

## Using Multimedia in Teaching Laboratory/Practical Sessions

1. When do you use multimedia in laboratory/practical teaching?
  - Enhance student understanding/learning experience
  - Ease the learning barrier of unfamiliar procedure/equipment
  - Facilitate large student to teacher ratio
  - Overcome time constraints
  - When experimental materials are expensive and rare
  - Provide a different way to student learning engagement
  - Initiate learning beyond classrooms/labs
  - Towards to universal design by providing easy access
  - Contextualize theories, ideas, or concepts
2. Available multimedia resources
  - University portals: blackboard and canvas
  - Educational videos or audios: YouTube, Khan Academy, Podcast
  - Social media: twitter, blog
  - Learning APP: socrative
  - Discipline related software: PyMOL and Chimera for biomolecule visualization, Google Earth for geography, geology and environmental sciences
  - New technologies: virtue reality for experiential learning, light board
  - Free virtual tour creators online: [www.eyespy360.com](http://www.eyespy360.com)
3. Tips for making your own video
  - Be collaborative
  - Keep the video short
  - Keep reusability in mind
  - Consider different angles
  - Ensure the audio quality
  - Use a tripod or other image stabilization device
  - Make sure the videos are directly linked to the class content
  - Contextualize the learning objective/outcome
  - Provide real life examples or cases for learning
4. Making the multimedia accessible to every student
  - Keep in mind that some students may be second-language learners, some may have visual or hearing loss, and some may have reading issues.
  - Provide Alt Text for photos and images
  - Maintain high contrast between the background and the text
  - Make sure videos are captioned
  - Make transcript available for audios