Strategic Portfolio Review Academic Program Report Academic Units April 28, 2021

Overview

In fall 2020, the Provost initiated a special program review and strategic planning analysis. This large endeavor was made in response to budgetary considerations as well as the need for the university to adapt to and help with the state's economic circumstances and future. As a key component of the program review process, Provost Alexander established the Strategic Portfolio Review Committee in February 2021 to review University of Wyoming academic and student services units. This report reviews the committee charge, processes followed, results, observations, and process concerns identified during the Strategic Portfolio Review process. This report provides results for academic units and those academic programs that are not housed within academic units (e.g., Agricultural Communications, Ecology). The results for student service units will be reported separately.

In addition to reporting on the committee's evaluations, this report, crucially, details the limitations and problems -- many serious -- with the program review process including concerns about available information and data, the charge to place units into quintiles, the restrictive timeline, and the evaluation methods employed.

Concerns About Process and Results

The SPR committee lacks confidence in the evaluation results reported here, especially the rankings and quintiles. Detailed committee comments are provided in **Appendix A.** Particular concerns shared by the entire committee include:

• Limited Time. The committee agreed that there was insufficient time to have the deep discussions that were needed to best evaluate the units, to explore why certain units were performing the way they were, to consider the interrelationships and interdependencies among units, to develop data and methods, to conduct in-depth qualitative analysis and to identify redundancies and opportunities for consolidations and reorganizations. Many of the other following concerns could have been addressed, at least partially, had more time been available for the committee's work.

• Problems with Critical Comparable Data

- Available data not well-targeted to accurately measure criteria.
- Lack of consistent, reliable data provided by units and by the Institution.
- No data on the impact of program elimination.
- Quality, length, and use of Strategic Visioning Analyses (SVA).

Overall Process

- Insufficiently guided by strategic planning.
- o Evaluative criteria determined after materials were submitted.
- Concerns with the primary evaluative criteria.
- Taxonomic and comparability issues among units and programs.
- Issues with unit-level analysis.
- Process Lacked Assessment of Quality.

• Questionnaire Structure and Process

- Judgement/opinion-based evaluations.
- Lack of common definitions for criteria.
- Likert scale not calibrated.

Possible bias in scoring.

Data Analysis

- Some limitations with the five-reviewer-per-unit approach.
- Lack of variation in evaluation scores and potential effect of outlying evaluations.

Note: Although there may be committee consensus on many of **Appendix A** comments, there is not consensus on all of them and there is strong disagreement on some.

Strategic Portfolio Review Committee Charge

The SPR committee members were charged with evaluating all academic and student services units that fall under the Division of Academic Affairs. The units were evaluated relative to the UW Mission, the 2017-2022 UW Strategic Plan, President Seidel's Four Pillars (Digital, Entrepreneurial, Inclusive, & Interdisciplinary), and other related criteria developed by the committee. It is important to note, the SPR committee was not charged with making any recommendations on the discontinuance, consolidation, reduction or reorganization of any unit.

SPR Committee Composition

The SPR Committee comprised 17 members including 12 faculty and administrators representing all colleges and five students. Faculty participants were nominated by Faculty Senate, and student members were nominated by ASUW. Interim Provost Alexander selected Associate Vice Provosts Ahern and Barrett to co-chair the committee.

Co-Chairs

- o Jim Ahern, Professor, Anthropology; AVP of Graduate Education, Academic Affairs
- Steven Barrett, Professor, Electrical & Computer Engineering; AVP of Undergraduate Education, Academic Affairs

Faculty & Administrators

- Melissa Alexander, Professor, College of Law
- Stephanie Anderson, Professor & Head, School of Politics, Public Administration and International Studies)
- Michael Barker, Professor, Civil & Architectural Engineering; Faculty Senate Member-at-Large
- April Heaney, Senior Lecturer, English; Director of LeaRN
- o Valerie Thompson-Ebanks, Associate Professor, Social Work; Faculty Senate Senator
- o Rudi Michalak, Senior Lecturer, Physics & Astronomy; Chair of Faculty Senate
- Richard Miller, Associate Director of Advising & Career Services
- o Ginger Paige, Professor, Ecosystem Science & Management, Faculty Senate Senator
- Jenna Shim, Associate Dean & Professor, College of Education
- o Robert Sprague, Professor, Management & Marketing

