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Interactive Teaching and Learning

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Teaching Practice

- **Interactive learning** –activities students do to construct knowledge and understanding (Freeman, 2015).
- **Metacognition**- the link between activities and learning , from students reflection about learning
- Why have we chosen to use Interactive or Active Learning for short?
- **Time Efficient**- By assigning pre-class work, my face to face class time can be used to apply new knowledge rather than introducing it (Educause, 2012). Materials can be provided in many different formats, such as power presentations, voice recordings, or videos. Classroom time can be spent on clarifying misconceptions or misunderstandings. Using class time in this way makes this class student centered-learning the way they want to learn while still making me responsible for delivering the course content.



Adopting Active Learning

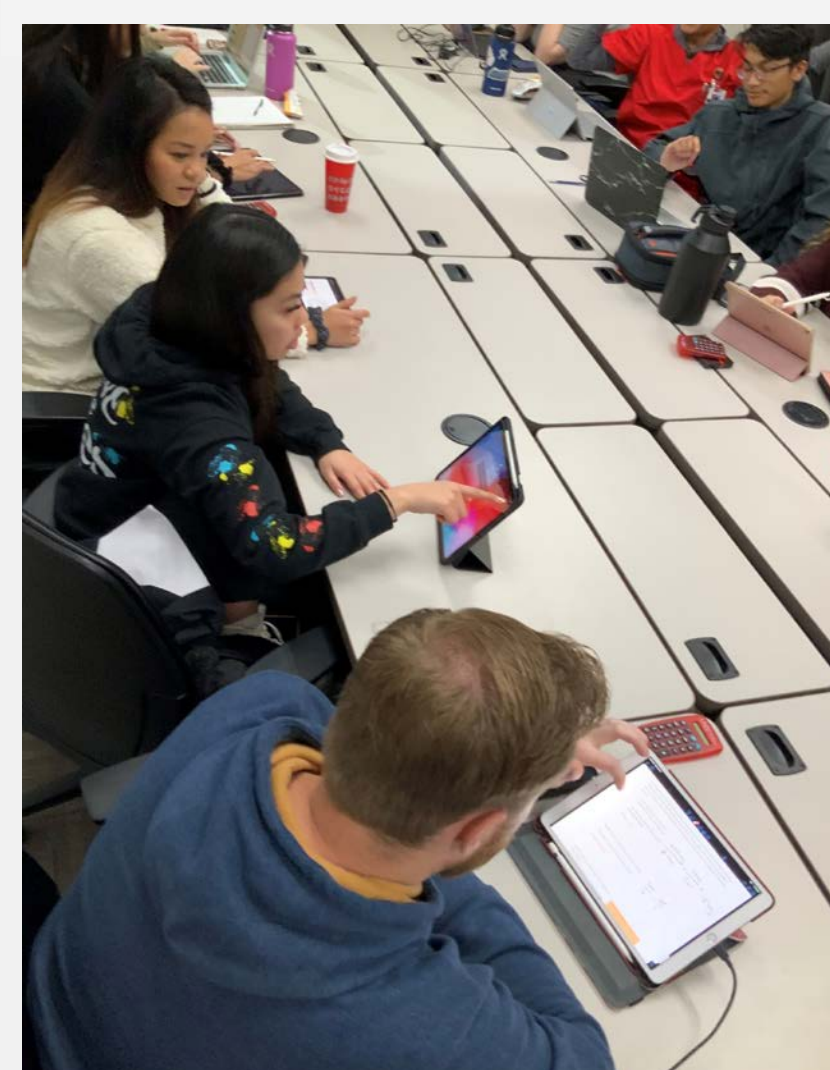
With the instructor serving as “guide on the side”, students are given more control and responsibility around how they learn, including the opportunity to teach one another through collaboration and personal interactions (Palloff & Pratt, 2013).

Faculty start adopting interactive learning by using backward design.

1. Determine the objective of learning. Next,
2. Provide the content in a selected an interactive tool such as PowerPoint or Playposit or Prezi.
3. Determine how to assess student learning for that content.



