



ALAMO
COLLEGES
DISTRICT

To: PVC

From: Executive Faculty Council

Re: Recommendations as proposed by Lab Loading Ad Hoc Committee

Date: February 22, 2018

In September, Super Senate (now United Faculty Senates) submitted a charge to the Executive Faculty Council (EFC) to recommend an appropriate ratio of converting lab hours to work load units. The Super Senate charge asked that EFC conduct research to: identify the history of lab loading at each of the five colleges, identify how the current ratio for lab loading impacts student instruction and student success, and identify other college or university models for lab loading. The Super Senate charge asked that EFC recommend an appropriate ratio of converting lab hours to work load units, provide a rationale for which lab offerings would be impacted, recommend funding options, and provide a report outlining the budget and staffing impact at each of the five colleges.

The EFC, in consultation with the Lab Loading Ad Hoc Committee, proposes these final recommendations to the PVC (please see the attached documents for more details):

- Load 1 lab hour as 1 workload unit
- To determine the feasibility of proposed funding options, appoint a subcommittee of Lab Loading Ad Hoc Committee members and the Chief Budget Officer from each of the five colleges to investigate the matter further.

In Fall 2016, the SPC Faculty Senate was presented with a memo from their Professional Concerns Subcommittee regarding concerns from a group of faculty over the extra instructional contact hours that many faculty must teach in order to make a full instructional load. The SPC Faculty Senate brought this concern to the Super Senate (now United Faculty Senates, UFS). The UFS submitted a work proposal to the Executive Faculty Council (EFC). The EFC accepted the Lab Loading Work Proposal and charged this Lab Loading ad hoc committee with assessing the current loading practices. This ad hoc committee determined that to accomplish our charge we needed to:

- Limit our consideration to laboratory hours as defined in Board Policy D.5.1.2 (Nursing labs were not considered for this recommendation because they are loaded as a full workload unit)
- Define Instructional Laboratory and Open Laboratory
- Draw comparisons with peer colleges
- Use instructional loads as loaded in Banner and listed in the course catalog for cost estimating
- Determine feasibility of any recommendation made

As stated in Board Policy D.5.1.2:

“A standard teaching load for a faculty member during the nine-month contract year is thirty workload units, fifteen units per semester.”

“A workload unit is defined as one faculty lecture hour. One faculty lecture hour is 16 instructional contact hours. One instructional contact hour is equal to 50 minutes.”

The standard full instructional load, without labs, requires 240 clock hours. The pay per contact hour inequality is depicted in the full time faculty member example from Board Policy D.5.1.2 example:

Board Policy D.5.1.2 Full time Faculty Example Workload units					
Class	Catalog Listing	1 Lab Hour: 0.667 Workload units		1 Lab Hour: 1 Workload unit	
Class 1	3-2-2	2 lecture, 1.333 lab	3.333	4 lecture	4
Class 2	3-3-1	3 lecture, 0.667 lab	3.667	4 lecture	4
Class 3	3-3-0	3 lecture	3	3 lecture	3
Class 4	4-3-3	3 lecture, 2 lab	5	6 lecture	6
		15 workload units = 240 instructional contact hours		17 workload units = 272 instructional contact hours	

This example requires an additional 32 instructional contact hours for a faculty member who teaches courses with labs to make their full 15 workload unit requirement. It is important to keep in mind that lecture contact hours and lab contact hours are both reimbursed by the State at the same rate.

Many of the Applied Science classes are heavily weighted with labs which are loaded at 0.667 workload units for every 1 lab hour listed in the course catalog. Faculty who teach these courses are consistently required to work in excess of 50 additional instruction hours to make a full instructional load. Further example programs listed below are shown with the typical additional instructional contact hours required to make the 15 workload unit load per semester.

