence depends upon:	The teacher	Little confidence, high uncertainty.	The student her/himself

Aspects of a learner's views at 5 different points on the Perry spectrum

	Student in Unknowable position	Student in position A	Student in subjectivist position(B)	Student in proc position	Student in constructivist position(C)
Student Role	React to demands	Passive acceptor	Realises that some responsibility rests with the student. But what? And how?	Follow rules	Sees student as source of knowledge or is confident of finding it. Debater, making own decisions. Wants to explore contexts; seeks interconnections.
Lecturer's Role	Make arbitrary demands	Authority, giving facts and know-how	Authority, where there are controversies, wants guidance as to which the lecturer favours.	Supply material, and support increasing skill at the rule of argument.	One authority among others. Values views of peers. Teacher as facilitator or gateway.
View of knowledge	Not possible to know things	Factual; black and white; clear objectives; non-controversial; exceptions unwelcome.	Admits 'black-and-white' approach not always appropriate. Sees no way to choose between alternative views. Feels insecure with these uncertainties.	A matter of competing views or theories, with different supports. Evidence, not just conclusions, an important part of knowledge. Enjoys creativity, scholarly work.	Enjoys creativity, and employing procedures for own original ends.
View of exams	Meaningless torture	Regurgitation of 'facts'. Exams are objective. Hard work will be rewarded.	Quantity is more important than quality in demonstrating maximum knowledge.	Demonstrate ability to produce reasoned arguments (though only to questions that do not challenge paradigm)	Quality is more important than quantity. Wants room to express own ideas, views.
Student confidence depends upon:	Being told what to do	The teacher	Little confidence, high uncertainty.	Mainly self; although also important to be part of a community following the same (CT) rules	The student her/himself