

# **A 7-Principle Model for Designing and Developing Video Lessons for Online Learning**

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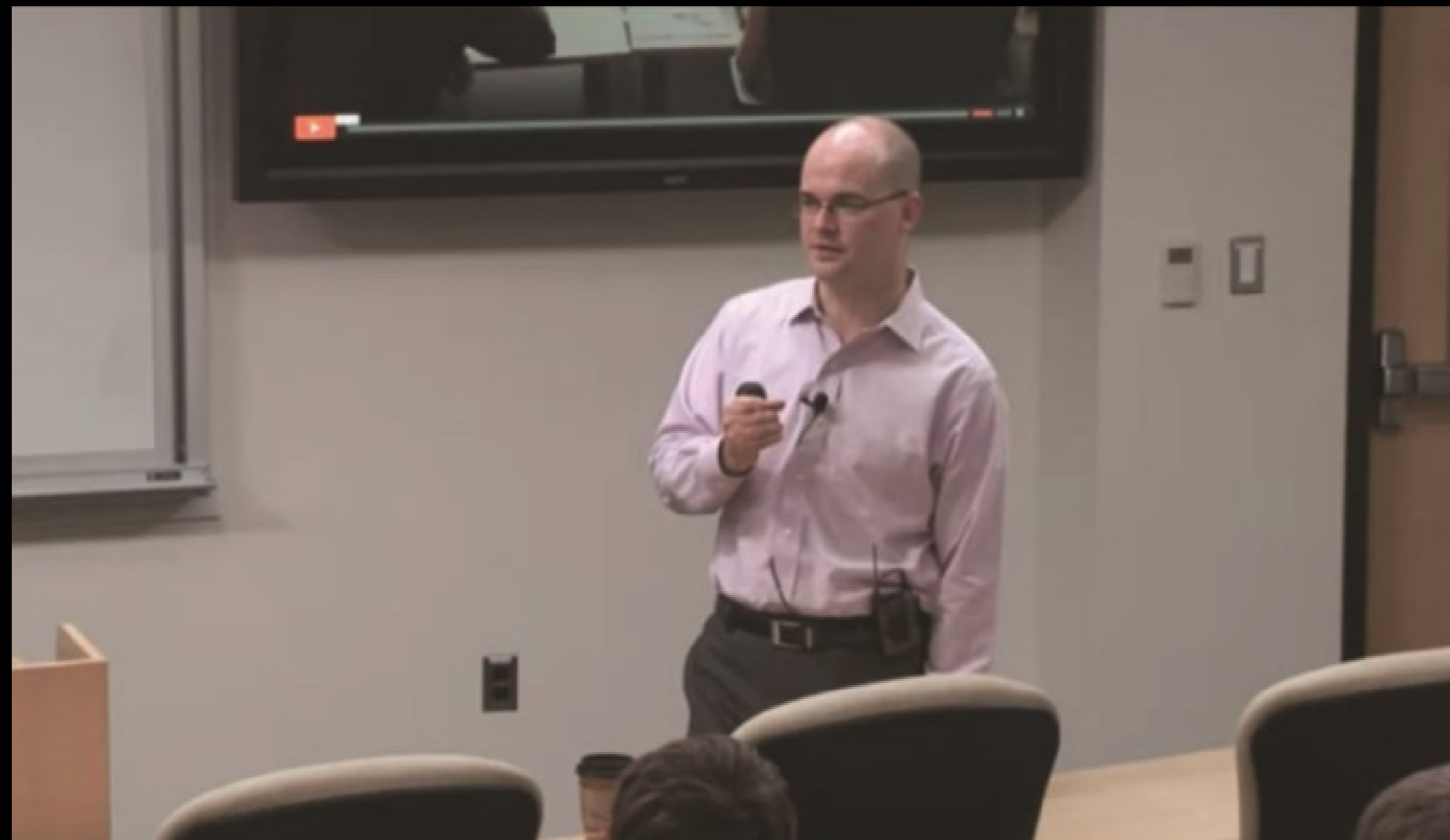
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Video is often the primary method for delivering instruction in online courses



