USEFUL REPETITION: SIMPLE AND EFFECTIVE

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Medical Laboratory Science Professionals

- Hospital & Clinic Laboratories
- Basic Science & Medical Research Facilities
- Diagnostic Testing Research & Development
- Forensic Laboratories
- Public Health (local, state (IDPH) and national (CDC)
- Donor Centers
- Environmental Laboratories
Challenges for Medical Laboratory Science Students

Content includes:

- Complex topics and concepts in:
  - Chemistry, hematology, immunology, immunohematology (blood bank), microbiology, research design and education & management
- Technical language
Time management is a critical factor for SUCCESS

- “Life comes at you fast” as an MLS student in our program
- Often this is a significant change for students entering the major courses
Major courses in Medical Laboratory Science Program

- **Junior year**
  - 8 courses with 5 different laboratories experiences over 2 semesters

- **Senior year**
  - 1 semester of professional practice (M-F 8 hours/per day in an affiliated hospital laboratory)
  - 1 semester of online courses (advanced concepts-no labs)
Junior Year Challenges

- Total immersion into both technical language and complex concepts begins first day of classes
  - 4 courses in the fall (3 with a laboratory)
  - 4 courses in the spring (2 with a laboratory)

- Learning curve can be steep for some students
  - Difficulty keeping up in lecture with terms and concepts
  - Correct spelling is often challenging
  - Standard note taking techniques often are inadequate
Useful Repetition Helps Overcome Perceived Barriers for MLS Students

- **Laboratory Experience**
  - *Build on previous concepts with each lab (building a strong foundation)*
  - *Example: Pocket portfolio*

- **Lecture**
  - *Worksheets or electronic assignments (application instead of just recall)*
  - *Nearthpod*
  - *Muddiest Point*
  - *Audio embedded into PowerPoints*
Adding Audio Component to Lecture Notes

- Added by using a function in PowerPoint
- Lectures with audio embedded are made available to students after the initial lecture has been delivered
The “How to” add audio to PowerPoint
Headphones for recording audio

- Range in price from $11.46- $23.99 and more
Advantages of adding audio

- **Hear** the correct pronunciation of technical terms
- **Listen** to lecture content unlimited times
- **Investigate** concepts which may not have been clearly understood the first time
- Study groups hear the same information-no time spent debating on what was actually said
- Can benefit all students but particularly may help those:
  - *Struggling with the pace and contents of the course work*
  - *Students whose first language is not English*
  - *Anyone needing accommodation with study skills*
  - *Students who may miss lecture for illness or other reasons*
Possible Disadvantages of adding audio

- **Additional prep time for instructor**
  - MLS course content fairly stable and edits are easy to make

- **Attendance**
  - If students know they can hear lecture they will not come to class
    - Rigor in the MLS curriculum addresses attendance and usually is not a problem

- **Students do not use resource**
  - Their choice but many students report that this option is beneficial both in face-to-face lectures and online courses

- **Audio files are large**
  - TRUE but the last few upgrades in ReggieNet have supported these files successfully
Adding Audio to PowerPoint Lectures-
Lessons Learned: (our observations)

- Adds an additional unlimited resource for very complex topics and new technical language

- The additional time it takes to add audio enhances the student learning experience and is time well spent

- Helps diminish stress and gives students more confidence to be successful