



MEMORANDUM

TO: HECC Commissioners
FROM: Duncan Wyse
DATE: September 9, 2020
SUBJECT: SSCM Review Workgroup Feedback

During the F&A subcommittee meeting on August 12, as part of the SSCM review update panel discussion, two key themes emerged which conclude that:

- More time is needed to finish the workgroup process with the consensus being the recommendations be considered by the Commission in the fall; potentially at the November F&A subcommittee meeting.
- More direction is needed from the commission on policy priorities and how to manage conflicting priorities when they occur.

This memo lays out for commission discussion proposed feedback to help guide the workgroup's deliberations. This feedback is designed to address the tension created between conflicting priorities which allows the commission to define where to focus the intensity of the state's funding efforts. If progress can be made with significant consensus developed, more energy can then be placed on obtaining the resources needed to focus on student success.

Regarding funding challenges, the Commission is sensitive to the immediacy created by the pandemic, but the formula should focus on the long-term and remain principles-driven with any crisis response considered separately.

It is my view that the Commission should:

1. Affirm the basic architecture of the current model, with its focus on student access and completion. In addition, affirm our commitment to providing additional weights for objectives consistent with our strategic plan including access and completion for veterans, low income, rural, and students of color as well as for completion of degrees in high demand fields.
2. Generally, endorse the workgroup's recommendations with respect to consensus items 1-6 in F&A docket item 4.0 from the August 12th meeting, while reserving final judgement once the totality of all other changes is known. The areas of consensus are included in the appendix for reference.

3. Express caution/concern about the apparent shift of resources from undergraduate to graduate education via the recommendation for updated cost weights (#5). Emphasize that while we support a value- and policy-neutral approach to cost weighting, the policy priority of the Commission remains undergraduate education (particularly given our equity objectives), and suggests the potential need for a counterbalancing formula adjustment to reflect this priority.
4. Reaffirm our expectation that the mission differentiation component of the SSCM will be retained but significantly simplified. Establish that the SSCM's approach to mission differentiation funding should treat all of the institutions equitably, either by providing equivalent funding to each institution or by using a rational and consistent formula.
5. Establish that the SSCM should dedicate a specific, limited amount of funding for mission differentiation and regional support. This should be similar to the amount currently within the formula (\$69M). This amount should grow by the rate of inflation but protected from extraordinary cuts in the total amount of PUSF funding in order to provide some stability for institutions in the face of volatile economic conditions.
6. Establish that mission differentiation funding for OSU-Cascades should be continued based on the current practice of reflecting that it is a campus of OSU and provides regional access for the area in which it is located.
7. Establish that changes to SSCM will begin in FY 22 and will be phased in over several years.
8. Establish a timetable for the next comprehensive review of the SSCM, probably in another five years, with a technical advisory group to meet during the interim (maybe in 2 or 3 years) to consider areas of study, cost weights and equity issues.

APPENDIX – AREAS OF CONSENSUS

The workgroup membership has reached consensus on a number of issues that will create progress. Those areas of consensus are listed below with more information on each. The areas are listed in order of the magnitude they are likely to affect the funding distribution, from those with the least impact to those with the most.

1 – Use a nationally defined list of STEM degrees for the area of study bonus

In the current formula, science, technology, engineering and math (STEM) degrees are incentivized with an area of study bonus in the outcomes portion of the formula. The current definition of STEM degrees has been in use for some time and is not consistent with other national definitions potentially undercounting in comparison.

There are a number of alternatives that can be used. The federal Department of Homeland Security maintains a defined list of STEM degrees for use in the F1 student visa program because those students can be offered a visa extension if they are pursuing a STEM degree.

Their list includes technology related fields (i.e. education technology) in addition to the traditional natural sciences and engineering. Their list also includes health related fields which are also eligible for the area of study bonus. This broader definition is a more consistent and modernized approach to identifying STEM areas that should be eligible for the area of study bonus.

There was discussion during workgroup meetings about the STEM bonus in general related to the area of study bonus which ties to principle of encouraging attainment in high-demand and high-reward disciplines. As a matter of process, a staff recommendation will likely include having future workgroups consider the state's workforce needs in helping define the areas to incentivize in the area of study bonus.

2 – Update the definition of bilingual education

Bilingual education is another field eligible for the area of study bonus. The current definition is no longer applicable as the Teacher Standards and Practices Commission (TSPC) has altered its approach.

In collaboration with the education deans at the universities and TSPC, the definition will be updated to include the completion of a TSPC-approved dual language specialization or the completion of a TSPC-approved English as a Second Language (ESOL) endorsement program and the demonstration of proficiency in a second language by passing an approved language test.

The improved definition will correctly account for all the bilingual education graduates and properly apply the area of study bonus consistent with existing policy.

3 – Define completion by the number of students and not degrees

The calculation for the outcomes portion of the formula includes all degrees earned by resident students and doctoral degrees earned by both residents and non-residents alike. In rare cases, a student will graduate with multiple undergraduate degrees. This is often by design in that some programs allow for the student to earn degrees in complementary academic disciplines, an example of which is an education degree and a degree in a content area like engineering. This is an unintended consequence of the current formula.

