



## Physics Best Practices Sharing Session

April 9, 2020

### Attendees:

1. Sarina Etheridge - Columbus Technical College
2. Al Harmon Central Georgia Technical College
3. John Stout - Chattahoochee Tech
4. Steve Moore, West Georgia Technical College
5. Michelle Likins - North Georgia Technical College
6. Amy Holloway - CGTC
7. Dave Brown - GNTC
8. Jarod Lynn
9. Ebenezar
10. Jeff
11. David Scott
12. Nathalie Dames TCSG

### Points of Discussion:

1. The purpose of this meeting was to address the needs of general education faculty in light of the recent quick transition to virtual learning for all course. The following questions were presented during the meeting:
  - GVTC Resources: <https://gvtc.tcsg.edu/deac>
  - What have you had to change to accommodate online instruction?
  - What suggestions do you have for your peers?
  - Where do you need assistance?

### Discussion Notes:

- **The GVTC Resources:** <https://gvtc.tcsg.edu/deac> website was shared.
- **Dave shared:** 1. Maintain continuity and consistency with the mode of delivery that the student had from the beginning of the course. For the Physics lab videos have been created to simulate the labs and students will be required to write a paper. 2. Send out an itinerary of remaining assignments and when they are due. 3. Maintain open lines of communication with the students.
- **Sarina Shared:** For labs she has used phet.colorado.edu. (Downside is JAVA is required and students may need assistance with downloading). It has been working well so far. Any other labs like modern physics she will do videos and students will answer questions from a worksheet to demonstrate understanding. Help needed for tests. The desire is to have the student be able to show their work for mathematical calculations within Blackboard without the student trying to type it. So far she has had the students to take picture of work and upload.
- Some platforms offers a way for students to write and upload but this does not avoid that problem of a massive amount to grade. Some suggestions is to focus and limit the number of

problems to make the grading more manageable and less stress on the student. Also using timed formats and allowing time for upload.

- Detailed power points are created to allow for students with limited hearing ability to be able to understand the material. Lots of time is spent on the creation of the powerpoints and mini power points over specific topics.
- Jeff Shared: Several resources for Labs. (Please see below as well as information sent out on listserve) There was a concern over the mode for calculated response in Blackboard. The desire was to use degrees as opposed to radians which is the default for WIRIS. (A suggestions was sent out on the list serve). Requests were made for site licenses for online labs.
- **Other Suggestions for labs:**
  - phet.colorado.edu: has additional resources including lecture plans and Lab worksheets
  - Youtube has several videos of instructors going through their labs but not necessarily in a single source.
  - Jodi Brookshire PHYS 1112 has created Swiff player labs. Swiff Player  
<https://www.globfx.com/products/swfplayer/>
  - Another place to receive videos is <https://www.walter-fendt.de/html5/phen/>
  - CTC uses Vernier equipment in our labs and they provided the following list of experiments, videos and sample data.  
[https://docs.google.com/spreadsheets/d/e/2PACX-1vQUGzkycEPNVlcZ1zbbG5322eyDlaKkOXI7MWk8fiphb9eszJXOwtR\\_6IMH8rIDeyjV89wVVw2umrz/pubhtml#](https://docs.google.com/spreadsheets/d/e/2PACX-1vQUGzkycEPNVlcZ1zbbG5322eyDlaKkOXI7MWk8fiphb9eszJXOwtR_6IMH8rIDeyjV89wVVw2umrz/pubhtml#)
  - The <https://gvtc.tcsg.edu/deac> site has the following resources listed specifically for physics labs
    - Merlot virtual labs (Biology, Chemistry, Physics, Environmental Science, Engineering, Math) <https://virtuallabs.merlot.org/>
    - PHET simulations (Physics, Chemistry, Earth Science, Math, Biology): [https://phet.colorado.edu/\\_m/](https://phet.colorado.edu/_m/)
    - Phet physics: <https://phet.colorado.edu/en/simulations/category/physics>
    - Amrita physic virtual labs: <https://vlab.amrita.edu/?sub=1&brch=195>
    - Daniel V. Schroeder <http://physics.weber.edu/schroeder/> Physic simulations: <http://physics.bu.edu/~duffy/HTML5/index.html>
- **Summer Labs:**
  - Some institution have not been informed if they will have summer classes online at this time. Others do not typically offer summer classes. Some were considering postponing the labs for another term.
  - Concerns was over labs at the beginning of the term were it was more difficult to find simulations.
  - There are no institutions that are currently teaching physics labs online within TCSG prior to this point.
- The list serve was recommended as a place to continue to share best practices and to ask for help.