# Lecture Capture



# Talking Head



## Why build social capital?

- People with rich social capital are:
  - Better informed
  - More creative
  - More efficient
  - Better problem solvers
- With the right networks, people:
  - Save time because they know where to get the information they need
  - Foster cooperation and collaboration



# Tablet Capture

Quiz

PID → P  
I  
D

	AVOIDS OVERSHOOT	MINIMIZING ERROR	COMPENSATING DRIFT
	0	<del>0</del>	0
	0	0	0
	0	0	0

KSV  
↳ Klem-style-videos

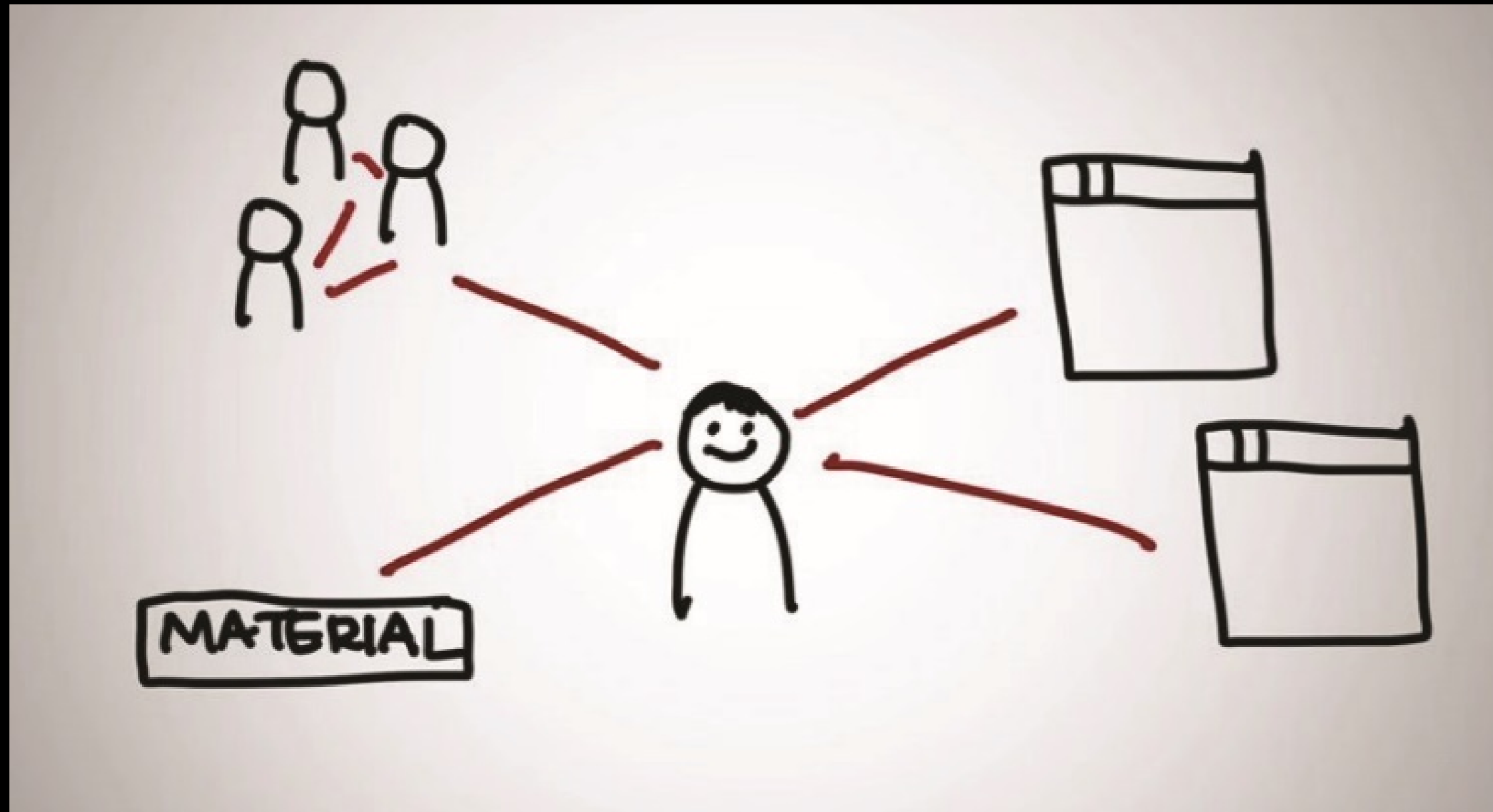
\* conversational

\* visuals/colors  
↳ not too fancy → hand-drawn → more output

\* Preparation → prepare your mind → speaking from mind/heart  
↳ no scripts

not: • emotionless → GPS  
• talking "above"  
↓  
• talking "below"