Counting graduates aligns with the state's higher education attainment goal of 40-40-20. Therefore, only one degree should be counted for these students. The higher valued degree should be the one counted.

4 – Modify the area of study bonus to be additive

There are four sets of adjustments applied in the outcomes portion of the formula. They include degree weights, cost weights, an area of study bonus, and a bonus for targeted populations. Making the bonus additive will achieve a consistent bonus regardless of academic major.

The current calculation methodology:

$(\text{degree weight}) \times (\text{cost weight}) \times (\text{area of study bonus}) + (\text{targeted population bonus}) = \text{weighted pts}$

Example – undergraduate engineering degree, non-transfer, not a targeted population

$2.00 \times 1.85 \times 20\% = 4.44$ (bonus is 0.74 or 37%)

The revised calculation methodology:

$(\text{degree weight}) \times (\text{cost weight}) + \underline{(\text{area of study bonus})} + (\text{targeted population bonus}) = \text{weighted pts}$

Example – undergraduate engineering degree, non-transfer, not a targeted population

$2.00 \times 1.85 + 0.4 = 4.10$ (bonus is 0.40 or 20%)

In the current formula, the degree weight of 2.0 is multiplied by the cost weight of 1.85 leading to 3.7 points. The 20% area of study bonus is then applied to that calculation leading to an effective bonus of 37% when compared to the degree weight of 2.0 (0.74 divided by 2.0). With the current methodology, the value of the area of study bonus varies based on the magnitude of the cost weight of the particular program the degree is in when expressed as a percentage of the degree weight.

As a matter of policy, the area of study bonus should provide a consistent incentive regardless of academic program. With that in mind, it should be calibrated to add a number of points relative to the degree weight. Therefore, for undergraduate degrees, the area of study bonus should be modified to add 0.4 points for each STEM degree resulting in a consistent 20% incentive (0.4 divided by 2.0).

This is consistent with how the targeted population bonus is applied and would result in a bonus of 20% for the area of study to incentivize areas of employer demand and a bonus of 40% for targeted populations to reflect the importance of pursuing equity. The targeted population bonus increases for more than one characteristic.

5 – Update the cost weights

The current set of cost weights used in the SSCM has not been updated in at least twenty years. Cost weights are used in the formula in recognition that some courses are more expensive to offer than others. Instruction in engineering, for example, is more expensive than instruction in English literature.

The value of having cost weights lies in the differences between the rates rather than the nominal value of the rates. If based on actual costs, those differences will vary between states. The rates in some states are consistently lower than in other states and vice versa. The cost weights from a number of states were considered including Florida, Ohio, Illinois, Texas, and Nevada.

Overall, the differences in the rates within the current set of weights used in the SSCM were fairly consistent to those across all the various cost weight data sets at the undergraduate level. This was not true for the graduate level course weights. The current SSCM weights were consistently lower and therefore, undervalue graduate education. It is important to have a set of weights which reasonably recognize nationally-normed cost differences across different levels of instruction as well as by discipline.

Ideally, the cost weights used in the Oregon model would be based on data originating from the public universities and updated frequently coupled with a comparison to similar weights nationally. The ability of the institutions to support the creation of a cost study to generate the cost weights is limited, meaning that any updates are dependent on existing weights used in other states. Using weights in other states would help ensure that costs applied in the Oregon model are consistent for different kinds of instruction.

The use of any one state's weights or even a combination of weights leads to the reorientation of funding from the TRUs to the larger institutions (UO, OSU and PSU) as a result of the current underfunding of graduate coursework. The amount of volatility is dependent upon the set of weights used. Using a calculated set of weights, based on averages from the weights used in other states, can accomplish the goal of updating the weights used in the SSCM while managing the volatility in the formula.

It should be noted that the consensus reached by the workgroup on this revised set of weights is dependent on adjustments made in other components of the formula, most notably in mission differentiation, to align the overall distribution.

6 – Apply transfer weighting to all transfer students and apply a bonus for community college transfers

In the outcomes portion of the formula, degrees awarded to students who transfer from an Oregon community college are weighted at 62.5%. This is done in recognition of the amount of instruction provided at the community college which should then be discounted from the degree funding awarded to the degree granting institution. HECC staff reviewed the enrollment activity of transfer students to confirm that this cost weighting was still accurate.

Currently, the weighting does not apply to students transferring from another public university or private institution. In the interests of consistency, transfer weighting should be applied to all transfer students regardless of origination.

Other policy work has recently been completed to define transfer pathways between community colleges and public universities. These transfer pathways will help to create more efficient degree attainment opportunities for students and could potentially affect affordability by reducing the average number of credit hours attempted while earning a degree.

In an effort to incentive the use of transfer pathways, and additional collaboration between the sectors, the workgroup recommends adding a bonus for those completions earned by Oregon community college transfers. The calculation of the bonus should be consistent with that of the other bonuses offered in the formula. There is some uncertainty as to the size of the bonus with one perspective being that it should be consistent with that of the area of study bonus.