

Some references

- Boud,D., Keogh,R. & Walker,D. (1985) (eds.)
Reflection: turning experience into learning (Kogan Page)
- Boud,D., Cohen,R. & Walker,D. (1993) (eds.)
Using experience for learning (Open University Press)
- Dewey,J. (1933) How we think (New York: Heath)
Experience and education
- Kolb, D.A. (1984) Experiential learning
- Kolb, D.A. & Fry,R. (1975)
 "Towards an applied theory of experiential learning" ch.3 pp.33-57
 in Cooper,C.L. (Ed.) Theories of Group Processes (Wiley: London)
- Laurillard, D. (1993) Rethinking university teaching: A framework for
 the effective use of educational technology
- Schön, D.A. (1983)
The reflective practitioner: How professionals think in action
- Schön,D.A. (1987) Educating the reflective practitioner
- Schön,D.A. (1991) (ed.)
The reflective turn: case studies in and on educational practice

Active learning, and the possible interactions

A crucial aspect of an adequate theory of the learning and teaching process is the interactions a learner performs; thus, implicitly, acquiring feedback. But interaction with (feedback from) whom or what?

Learners may / must (productively) interact with:

- A teacher
- Peers (fellow learners)
- The world / concrete action
- Self (reflection)

[Many theories emphasise one of these, and overlook others.]

Dimensions of reflective thinking

- A] About subject domain OR about self
 Deep learning; (thought experiments)
 OR: reflexive rather than reflective thinking, meta-cognition
- B] By the learners or the teachers
 By the learners as part of learning
 OR by the teachers about their professional practice
- C] The content of reflection:
 What is reflected on, with respect to what else, when, and for what purpose
- C1] On what?
 E.g. reflect on actions, or on concepts
 on perceptions, or on facts
- C2] What is it related to or checked against?
 E.g. Checking new concepts against old facts and concepts
- C3] When?
 Before, during, after the action? [Reflection for/in/on]
- C4] What for?
 What's the purpose? [analytic vs. evaluative reflection]

Main educational senses of "reflection"

[OED: "Reflect: go back in thought, meditate, consult with oneself, remind oneself or consider." 5th of 6 meanings.]

- Thinking:
 about concepts? or about action / experience?
- Iteration: learning as a cycle, not a one-shot event
- Relating concepts and experience

Theories

Kolb The two levels of public concepts and personal experience; and a cycle (only) between them. Reflection refers to the step from experience to concepts.

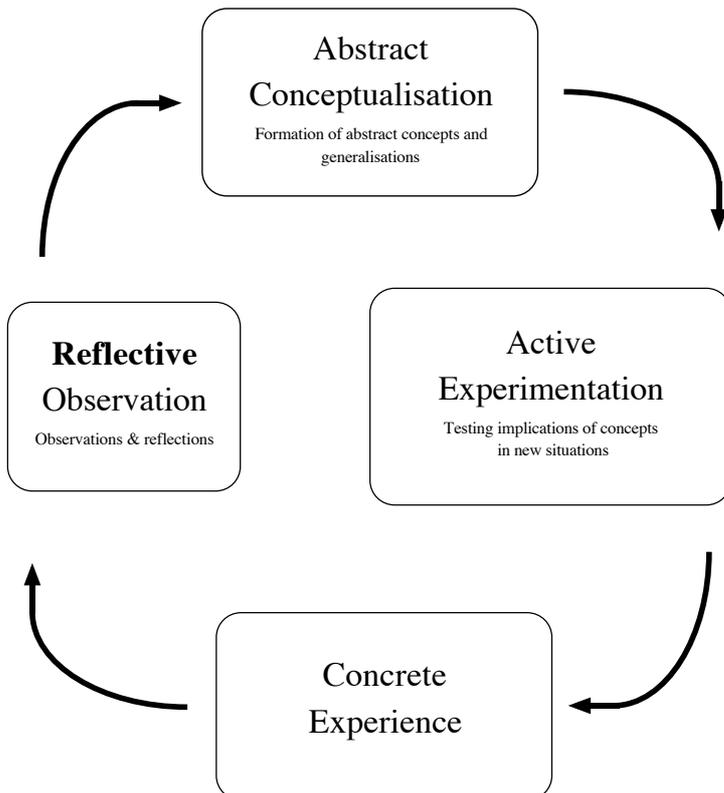
Schön Focus on learning from experience by itself. So a focus on a cycle within the level of personal experience alone; and a challenge to account for learning things for which NO public conceptual description exists. Pays attention to the "art school" or "practicum" model of HE.

Laurillard [diagram]. And challenges to normal practice, even if implicitly covered by this theory:

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Practice

- Making time for thinking, digestion
- Learning diaries. Reflection diaries. But are these exercises done to please a teacher OR as a personal aid to reflect the learners' *actual* concerns (in which case they may become another challenge to our LTP theories).
- Learning, and being taught to learn, from new experience, not just from the relayed and agreed experience of others.
- Teacher organises better feedback from practical actions, including real explanations of unintended effects and results.
- Teaching skills. And teaching whole task hierarchies, not just low level component skills i.e. how these skills are applied to address "real" ("authentic") tasks.



Kolb cycle