# Animation and Screencast

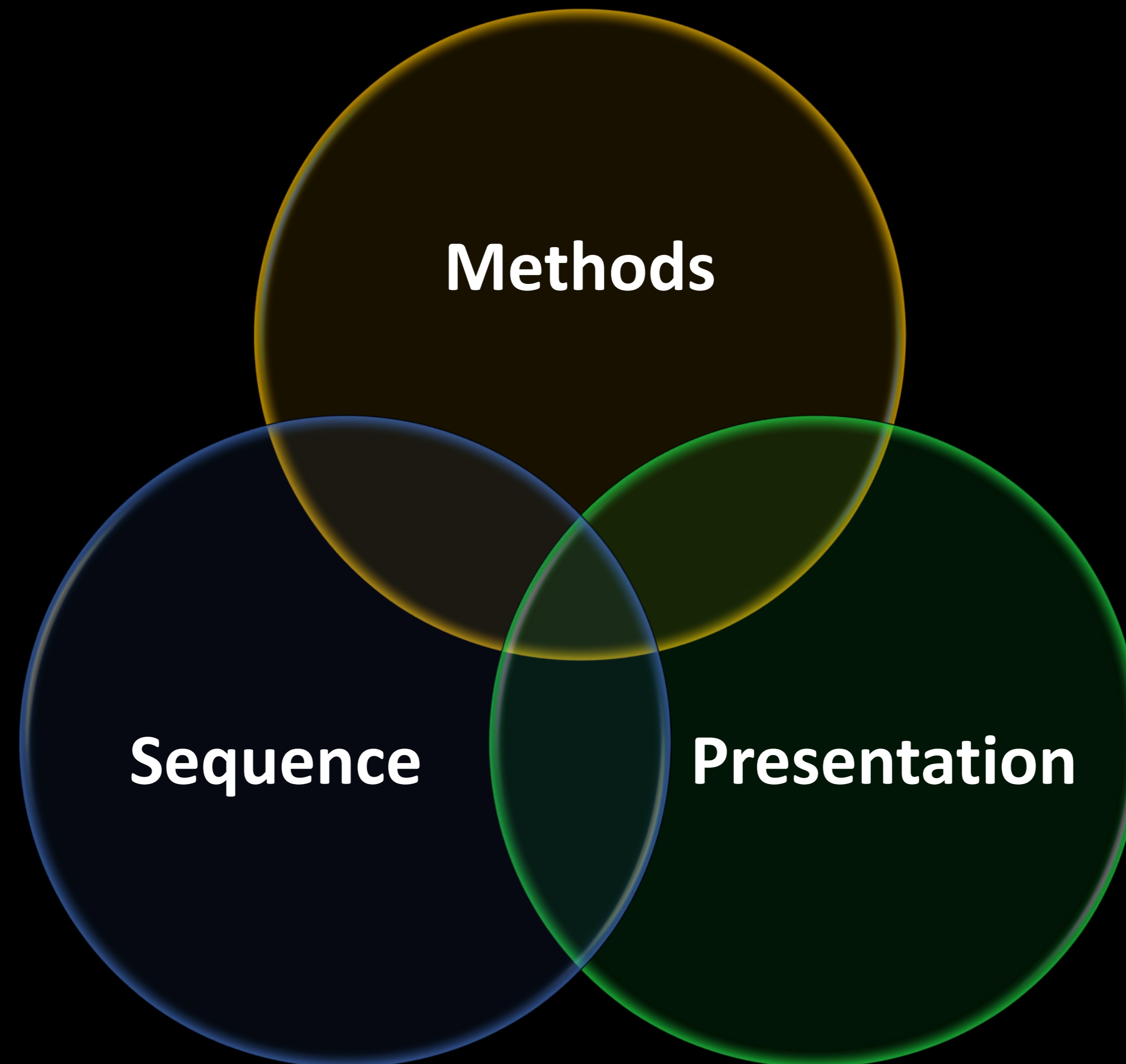


The screenshot shows a web browser displaying an edX course page. The browser's address bar shows the URL: <https://courses.edx.org/courses/GeorgetownX/GUID-501-01x/2014/courseware/33ef80556a294752b194de37a3d3e94cc7b70700c7746d4d118f15e7e3d9f79/>. The page header includes the edX logo and the course title: "GeorgetownX: GUID-501-01x Terrorism and Counterterrorism". A user profile for "Dan7Davis" is visible in the top right. A navigation menu below the header includes links for "Courseware", "Course Info", "Discussion", "Progress", "Open Ended Panel", "Definition of Terms", "Course Syllabus", "Course Readings", and "Current Events". The main content area is titled "Section 1: What is Terrorism" and includes a video player with a play button. Below the video, there is a "Context" section with text: "In the video located on the next page, Professor Bruce Hoffman introduces the difficulties one encounters when defining terrorism. The following question will be addressed:" followed by a bullet point: "• Why is terrorism so difficult to define?". A "Student Lecture Notes" section is also visible at the bottom.

