Best Practice for Online Lecture Development

- **Rule of 7**: A lecture should cover no more than 7+2 concepts/items.  
  **Why**: 7 is the maximum number of ideas, facts, or issues that people can actively focus on at any one time. The numbers of items that we can recall will decrease as the complexity of information increases.

- **Rule of 20**: A lecture should last no more than 20 minutes.  
  **Why**: The attention span of an adult is not exceeding 20 minutes. In real life, the attention span may be much shorter depending on your students’ age, experiences, and other individual differences.

- **If your class lecture** runs more than 20 minutes and covers more than 9 concepts/points, you may consider chunking them into small meaningful parts before publishing your lecture online.  
  **Why**: In on-campus class, you can pause, ask questions, or push your students to participate in class discussion. But in an online learning environment, once a lecture is posted and played, it will keep playing until it reaches the end. That means your students may have to sit through the entire lecture passively in front of the computers. Therefore, to chunk your lecture into small meaningful parts would improve student engagement in the lecture.

- **The beginning part of a lecture** should be able to capture students’ attention, informing them of the learning goals and linking what they are going to learn with their prior knowledge. You may include overview of a lesson, recall of relevant prior knowledge and experiences, or videos of current event related to the topic of the lesson in the beginning part of your lecture.

- **Other tips when creating online lecture**
  - Avoid the redundant use of different media on the same content
  - Avoid putting up speaker’s image/talk-head on the center of the screen throughout the entire presentation
  - Avoid interesting but irrelevant elements, which may divert students’ attention, disrupt their information processing and knowledge construction
  - Students learn better from graphics and narration than from graphics, narration and on-screen text. Because their visual channel is loaded with both graphics and texts while their mental effort is processing with both spoken and written texts.
Students learn better from animation with narration than from animation with on-screen texts.

References

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