blended learning: design & improvisation

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overview

key terms:
blended learning, educational design, improvisation in teaching & learning

learning outcomes:
thinking for a living, working knowledge, epistemic fluency, apprenticeship in the improvement of ideas (conceptual artefacts)

the scope of educational design

capturing and sharing educational design experience in the form of design patterns

‘blended learning’

what & whether students learn

where, when & how students learn

informed choice:
if we (as teachers) and they (as students) are making choices about where, when & how to learn - on what kinds of conceptual and procedural resource can we draw to make good decisions?

blended learning

e-learning
b-learning
l-learning

‘blended learning’

what & whether students learn

where, when & how students learn

When I use a word ..., it means just what I choose it to mean -- neither more nor less.

[Humpty Dumpty in Lewis Carroll’s Through the Looking-Glass]
\[ \Delta \xi = f(\text{PKA} + \text{DP} + \text{SR} + \ldots) \]

media choices are about cost & efficiency, rather than about cognition & learning

Dick Clark

paradigm shift

Inert, fragmented knowledge \rightarrow \text{‘working’ knowledge}

‘teacher’ directed \rightarrow learner-managed learning

subject-centered \rightarrow learner-centered

individualistic learning \rightarrow learning communities

Information transmission \rightarrow design of learning tasks and environments

content & presentation \rightarrow student activity

presentation technologies \rightarrow tools (for individual & collaborative work)

21st century learning: thinking for a living

Learning outcomes

fragmented & inert knowledge vs ‘working knowledge’

epistemic fluency

cognitive apprenticeship:
authentic involvement in the collaborative improvement of ideas - ‘conceptual artefacts’

21st century learning: thinking for a living

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"the students are entrapped in (a)… web of consistency, optimising the likelihood that they will engage in the appropriate learning activities, but paradoxically leaving them free to construct their knowledge”

John Biggs (2003, p. 27)

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Learning is active: 'what the learner does' (Biggs, Shuell)

Learning outcomes
Learning activity
Learning tasks

Affordances

Limitless & undifferentiated landscape of possible design combinations
Manageable but flexible set of 'patterns' - recurring, explicable forms
design patterns

A pattern is a solution to a recurrent problem in a context.

In Alexander's own words, a pattern "describes a problem which occurs over and over again in our environment, and then describes the core of the solution to that problem, in such a way that you can use this solution a million times over, without ever doing it the same way twice." (Alexander et al., 1977, p.x)

Discussion group

This pattern is mainly concerned with the establishment of appropriate organisational forms for knowledge-sharing, questioning and critique. It is a way of helping implement the patterns LEARNING THROUGH DISCUSSION, COLLABORATIVE LEARNING and NETWORKED LEARNING PROGRAMME.

Discussion groups are the most common way of organising activity in networked learning environments. The degree to which a discussion is structured, and the choice of structure, are key in determining how successfully the discussion will promote learning for the participants.

Start any online discussion by establishing its structure. Make the rules and timetable for this structure explicit to all the members of the group. Where there is little time available to the group for the discussion, and/or the members of the group are inexperienced at holding online discussions, the teacher/facilitator should set the structure. Where the students are to set their own structure, the teacher/facilitator should give them support and ideas about how to do this, and encourage them to do so in a fair and timely way.

Patterns needed to complete this pattern include: DISCUSSION ROLE, FACILITATOR, DISCURSIVE TASK

Discussions can be manifested)

\[
\begin{align*}
\textbf{A headline}, in bold type, to give the essence of the problem in one or two sentences \\
\textbf{The body of the problem},
\end{align*}
\]

\(\text{(its empirical background, evidence for its validity, examples of different ways the pattern can be manifested)}\)

\(\textbf{The solution}, in bold type. This is the heart of the pattern – the field of physical and social relationships which are required to solve the stated problem in the stated context. Always written as an instruction, so that you know what to do to build the pattern.}\)

\(\textbf{A diagrammatic representation of the solution},\)

\(\text{(to show the main body of the pattern is finished)}\)

\(\textbf{A paragraph tying the pattern to the smaller patterns needed to complete and embellish it}.\)
pattern language for COURSE

- Read texts
- DISCUSS
- Group projects
- Present outcomes
- Synthesise evidence
- DEBATE

learnspaces

- own study: intensive, uninterrupted work
- tutorial room: small group, tutor-led discussion
- lecture theatre:
- lab: practical work with scarce equipment…
- library: browsing access to scarce (info)
- artefacts
- group workspace: soundproof, tables & IT
- online discussion space:

organisational forms

- individual
- dyad
- triad
- team
- Community, etc
- mixed ability, equal ability,
  self-forming, teacher-formed, etc

patterns as combinations of task,
space & organisational form

- identified, explained, shared & developed within a setting
  (educational community)
- familiar/recognisable to students, but not over-used
- compatible with overall pedagogical philosophy & approach

task types

- memorise formulae
- practise procedure
- write report
- debate
- discuss
- design
- etc

concluding points

- blended learning foregrounds choice (educational design)
- the practice of educational design is constrained by
  time, knowledge, etc
- putting student activity at the centre; clarity about
  desirable outcomes, perceptible coherence/alignment
  in design
- patterns as recurrent explicable forms, owned by a
  community (rather than prescribed from outside)
Thank you

http://coco.edfac.usyd.edu.au