# Online Knowledge-Based Artificial Intelligence (KBAI) at Georgia Tech

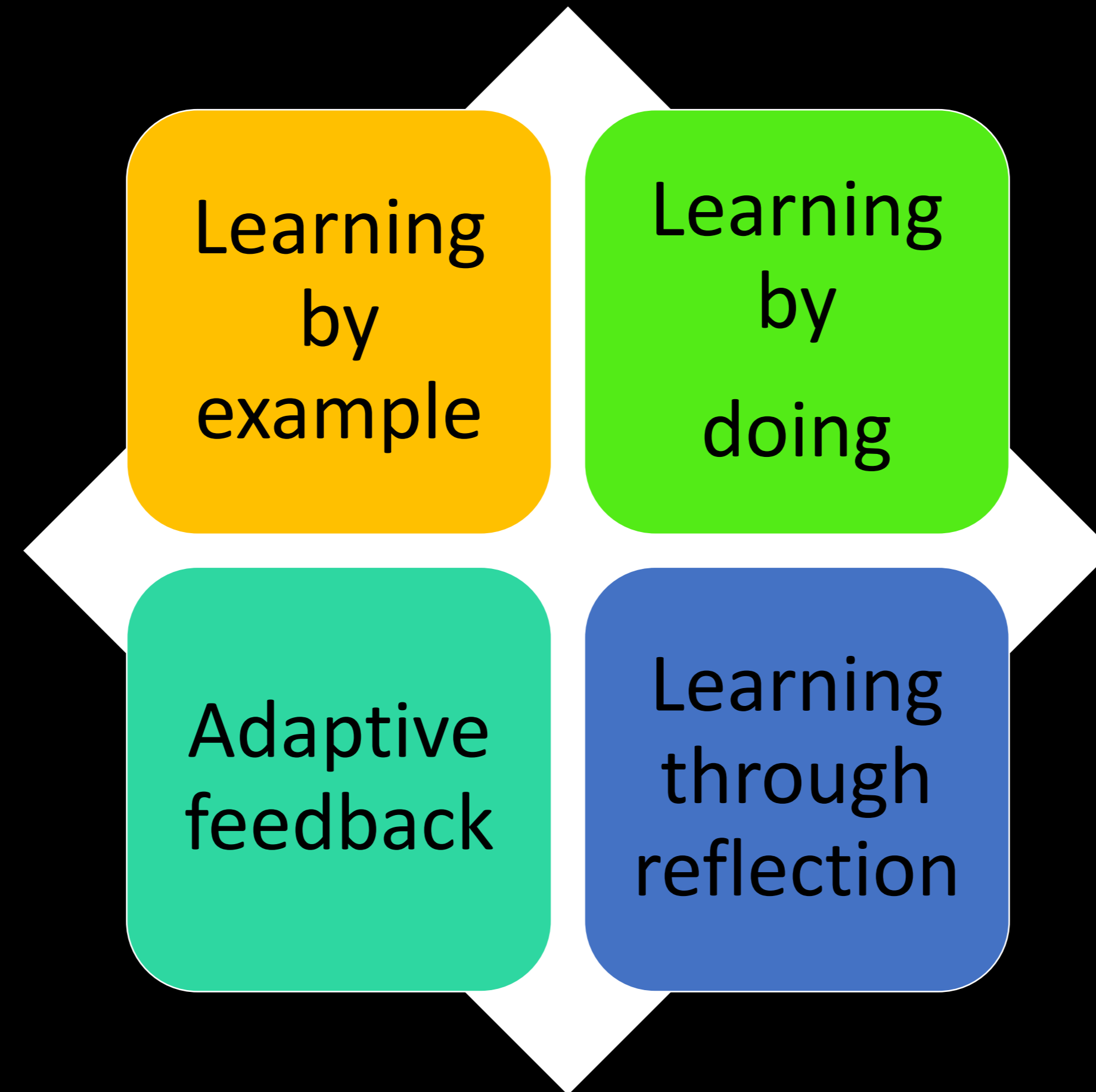


# The Design Model for the Video Lessons



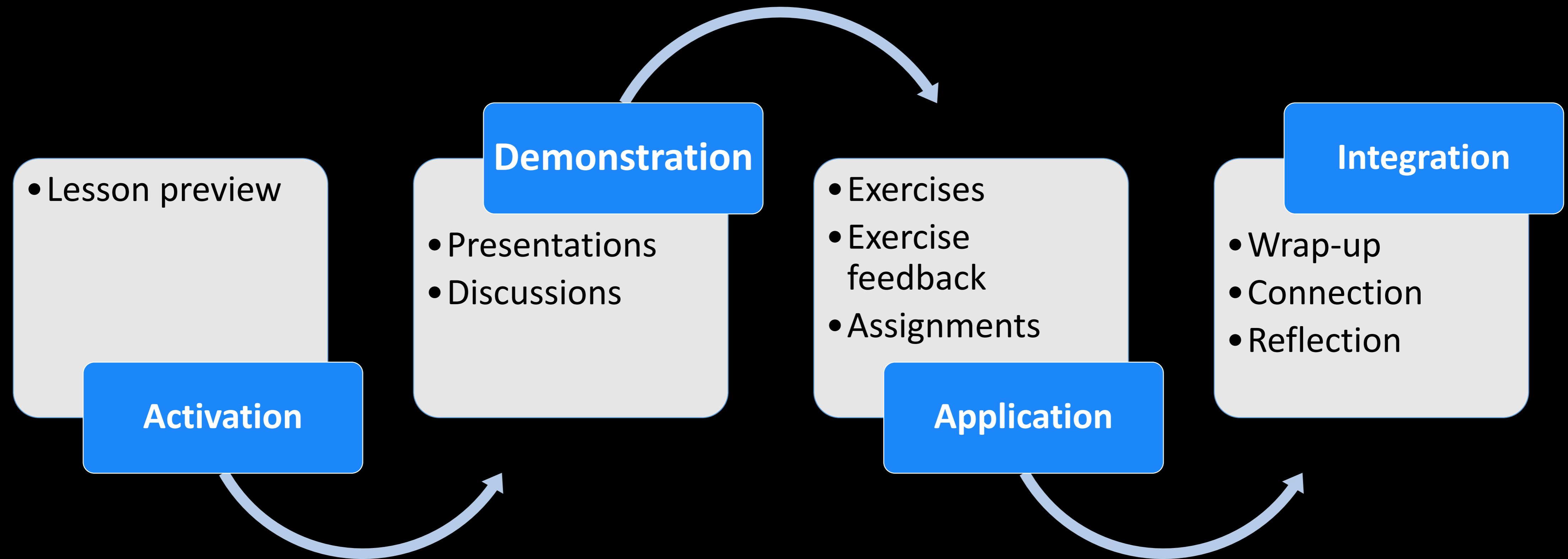


# Instructional Methods



# Instructional Sequence

- 4-Phase Instruction



# Instructional Presentation

- Human embodiment
- Instructional media

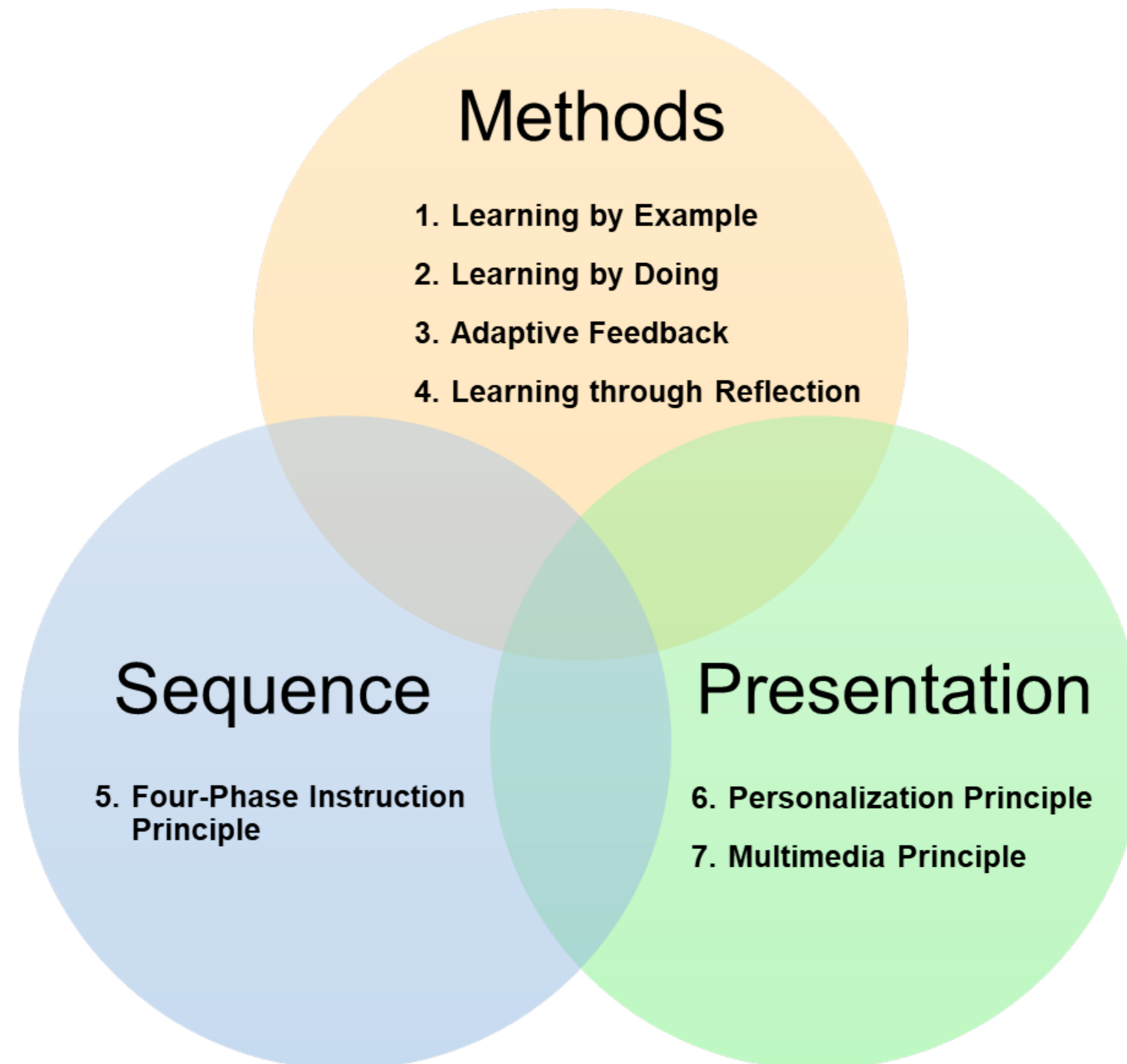