Sample Construction Teaching Schedule					
Class	Catalog Listing	1 Lab Hour: 0.667 Workload units		1 Lab Hour: 1 Workload unit	
CNTB 1416	4-3-3	3 lecture, 2 lab	5	6 lecture	6
CNTB 1400	4-3-3	3 lecture, 2 lab	5	6 lecture	6
CNTB 1418	4-3-3	3 lecture, 2 lab	5	6 lecture	6
		15 workload units = 240 instructional contact hours		18 workload units = 288 instructional contact hours	

Sample Aircraft Teaching Schedule					
Class	Catalog Listing	1 Lab Hour: 0.667 Workload units		1 Lab Hour: 1 Workload unit	
AERM 1345	3-0-4	0 lecture, 2.667 lab	2.667	4 lecture	4
AERM 1444	4-3-3	3 lecture, 2 lab	5	6 lecture	6
AERM 1357	3-2-4	2 lecture, 2.667 lab	4.667	6 lecture	6
AERM 1444	4-3-3	3 lecture, 2 lab	5	6 lecture	6
		17.334 workload units = 277.344 instructional contact hours		22 workload units = 352 instructional contact hours	

This ad hoc committee only considered the class assignment definitions of “laboratory” as stated in Board Policy D.5.1.2. Other class assignment definitions are outside of the charge for this committee. Board Policy D.5.1.2 defines **Laboratory** as: “Faculty member provides supervision; introduces information; schedules the lab work; provides individual skills instruction”

In order to provide some context for our discussion, we also used the definitions of lab that El Paso Community College uses based on their Board Policy 3.08.01:

“**Open Lab** is that portion of a course in which students perform independent activities which may require assistance, but which does not require direct instruction by faculty. Lab assistants are usually available to assist the student.”

“**Instructional Lab Courses.** Faculty are fully engaged with the student for 100% of the time during lab. These are courses in which demonstrations, return demonstrations, experiments, exercises and examinations require direct involvement by the instructor. The instructor is required to be present at all times and provides lectures, demonstrations, and evaluation of students.”

The ad hoc committee also looked at the definition of a Lab Technician as it pertains to Alamo Colleges. It has been established that Lab Techs maintain materials, supplies, and facilities. Lab Technicians do not possess credentials or experience criteria for instruction and are not used in that capacity.

Faculty who teach labs report that they spend a substantial amount of their time, outside of class, prepping labs, cleaning up, and grading lab assignments. Laboratory work also poses inherent health and safety risks that are not part of traditional lecture based courses. Over the last several years, faculty

members have been tasked with devoting more of their time to new responsibilities and a myriad of district and campus initiatives. Examples of such Initiatives include: Alamo Institutes implementation, WIG completion/4DX, Alamo Pathways implementation, Faculty Mentoring, Early Alerts, Midterm Alerts, Midterm Grades, Student Learning Outcome mapping and documentation (SLOs), Co-curricular activities, Community engagement and outreach, Faculty development activities, as well as numerous mandatory employee training programs. While faculty remain firmly committed to Student Success, faculty who teach labs have a dearth of time available outside of class for successfully addressing all of these items. Additionally, the funding for labs at some of the colleges has been significantly reduced. The resulting materials and equipment shortages have greatly increased the difficulty of teaching labs, and many faculty find that they require more time outside of their class schedule to mitigate the challenges caused by reduced funding. Junior faculty have been negatively impacted by not having enough time, or flexibility, in their schedules to participate in professional development and growth activities that may allow them to progress in academic rank and promotions. Faculty who teach labs are therefore at a serious disadvantage in available time, as well as a real disadvantage in compensation, as compared to their peers who do not teach labs.

Given the competitive salaries that exist in the private sector, the existence of the lab pay inequality may discourage recruitment of new faculty, especially in the Sciences, Health Sciences, and in the Applied Sciences. This may seriously affect our ability to offer more course sections, develop new courses, and recruit Faculty who can keep the curriculum abreast of new and emerging technologies.