Students (Undergraduate)

- o Riley Talamantes, Undergraduate Student and ASUW President
- Ceejay Berg, Undergraduate Student and ASUW Director of Finance and Student Organizations
- Taelor Nielsen, Undergraduate Student and ASUW Director of Governmental and Community Affairs

Students (Graduate)

- Ashli Tomisich, Graduate Student and Graduate Council Student Representative
- Andrew Warfield, Graduate Student and Graduate Council Student Representative

SPR Committee Expectations of Ethical Behavior

The SPR Committee understood and embraced the tremendous responsibility of their work. Each member understood the crucial committee role in influencing potential unit eliminations, reorganizations and/or consolidations, including possible terminations of personnel. Although the weight of these decisions did not rest on the committee, we constantly kept in mind the weight of our responsibility. SPR committee members pledged to abide by the following ethical expectations:

- hold all discussions of the committee and all information reviewed by the committee in confidence, unless permitted by the co-chairs, Provost, President, Board of Trustees, or by a Legalorder;
- make evaluations and engage in discussions that prioritize the best interests of the university and its Mission;
- engage in civil but productive and critical dialogue;
- prioritize the work of the SPR committee given its importance to the university's future; and
- divulge any potential conflicts of interest and recuse themselves from evaluations and discussions of and conflicts of interest.

The Provost did permit members to report on the general happenings of the SPR committee to members of the UW community. These general updates were not considered a violation of the expectations of ethical behavior described above. However, sharing information or perspectives about specific units or programs based upon any information the SPR committee had access to was strictly forbidden.

Process

The committee was tasked with evaluating all units within the Division of Academic Affairs. Each unit provided a Strategic Visioning Analysis (SVA) that outlined strengths, weaknesses, opportunities, and threats (SWOT analysis). Additional materials, that were provided for Round 1 Reg 2-13 review (December – February, 2021) or for units selected for accelerated review in fall 2020, were also made available to the committee. In consultation with the Provost and WySAC (Wyoming Survey and Analysis Center), the committee developed a process for the evaluations, including specific questions and elements to be used in reviewing the units (e.g., relevance to UW's mission, the 2017-2022 strategic plan, the four pillars, etc.). The WySAC review indicated: "In the end, what you have works, and your reviewers would be able to effectively work through the questionnaire. Our recommendations may offer some clarity and nuance, but they are merely suggestions." The final questionnaire used by the committee is provided in **Appendix B**.

To accommodate the short-time window, to prevent fatigue bias, and to attempt statistical reliability, each unit was evaluated by five, randomly assigned, committee members. Each evaluating group included two faculty, two administrators and one student, and any person with a declared conflict of interest was replaced by a random substitute. The survey quantified the committee's judgements through the use of a five-point Likert scale. Instructions provided to the committee for assessing assigned units are provided in **Appendix C.**

The SPR committee agreed to assess the raw scores via the weighting schemes provided in Table 1. The average scores for each unit and for each weighting scheme were ordered and sorted into quintiles, and the frequency of each unit's occurrence in the bottom two quintiles and in just the bottom quintile were recorded. See Results, below.

