

CyberCourse

CyCo for short

- Outcome-based learning
- Deep learning
- Patterns
- Practice - lots!
- Scaffolding
- Formative feedback
- Metacognitive awareness
 - Pedagogical agents
- Transfer
- Cognitive and physical waste
- ...

Why don't we do better?

- We're not trained
- Limited financial and social rewards for learning about learning

Steven Kerr, "On the folly of rewarding A, while hoping for B," *Academy of Management Journal*, 1975

- Learning research is a complex field

Other constraints

- Administrative practices
- Cost

A CyberCourse

- Replace textbook with a CyberCourse
- Flipped
- Many exercises
 - Embedded in the course content
 - Students get formative feedback for each exercise, from a human grader

Making CyCos

- Course specification
- Course creation
- Course operation

Course specification

- Course outcomes and constraints
- By:
 - Individual faculty
 - Department committees
 - Professional organizations
- Problem: the expert's blind spot

Course creation

- By discipline experts who learn about learning
- Create many exercises, along with grading rubrics
- Can charge for their work

Course operation

- Professors keep up with their field, do research, choose CyCos, help students with exercises, give exams...
 - No lecturing, or detailed course design
- Graders evaluate student work, using rubrics created by authors

Current status

- Finishing the exercise system
- Goal: first release by September
 - Open source
- Watch cybercour.se for details...
 - ... or give me your email address