

USEFUL REPETITION: SIMPLE AND EFFECTIVE

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ILLINOIS STATE
UNIVERSITY
Illinois' first public university.

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 on line 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

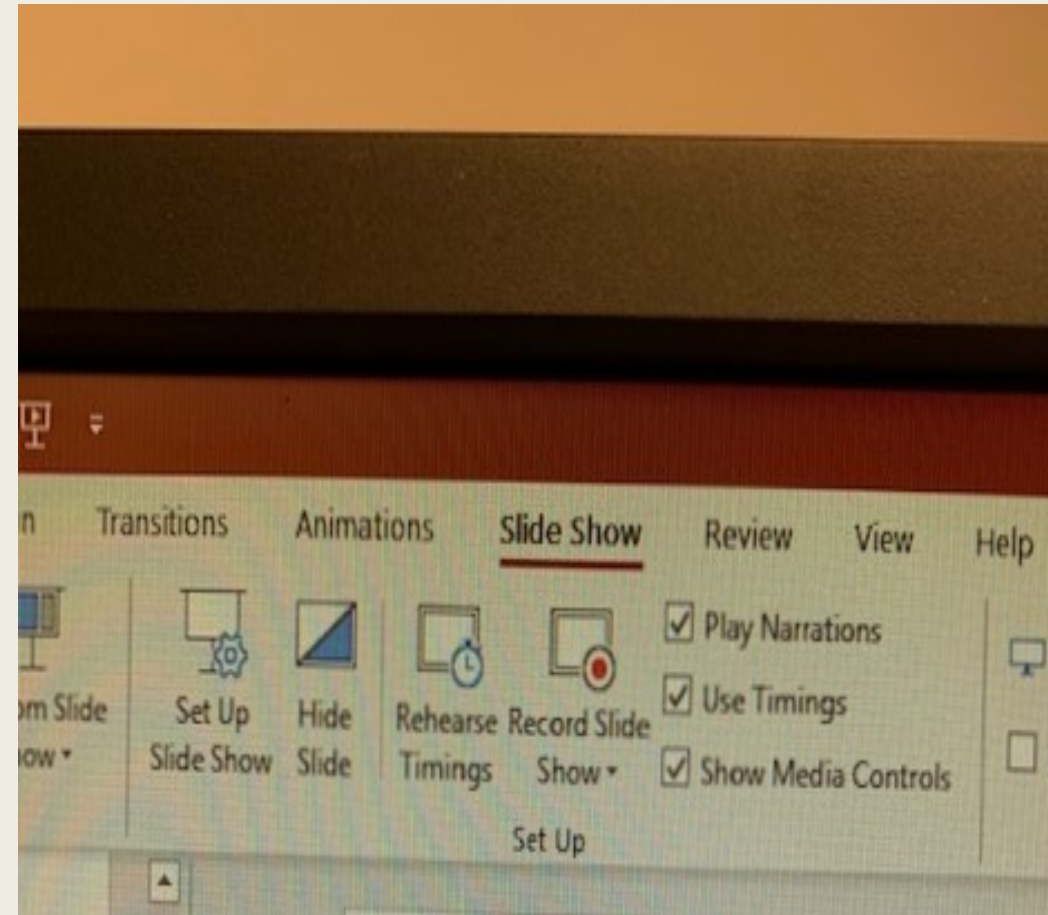
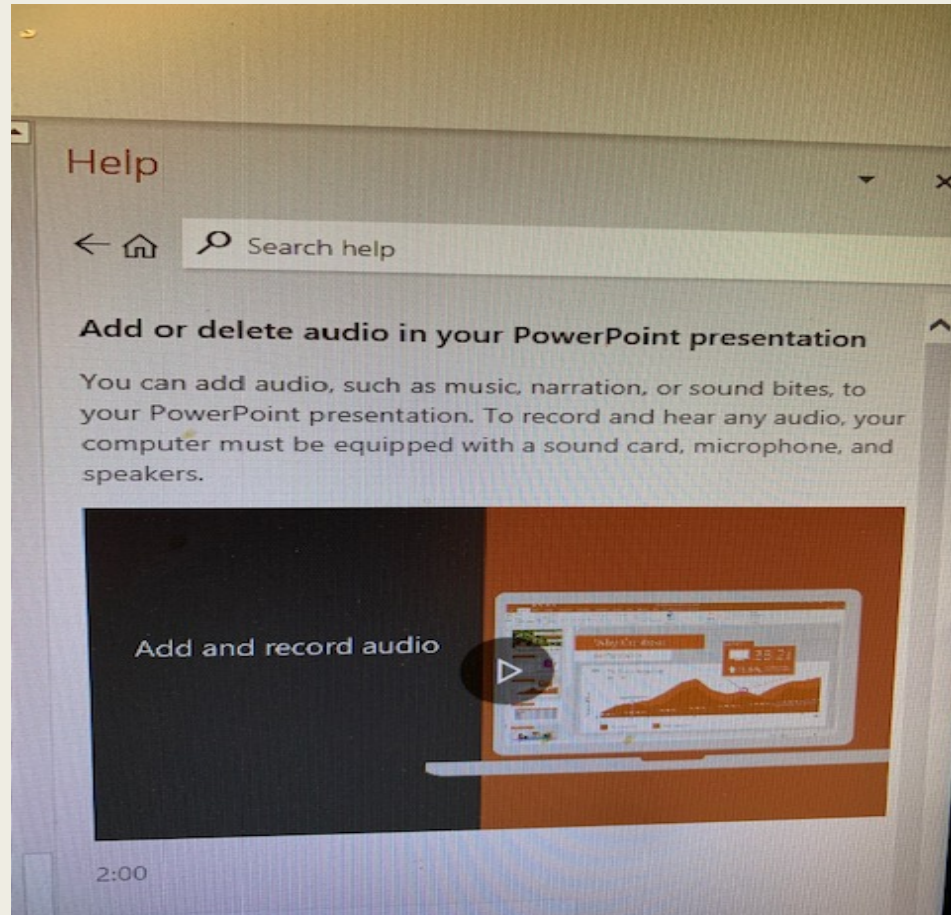
Useful Repetition Helps Overcome Perceived Barriers for MLS Students

- 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)*
 - *Nearpod*
 - *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 on line 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*