This can be done by quizzing them using Quizizz. This online interactive quizzing format has each student use a computer or smart phone to answer multiple choice questions. Another method is using a case study or concept map format to deliver the material. Students can be broken up into groups to dissect the material and them come back as a whole group to present and alter the material for more in-depth critical thinking to occur.



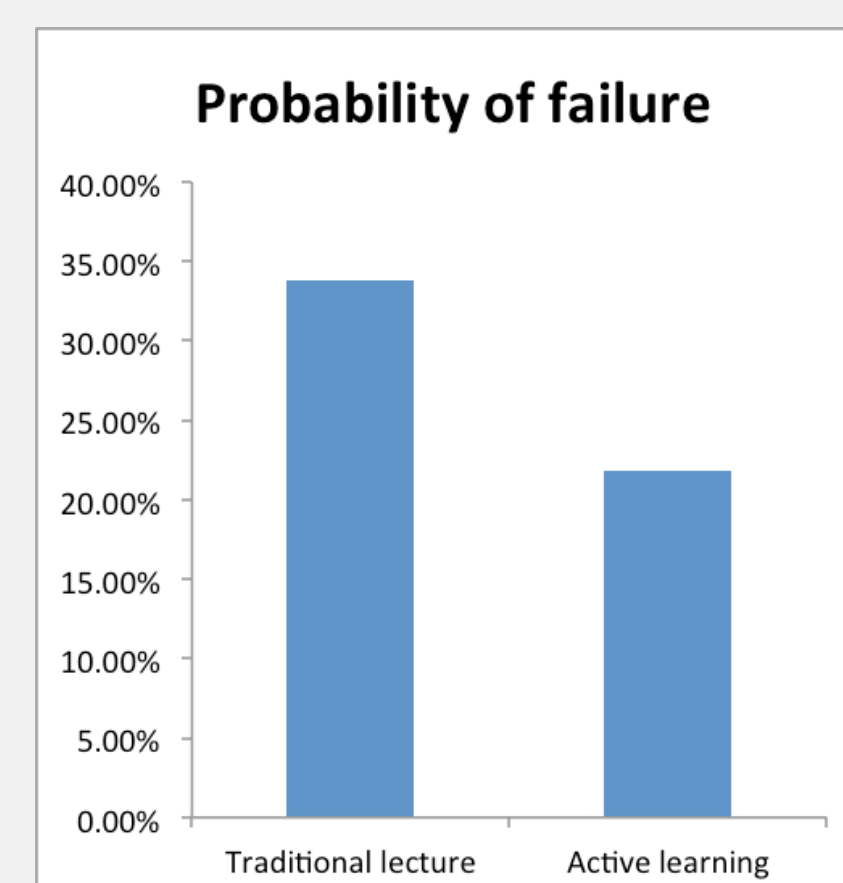
<https://youtu.be/CHPvW-pLJqE>

Resources & Where to Find Them

- Voice recorded Power Point, Camtasia recorded video, shared via Panopto or YouTube
- Summative low stakes quizzing of students : Kahoot, Quizizz, Quizlet, or Quizzes in Canvas
- Group or team activities: concept map
- Asynchronous teamwork: Groups in Canvas or Teams in Microsoft Office 365
- Synchronous teamwork: Zoom or Webex

**Using a variety of interactive teaching tools can make the interaction more fun and less mundane, providing multiple ways of assessing learning

Evidence it Benefits Students



- Freeman (2014) conducted a meta analysis of 225 studies with active learning and passive learning.
- Compared student pass/fail rates, and concept inventories. Above chart shows evidence that active learning produce lower failure rates (odds ratio of 1.95, Z = 10.4, P<<0.001), exam performance was 1.5 x higher in active learning group.
- Student performance on exams and assessments increased half a standard deviation when active learning was used (weighted standardized mean difference of 0.47, Z = 9.781, P<<0.001)
- These results were consistent across disciplines
- In my nursing courses, I use think-pair-share active learning by breaking students into groups, each group answers a question and then all groups come together to share answers and questions. Course evaluations have shown increased student satisfaction with course, and course instructor as well as overall individual test scores.

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