A survey of faculty throughout the Alamo Colleges supports our findings. Here are some of the comments that faculty contributed:

“As an Allied Health program, we (the faculty who teach the specific class) are solely responsible for setting up & taking down our own student laboratories (we do not have academic lab technicians), or lab simulation managers (as in Nursing) to do this, or any lab assistants, nor do we often have a specified work study dedicated to our program.”

“The average [workforce] instructor has to teach just over 19 units, about half at 100 and half at 66.7% and this averages out to about 80 additional hours per semester. Now how does that affect the student, it doesn't because the [workforce] instructors usually come in at 6:45 and stay until after 5:30 to get things done. While the extra hours are not reflected in the students learning it drags the instructors and their families because we shield the students from our unjust treatment and just bite the bullet. “

“I teach labs in functional anatomy, neurologic management, and rehab techniques. I am in calls for 3 hours, then lab for 6 hours per week. I have to prepare for each activity. It blocks time I could be working on school committees and on preparing clinicals. I don't get release time for clinicals in the Fall because I am only doing prep work. I don't have 15 units in the Fall despite doing as much work as I do in the Spring, because I don't get full credit for lab time.”

“During semesters when I taught 8 labs I had approximately 190 students. If I had taught the same teaching load but had lectures instead of labs I would have had only 120 students. Faculty-student interactions are hindered by having so many students.”

“Laboratory preparation, grading, and execution for chemistry courses has always been *at least as time consuming* as lecture preparation, grading, and execution. In fact, if you consider the risk/hazard factor of

laboratory and the stress associated with maintaining a safe environment, laboratory pay should be greater than lecture pay. Also, many of our chemistry courses have as many laboratory SLOs to address as those pertaining to lecture.”

The ad hoc committee contacted Chairs and Deans from each of the college systems to gather information their current lab loading practices. A review of some of our peer colleges reveals that four of the eight peer institutions load 1 lab hour as 1 workload unit, there is no difference between how a lab hour and a lecture hour are loaded. One institution loads 1 lab hour as 0.75 workload units. One college bases the lab loading units on whether the unit is part of a full time faculty load (1 lab hour loaded as 0.667 workload units) or if it is part of a part time faculty load or an overload (1 lab hour loaded as 1 workload unit). One peer institution loads 1 lab hour as 0.667 workload units and one institution loads 1 lab hour as 0.60 workload units.

College	Workload Unit for Lab
Lone Star College System	1
San Jacinto College	1
Tarrant County College District	1
Houston Community College System	1
Dallas County Community College	0.667 or 1*
Austin Community College	0.75
Alamo Colleges	0.667 or 1**
El Paso	0.60
<i>*Full time faculty 0.667, Adjunct/Overload 1</i>	
<i>**Instructional labs 0.667, Nursing labs 1</i>	

We propose that the remedy for the lab pay inequality is to load 1 lab unit as 1 workload unit, instead of as 0.667 workload units. If the colleges were to increase the lab loading ratio, it would have an impact on the budget as shown in the following table.

Compensation Lacking At Current Ratio	
NLC	\$ 305,685.99
NVC	\$ 1,468,926.21
PAC	\$ 837,673.30
SAC	\$ 1,729,088.46
SPC	\$ 2,426,633.16
Total	\$ 6,768,007.12

The members of the Lab Loading Ad Hoc Committee recognize that the cost of immediately implementing the recommendations for loading 1 lab hour as 1 workload unit may be prohibitive given the status of budgets for the Alamo College District and each of the colleges within the district. The committee also recognizes that the state reimburses lab contact hours at the same rate as lecture contact hours.

The committee was tasked with exploring ways to fund any recommended changes in the current lab loading ratio. There are a number of tools that could be employed to generate the funds to help us reach

parity with some of our peer institutions. The district could enact a lab fee for all students, similar to the student activities fee, which would generate additional revenue to pay lab instructors. Board Policy D.5.1.2 could be changed to adjust how a full teaching load is defined, using 240 instructional contact hours instead of 15 workload units; or a full time teaching load could be reduced to 12 workload units for faculty who teach lab courses. Finally, there could be a phase in of increases for lab loading over time until reaching the full 1 lab hour as 1 workload unit equivalency across the district. Of course, any of these approaches could be combined with the others, depending on the guidance of financial teams and other stakeholders across the district.

