Designs for digital self-directed learning: Openings and boundaries

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From a Danish perspective:

I will discuss:

• The notion of self-directed learning
• Relate it to MOOC
• Suggest PBL as an approach to self-directed learning
Self-directed learning?

• “…Describes a process by which individuals take the initiative, with or without the assistance of others, in diagnosing their learning needs, formulating learning goals, identify human and material resources for learning, choosing and implement appropriate learning strategies, and evaluating learning outcomes.” (Knowles, Principle of andrology, 1972)
The adult learner

• The need to know – why they need to know
• Learner self-concept – responsible for own decisions
• Role of learners experience – a resource imbued with bias and presupposition
• Readiness to learn – in order to cope effectively with life situations
• Orientation to learning – motivated to the extent that it will help to perform. (Knowles 1990)
Digital opportunities

- Open resources
- Digital tools
- Synchronous and asynchronous interaction
- Telepresence and ‘third spaces’
- Multimodal forms
What is required of the self directed student?

• Set goals for achievements – the ‘Why’?
• Plan the learning content – ‘What’?
• Organize the learning process– ‘How’?

• = Basic didactical questions
The opportunities of MOOCs

• MOOCs facilitate new ways of using digital technologies in education, instead of repeating old structures.

• MOOCs offer a framing of open networking among the participants.

• The student will learn independently of the teacher
Learning approaches to MOOCs

• General tendency:
  – National plans or
  – institutional/organizational initiatives

• Which learning cultures form the point of departure for learning?

• A Danish approach: Problem based and project oriented learning at Aalborg University
A connectivist view

- Experiences are mediated
- Knowledge is generated complex and random; not in linear and logic processes
- Knowledge is not static, but rapidly changing

- Learning becomes managing of accessible information
A social constructivist view

- Knowledge is not static; and cannot be transferred simply.
- Learning is social and participatory
- Learning through real-life problems

- ‘Learning relations’: through interaction between students, teachers, and content – in multiple and shifting relations
Self directed learning

• MOOCs offers a platform for learning but are no quick fix to overcome a massive need for education.

• Networking needs the presence of teachers, learners and content in shifting and multiple relations:

• The relational learningship
PBL: Aalborg University’s Pedagogical model for advanced and efficient learning

• Acquiring knowledge and skills independently and at high academic level
• Working analytically and according to interdisciplinary and problem and result oriented methods
• Cooperating with business community on the solution of authentic professional problems
• Developing their abilities within teamwork
• Becoming well prepared for the labour market
Basic principles

- Project organization creates the framework of problem-based learning
- Courses support the project work
- Collaboration – groups, supervisor, external partners
- The problem based project work of the groups must be exemplary
- Student responsibility for their own learning
Basic question for designing courses and self directing

Bayne & Ross: The “what, the how and the whom” – and the “why”?

Issues related to MOOCs:

Learning cultures - worldwide learning?

• related to domains (e.g. caregivers, midwifery)?
  – A practical or an academic profession?
• related to disciplines (arts, humanities, technical, natural, social sciences)?
  – Discussion or facts?
Suggestions:

• Focus on the relations between knowledge domains and pedagogical models

• Use the potentials for facilitating networks to share, participate, and contribute, but focus on diverse scaffolding strategies

• Focus on teaching competence, and develop ‘relational learningships’ between teachers, students and content
Design issues

The teacher role as:

• Facilitator of e.g. peer-to-peer learning activities
• Moderator of student interaction ‘rules’
• Instructor of course design activities
• Lecturer of core content
• Modeler – of overall course design and demonstrator of optional learning resources
• Assessment – formative or summative

• Learner from participating in processes
The self-directed adult learner

The need to know – why they need to know

• Learner self-concept – responsible for own decisions

Requires criteria for making them

• Role of learners experience – a resource imbued with bias and presupposition

Need new questions to progress the knowledge generation

• Readiness to learn – in order to cope effectively with life situations

Must be supported by ability to identify relevant problems

• Orientation to learning – motivated to the extent that it will help to perform

Connection to the labour market
Thank you!