

Creating Multimedia Resources Depending on Instructors' Needs

Azita Seyed Fadaei, Department of Physics, South Seattle College



Necessity

- Multimedia has a positive effect on people's lifelong learning
- Students can go with multimedia through their mobile device
- A huge ocean of multimedia information in front of students
- Preparing, managing and choosing the best resources by teachers

The Idea

Pros

- Speeds up the teaching process.
- Helps instructors use the "Multimedia Representation" in their real or virtual class.
- Helps to plan, make and prepare some part of curriculum, observing a phenomena, demonstrating, explaining practices and lab activities.

Case Study

- Spring quarter 2019
- Two-year college, 17 Students
- Introductory, Algebra-based General Physics for STEM major
- Demo: 1 instructional 10 minute video on Canvas, Youtube,

Demo Demographics

Demo Prepared Video by Instructor

Introducing the Basic of Logger Pro
- Free download and accessible for one month on PC.

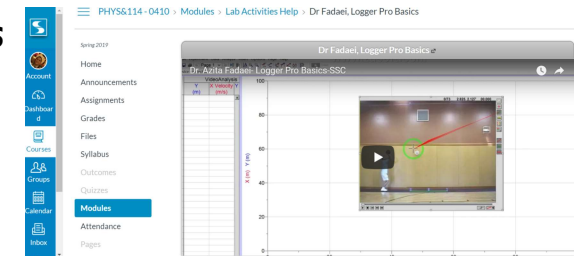
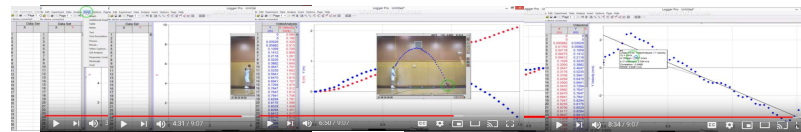
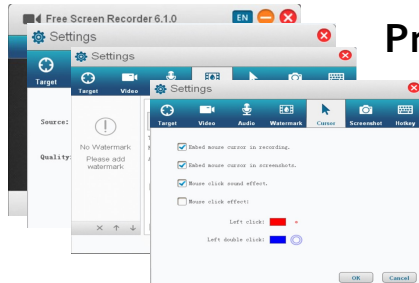
Free Additional Application

Screen Recorder
- Free download Software accessible for every one to produce videos from monitor

Prepared Video

Canvas, Youtube
- Accessible for students to learn every time, every where, depending on Lab Activities needs

Prepared Video's Effects on Students Attitudes in Physics



Before Instruction

- Grab students' attention;
- Focus students' concentration;
- Generate interest in class;
- Create a sense of anticipation;
- Energize or relax students for learning exercise;
- Improve attitudes toward content and learning;
- Inspire and motivate students;

During Instruction

- Draw on students' imagination;
- Increase memory of content;
- Increase understanding;
- Build a connection with other students and instructor;
- Serve as a vehicle for collaboration;
- Make learning fun;
- Set an appropriate mood or tone;

After Instruction

- Foster creativity;
- Stimulate the flow of ideas;
- Foster deeper learning;
- Provide an opportunity for freedom of more expression;
- Decrease anxiety and tension on scary topics;
- Create memorable visual images.
- Accessible every time every where with access to internet

Analyzing the Students' Attitudes to Physics



Conclusions

Students have positive ideas about the prepared video by instructor.

- Prepared video by instructor helped students to find the context more accessible, interesting and memorable than their previous experiences of physics learning.
- Prepared video by instructor gave students the especial positive attitude to use multimedia in their learning process.

- Prepared video by instructor gave students the idea about applying technology in physics classes.
- Prepared video by instructor gave students the idea that learning is easier and faster than their previous experiences of physics learning.
- Instructors can prepare videos depending on their instructional needs.