Personalization  
Principle

- Team teaching:  
conversational & interactive

Multimedia  
Principle

- Pre-prepared visuals:  
efficient & refined recording

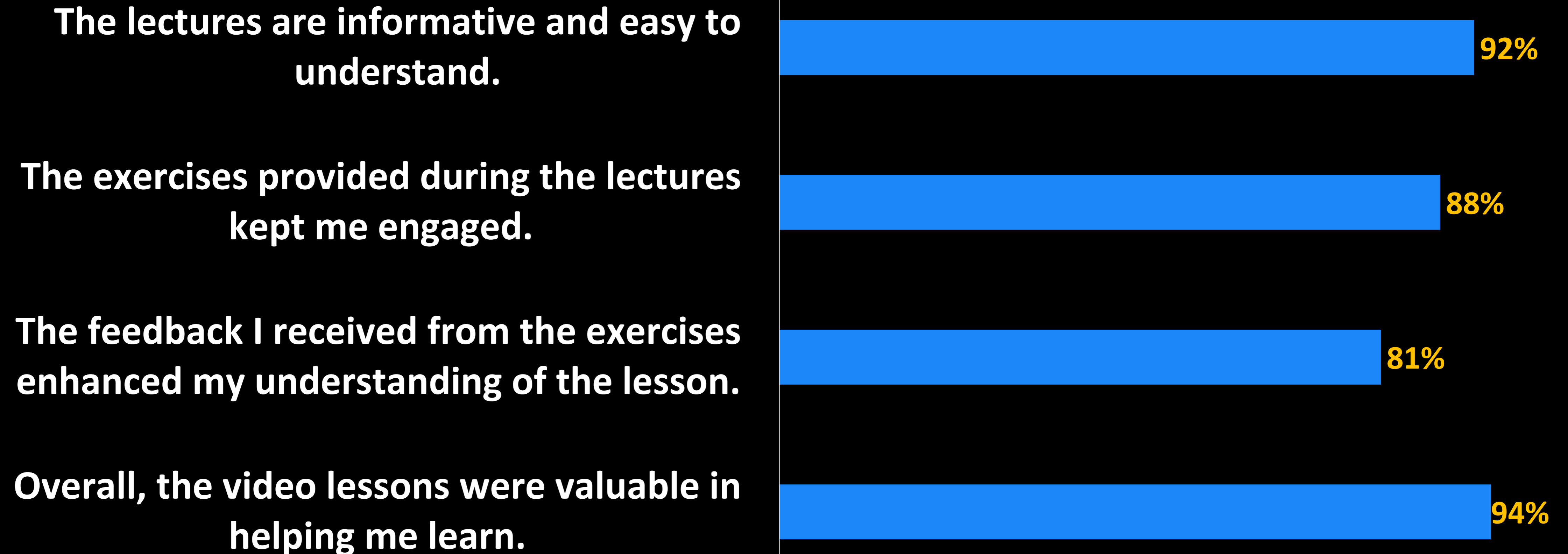
# A 7-Principle Design Model



# Student Survey on the Effectiveness of the Video Lessons

- Student survey data collected for 8 semesters since Fall 2014
- 1,242 students completed the survey for a response rate of 65%
- Students rated their level of agreement on 4 statements about the video lessons (1=Strongly Disagree and 7=Strongly Agree)

# Percentages of Students Who Agreed with the 4 Statements on the Video Lessons



## Perceived Video Effectiveness Significantly Predicted Perceived Course Effectiveness

- Rating of course effectiveness (1=Bad, 7=Excellent)
  - $M = 6.00, SD = 1.04$
- Students' rating of the video lessons significantly predicted their rating of the course effectiveness.
  - $\beta_1 = .683, p < .001.$

## To Learn More

- Contact: [cou@gatech.edu](mailto:cou@gatech.edu)
- A journal article coming out soon:

Ou, C., Joyner, D. A., and Goel, A. K. (in press). Designing and developing video lessons for online learning: A 7-principle model. *Online Learning*.