

University of Hawaii at Hilo

RE: MOTION: ON-LINE LABS NOT EQUIVALENT TO REAL HANDS-ON LABS

Background: At the meeting of the CAS Senate December 6, 2013 I introduced the following motion:

“Whereas on-line laboratory courses do not train students in hand motor skills with laboratory equipment and safety, on-line laboratory courses are contrary to the mission of hands-on laboratory courses. On-line laboratory courses are not academically equivalent to hands-on laboratory courses.”

The motion was then referred to the Academic Policy Committee for further review and then to the UHH Faculty Congress as follows below. The motion passed (?) and was then moved for consideration by the All Campus Council of Faculty Senate Chairs (ACCFSC)

Whereas on-line laboratory courses do not train students in hand motor skills with laboratory equipment and safety, on-line laboratory courses are contrary to the mission of hands-on laboratory courses. On-line laboratory courses are not academically equivalent to hands-on laboratory courses. On-line laboratory courses should be designated as such with a different alphanumeric code; for example replace the “L” code for “laboratory course” with “OLL” for “on-line laboratory course.”

UHMC Distance Learning Committee Response and Questions for Consideration

The following is the response as well as questions from the UHMC Distance Learning Committee in regards to the above motion:

1. Even if UHMC does not conduct online labs, our students take classes from other UH system campuses that do, therefore this motion would affect our students, perhaps adversely.
2. If the designation for online labs (OLL) is created that is separate from a lab (L) course, and the general education requirement is that students need an L course, does that mean that the OLL will not count towards this requirement?
3. Having an OLL designation that seems “lesser than” an L designation could have the potential to create a situation that could designate all online classes as “lesser than” face-to-face, on campus classes.
4. Could online lab classes have certain live components done at a students’ home campus, similar to having a proctored assessment for other online classes?
5. What about L courses for non-science majors? How would this affect those students? Do non-science majors need the hand motor skills as suggested by this motion?

6. Each hand motor skill needs to be defined as part of individual learning objectives and there needs to be specific definitions on what needs to be hands on for each science course vs. what is academic. How much specific lab work is essential hand motor skills and how much is not? For example, in a biology class where dissections are performed, if the lesson is to learn the anatomy of the organism; does each student really need to perform their own hands on dissection to learn the anatomy of that organism? Another example is that the MIT physics program flipped their lab courses since many of the lab exercises do not need to be in a live, hands-on lab, but can be done in online labs.

7. Using the argument of hand motor skills being an integral part of all science labs could be problematic concerning ADA (Americans with Disabilities Act) laws.

8. There are resources such as iLabCentral that could be leveraged to give students comparable experiences in online science labs.