

Capitalizing on Technology to Enhance Professional Management Education

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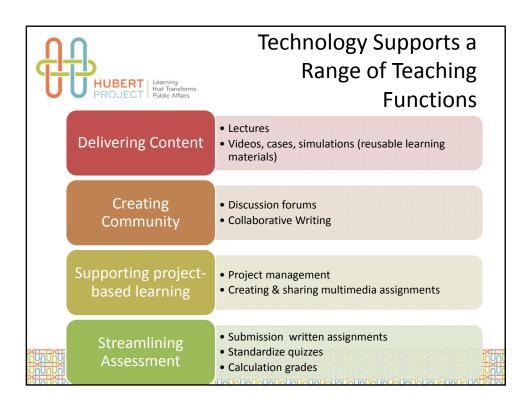
Typical Understanding of Technology Use in Teaching

	% of Content online	Activities
Traditional Face-to-Face Classroom	0%	Lecture Small group discussion Quizzes, Tests, Papers
Online	100%	On-line Lectures Discussion boards Online submission and assessment of assignment



Actual Application of Technology in Teaching

	% of Content online	Activities
Traditional Face-to-Face	0 %	Lecture Small group discussion Quizzes, Tests, Papers
Web Facilitated	1 – 29 %	Uses learning management systems Multimedia learning materials
Blended / Hybrid	30 – 79 %	Some face-to-face meetings for deepening social learning "Flipped" classrooms with lectures online
Online	80 %	Various technologies: Online lectures, collaborative writing Online submission and assessment of assignment





Management Education

Knowledge & Skill Development

Strength & Limits of Traditional Case Study Pedagogy

Application of Science of Teaching & Learning

Scalable Ways for Improving Management Education



Flickr: World Economic Forum



Management Education

- 1. Application of Management Science through Techniques
- 2. Analysis of Management Problems through Context Analysis



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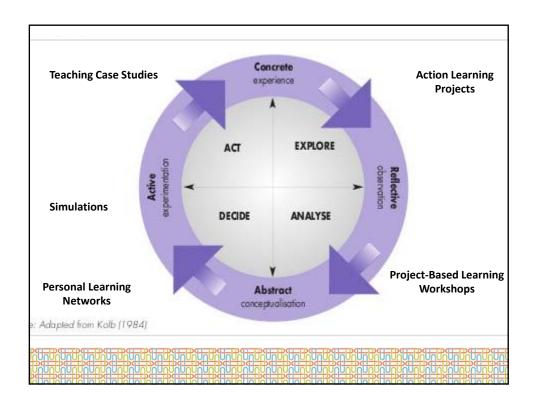
HUBERT Learning that Transforms that Transform

Analysis of Management Practice

- Distinct Epistemology
 - Practical
 - Situated Knowing & Acting
 - "feeling for phenomenon & what is appropriate in that setting" (Schon 1983)
 - Tacit, implicit

- Pattern recognition
 - Problems resembling others
 - Learning from exemplars







Teaching Case Studies

- Enables active learning and problem solving
- Poses problem for which no obvious right answer
- Uses case information to address problems
- Supplemental assignments: memos, technical reports, etc.
- Interactive, facilitative classroom discussion





Teaching Case Studies

Strengths

- · Appealing to students
- Contextual analysis
- Focus on problem solving through creative and critical thinking
- Low-cost failure
- "Reusable" learning materials

Limitations

- Few empirical studies about impact on learning outcomes
- Causal mechanisms are unclear















Technology Enhancements to Teaching Cases





Technology Enhancements to Teaching Cases

Science of Teaching & Learning

- Prior Experience
 - Tacit & Explicit knowledge
- Neural plasticity
 Brain structure created by repeated interactions





Technology Enhancements to Teaching Cases

Science of Teaching & Learning

- Social foundation of learning
 - Emotional
 - Body language
 - Identification

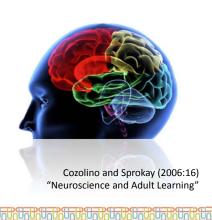




Technology Enhancements to Teaching Cases

Science of Teaching & Learning

"[N]arrative serves to integrate the functioning of individuals within groups by teaching specific skills and general values, and creating common blueprints and shared understandings....The convergence of these diverse functions within the narrative provides a nexus of neural network integration among left and right; top and bottom; and the sensory, somatic, motor, affective and cognitive processes in all parts of the brain."





Technology Enhancements to Teaching Cases

Science of Teaching & Learning

Hypotheses:

- Trigger social process
- Stimulate experience
- Face validity of account
- Redundant information

Result:

 Leverage neural plasticity to change brain structure





Scientific Foundation for New Teaching Case Deployment

Built in Multimedia Environment

- Balancing Cognitive load
- Scaffolding content
- Visualizing learning objectives

Implemented in Interactive Classroom

- Social learning
- · Practice-based problem solving
- Meta-cognition





Scholarly Teaching Practice

"The ability to learn is vastly more ancient and automatic than the ability to teach. All animals learn, very few teach"

- Unknown





Scholarly Teaching Practice

- Creating Relevant Content
- Facilitating Active Learning Experiences





Creating the Content: Open Educational Resources

Freely accessible, openly formatted and licensed media used for teaching, learning, assessment and research







Facilitating Active Learning: Technologies of Participation