	Sum of Cost to get to 0.75 workload units	Sum of Cost to get to 0.80 workload units	Sum of Cost to get 0.85 workload units	Sum of Cost to get to 0.90 workload units	Sum of Cost to get to 0.95 workload units	Sum of Cost to get to 1 workload unit
NLC	\$ 76,348.46	\$ 122,341.51	\$ 168,334.56	\$ 214,327.61	\$ 260,320.65	\$ 305,685.99
NVC	\$ 365,763.91	\$ 586,103.61	\$ 806,443.32	\$ 1,026,783.02	\$ 1,247,122.73	\$ 1,468,926.21
PAC	\$ 208,580.65	\$ 334,231.65	\$ 459,882.64	\$ 585,533.64	\$ 711,184.63	\$ 837,673.30
SAC	\$ 430,543.03	\$ 689,906.30	\$ 949,269.57	\$ 1,208,632.84	\$ 1,467,996.11	\$ 1,729,088.46
SPC	\$ 604,231.79	\$ 968,226.84	\$ 1,332,221.89	\$ 1,696,216.94	\$ 2,060,211.99	\$ 2,426,633.16
Total	\$ 1,685,467.83	\$ 2,700,809.90	\$ 3,716,151.97	\$ 4,731,494.04	\$ 5,746,836.11	\$ 6,768,007.12

The committee has come up with several ideas about funding the increase in the lab loading ratio so that 1 lab hour would be loaded as 1 workload unit, however the knowledge base of the ad hoc committee is insufficient to determine the feasibility of these ideas. We have come to a point where further budget expertise is required. Therefore, we are recommending an ad hoc subcommittee to determine how best to fund a change in the lab loading ratio. This subcommittee would consist of a sub group of the Lab Loading ad hoc committee and chief budget officers from each of the colleges. With the budget officers' knowledge of funding sources and familiarity with each college's budget, we will be able to determine the feasibility of our ideas and perhaps come up with new ideas. The Executive Faculty Council proposes the following membership on this subcommittee:

- Cynthia Katz, Faculty, Mathematics, SPC
- Thomas McCrary, Chair, Faculty, Science and Kinesiology, NLC
- Luis Rodriguez, Faculty, Biology, SAC
- David Weaver, Faculty, Aircraft Construction & Manufacturing Technologies, SPC
- Dolores Zapata-Caballero, Coordinator of Student Success, PAC
- Shayne West, Fiscal Services, DSO
- Chief Budget Officer for each of the five colleges

The Executive Faculty Council requests that the subcommittee:

- Create a schedule/timeline of milestones for completing the recommendation
- Identify how much money would be generated by a general lab fee
- Determine if colleges are receiving the full reimbursement for the labs
- Determine the amount that district receives from state reimbursement in total

Lab Loading Recommendations

February 26, 2018

Charge of the EFC

- Identify the history of lab loading at each of the five colleges
- Identify how the current lab loading ratio impacts student instruction and student success
- Identify other college or university models for lab loading
- Recommend an appropriate lab loading ratio
- Recommend funding options
- Provide a report outlining the budget and staffing impact at each of the five colleges

Ad Hoc Process

- Research the history and current status of lab loading at the five colleges
- Survey faculty to determine the impact of the current lab loading ratio
- Draw comparisons with peer colleges
- Use instructional loads as loaded in Banner and listed in the course catalog for cost estimating
- Determine feasibility of any recommendation made

