Designing to Promote Interaction in Online Learning Systems

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Online learning

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Online learning

Advantage:
• Temporal and geographical flexibilities while learning
• Completing the course at learner’s pace
Online learning

Limitations?
Online learning Limitations?
No face-to-face interaction

Some Consequences for the learners:

• Feeling isolated or disconnected from the community
  • adverse emotions like anxiety, sadness, and depression.

• Need for instructor’s influence, feedback, explanation, or confirmation

• Feeling discouraged or lost

• More
Online Learning: Interaction

• By Moore (1989):
  1. Learner-learner interaction (peers)
  2. Learner-instructor interaction
  3. Learner-content interaction

• Learner-instructor and peer interaction
  1. asynchronous
  2. synchronous
OLS: Asynchronous Communication

Message passing using
• Email communication
  • perception process may take longer time
  • may require back and forth message passing
• Forums, and discussion board
  • too much interaction leading to learner overload
• Q/A

Advantages, Drawbacks?
• Interaction can happen at learner’s comfort time.

• Isolation and miscommunication are still highly likely.
OLS: Synchronous Communication

Instant messaging among peers and instructor

• Live chat:
  • How long?
  • When?
  • 24/7? --- costly, impossible
  • Chatbots? --- isolation, lack of instructor’s feedback, etc
  • Users may lose their own pace and flexibilities
OLS: Synchronous Communication

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How to learn/teach at our comfort (time and location) + still being able to interact face-to-face?

Tele-instruction
Tele-instruction: Appointments
Tele-instruction: Video conferencing and File Sharing
Tele-instruction: Learning Management System

• Content and meeting management

• Addressing student’s questions through the system

• Leading them to book an appointment with the instructor if needed
Tele-instruction: Trusted Technical Agents

- Agents to help instructor
- For Load balancing once needed
  - Ex. Large online classes
Tele-instruction

Can help with:

• Tracking progress and evaluations

• Course design and instruction adjustments
The Future?

Thank you!

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Selected References


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