

Testimony for Public Hearing on H. B. No. 5030

Good afternoon and thank you for the opportunity to voice my opinion regarding H. B. 5030.

My name is Dr. Gerry Lesley and I am a tenured professor and chairperson in the Department of Chemistry at Southern Connecticut State University. I have taught at SCSU since 2000 and have observed students that have progressed through our degree programs, as well as, those who have transferred to SCSU. I am in favor of a seamless transfer policy, but I am apprehensive about the potential outcomes for our program if the transition does not address certain key aspects that we identify as noteworthy strengths of our undergraduate programs.

My colleague Dr Mike Shea has spoken to the “reading and writing-intensive” aspects of upper-division courses and I would reiterate this point for programs in the STEM disciplines. In fact, some might say, myself included, that scientific writing is a very specific skill requiring very specific training. This training begins in the freshman level laboratories and continues, with a strong emphasis on technical proficiency, in the second year organic chemistry laboratories at SCSU. Students entering their junior year at SCSU are well trained and they are expected to improve upon their skills until they graduate. In the senior year there are strictly enforced writing and technical proficiency skills required to complete the senior thesis, seminar requirement, advanced laboratory reports, and so forth. For example, students are required to apply advanced inquiry-based skills to experimental design, to use critical thinking based on factual data gathered through experimentation, and to discuss the results of experimentation in a well-organized, evidence-based manner. We pride ourselves on preparing graduating students for the Connecticut workforce and graduate schools with these enhanced skills. This expectation would make success very difficult for students who have not had the proper training in their freshman and sophomore years and wish to enter the program at SCSU, if the same level of rigor is not implemented. Consequently, there is a strong sense that we will be required to lower our standards for achievement in this regard.

The discipline specific requirements for Chemistry are unique compared to most other subjects. While we typically have smaller enrollments in terms of majors, we also have very high standards and enhanced rigor in our programs because mistakes can be fatal. This unique skill set is one reason that we see such demand for our graduates in industry and academic settings and for example, why our students have a virtually perfect record for gaining entry into medical schools from our pre-med program. It is no secret that the costs associated with such programs can be quite high compared to other disciplines; however, this expenditure does ensure that students in the CSU system are receiving training commensurate with similar programs around the world. The community colleges in the CSU system seem vastly under equipped to address the needs for similar training and in many cases, may fail to meet the standards of external accrediting bodies. We have noted on many occasions that the background skills of students transferring from community colleges are not at the same level as those of our students. This observation is not meant to demean our colleagues at the community colleges but rather to point out

that their schools are not equipped with the same physical spaces, equipment, and full-time faculty numbers, to be able to deliver instruction with the same rigor. Frankly, to obtain parity in these areas would require funding that would not be in the best interests of the CSU system, especially in the current fiscal environment. For this reason it makes sense to equip the universities in the system to address these standards. The issue we face is that the use of such equipment, interpretation of the data obtained, exposure to advanced synthetic methods and methods of characterization, begins in the sophomore year or earlier! This training is the basis for continued studies in the junior and senior years and the inability to meet the same standards could have serious outcomes in terms of student learning and safety.

My concerns and those of my colleagues are based on the best interests of our students. While many disciplines can and will address the needs for such an articulation agreement within the CSU system, I urge you to weigh all of the factors when trying to fit every program into such a general scheme. I would welcome the chance to meet with colleagues from within the CSU system to discuss what I see as very important issues to ensure the quality of education remains to be the driving force as we institute system-wide change.

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