Definitions

- **Laboratory:** “Faculty member provides supervision; introduces information; schedules the lab work; provides individual skills instruction” – Alamo Colleges BOT Policy D.5.1.2
- **“Open Lab** is that portion of a course in which students perform independent activities which may require assistance, but which does not require direct instruction by faculty. Lab assistants are usually available to assist the student.” – El Paso Community College Board Policy 3.08.01
- **“Instructional Lab Courses.** Faculty are fully engaged with the student for 100% of the time during lab. These are courses in which demonstrations, return demonstrations, experiments, exercises and examinations require direct involvement by the instructor. The instructor is required to be present at all times and provides lectures, demonstrations, and evaluation of students.” – El Paso Community College Board Policy 3.08.01
- **Lab Technicians:** maintain materials, supplies, and facilities. Lab Techs do not possess credentials or experience criteria for instruction and are not used in that capacity

Definitions

- 1 workload unit: 1 faculty lecture hour
- 0.667 workload units: 1 lab hour
- 1 faculty lecture hour: 16 instructional contact hours
- Full teaching load per semester defined as:
 - 15 workload units, or
 - 15 faculty lecture hours, or
 - 240 instructional contact hours
- Nursing labs were not considered, already at 1 workload unit: 1 lab hour
- State reimbursements calculated from sum of lecture and lab hours for a course (no distinction)

Lab Loading Impact on Teaching Load

Board Policy D.5.1.2 Full time Faculty Example Workload units

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Other Program Examples

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Lab Loading Impact on Faculty

- Faculty who teach lab heavy course loads
 - are carrying more instructional contact hours than faculty who do not teach courses with labs
 - express difficulty in participating in college/district committee work due to time constraints
 - express difficulty in devoting time to college/district Student Success initiatives due to time constraints

Lab Loading Impact on Faculty

“The average [workforce] instructor has to teach just over 19 units, about half at 100 and half at 66.7% and this averages out to about 80 additional hours per semester. Now how does that affect the student, it doesn't because the [workforce] instructors usually come in at 6:45 and stay until after 5:30 to get things done. While the extra hours are not reflected in the students learning it drags the instructors and their families because we shield the students from our unjust treatment and just bite the bullet. “

Lab Loading Ratio Comparisons

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<i>**Instructional labs 0.667, Nursing labs 1</i>	

Lab Loading Ratio Increases

	Sum of Cost to get to 0.75 workload units	Sum of Cost to get to 0.80 workload units	Sum of Cost to get to 0.85 workload units	Sum of Cost to get to 0.90 workload units	Sum of Cost to get to 0.95 workload units	Sum of Cost to get to 1 workload unit
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Possible Funding Options

- Enact a lab fee for all students, similar to the student activities fee, which would generate additional revenue to pay lab instructors
- Adjust how a full teaching load is defined, using 240 instructional contact hours instead of 15 workload units
- Reduce a full time teaching load 12 workload units for faculty who teach lab courses
- Phase in of increases for lab loading over time until reaching the full 1 lab hour as 1 workload unit equivalency

Lab Loading Recommendation

- Load 1 lab hour as 1 workload unit
- Ad hoc subcommittee continue this work in conjunction with chief budget officers from each of the colleges to determine how best to fund an increase in the lab loading ratio

Subcommittee Membership

- The Executive Faculty Council proposes the following membership on this subcommittee:
 - Cynthia Katz, Faculty, Mathematics, SPC
 - Thomas McCrary, Chair, Faculty, Science and Kinesiology, NLC
 - Luis Rodriguez, Faculty, Biology, SAC
 - David Weaver, Faculty, Aircraft Construction & Manufacturing Technologies, SPC
 - Dolores Zapata-Caballero, Coordinator of Student Success, PAC
 - Shayne West, Fiscal Services, DSO
 - Chief Budget Officer for each of the five colleges

Subcommittee Charge

- Create a schedule/timeline of milestones for completing the recommendation
- Identify how much money would be generated by a general lab fee
- Determine if colleges are receiving the full reimbursement for the labs
- Determine the amount that district receives from state reimbursement in total