Table 1. Weighting Scenarios Adopted by SPR Committee, April 20, 2021

Tubic 1: 11 cigituing cuci	"Provost"	"Sugg 1"	"Sugg 4"	"Sugg 5"	"Compromise"
Land Grant	10%	10%	10%	10%	8%
UW Mission	40%	45%	40%	20%	30%
Strategic Plan	15%	10%	14%	10%	8%
Pillars	10%	5%	8%	10%	0%
Other:	25%	30%	28%	50%	54%
 Needs of 	3.57%	4.28%	4%	5 %	12%
state					
 Scholarship 	3.57%	4.28%	4%	10%	7%
 Ext contracts 	3.57%	4.28%	4%	10%	7%
and grants					
 UG Teaching 	3.57%	4.28%	4%	10%	7%
Grad	3.57%	4.28%	4%	10%	7%
Teaching					
Service	3.57%	4.28%	4%	5%	7%
Teaching					
Student	3.57%	4.28%	4%	0%	7%
Demand					

Results

Data analysis was performed, with the five weighting scenarios (Table 1) applied. Detailed results are provided in **Attachment 1**: "SPR_Gr1-2_STAGE1_Evaluations_Final" Excel file. In addition to having the results for each weighting scenario, the "Weight Scenarios Summary" tab in this Excel file has two tables at the bottom that order the units by: a) frequency of appearance in the lowest two quintiles across all five weighting scenario results, and b) frequency of appearance in the bottom quintile across all five weighting scenario results. Reference **Appendix D and E.**

After discussion about the possible effects of outliers on the group's evaluations, the SPR committee voted to have an outliers analysis performed on the evaluation data. Results of this outlier analysis are provided in **Attachment 2:** "Outlier_Analysis_STAGE 1_Evaluations" Excel file (see in particular the "Low-High-Pulls-Summary" tab in this file). The outlier analysis results are not intended to replace the original evaluation results ("2021.04.21_Gr1-2_STAGE1_Evaluations_Final-V.2-includes-by-question-stats"). Rather they are intended to provide additional information regarding the evaluation process and how the evaluations should be interpreted.

The outlier analysis involved pulling out the highest and lowest evaluator average scores for each unit for each weighting scenario. The units were then re-ranked, using these new (low-high-pull) averages for all five weighting scenarios. Mirroring the analysis of the original data, the counts of each unit's

appearance in a) the lowest two quintiles in the rankings, and b) the bottom quintile, were recorded. These counts are reported, along with the corresponding counts from the original evaluation analysis, in the tables in Appendices E and F as well as in the at the "2021.04.22 Outlier_Analysis Groups 1 & 2 Evaluation – STAGE 1" Excel file. Key observations from this outlier analysis are reported in the "READ ME" tab of the Excel file. Most notably:

- For counts in the bottom two quintiles, 17 of the original 20 units with 5 occurrences remained with five occurrences after the low-high pulls.
- For counts in the lowest quintile, 7 of the original 9 units with 5 occurrences remained with five occurrences after the low-high pulls.

Conclusion

Since most UW programs are performing well, the degree of separation across the quintiles was relatively small. In other words, most programs are solid. As a result, in many cases, only a very small decimal point separated the ranking of the programs. Given the method employed and the lack of spread, very few units are comfortably within their quintiles. Plots of the units, rank-ordered for each weighting scenario, are given in **Appendix F**. It is critical to note that <u>very few units' quintile assignments are statistically certain</u>. As shown in the **Appendix F** plots, 95% confidence intervals¹ for the means of most units overlap significantly.

In conclusion, the committee believes while this process was instructive, it does not provide a reifiable path forward to achieve the necessary budget cuts.

Respectfully submitted,

The Strategic Portfolio Review Committee.

Appendices

- A. Process Concerns and Support comments
- B. Groups 1 & 2 Evaluation Questionnaire (D5)
- C. Basic Instructions for the Stage 1 (Groups 1 & 2) Reviews
- D. Frequency of Appearance in the Lowest Quintiles Table
- E. Frequency of Appearance in the Lowest Quintiles with Low and High Removed Table
- F. Plots of Means and 95% Confidence Intervals for All Units for All Weighting Scenarios

Attachments (available as separate files)

Attachment 1: "SPR_Gr1-2_STAGE1_Evaluations_Final" Excel file. Attachment 2: "Outlier_Analysis_STAGE 1_Evaluations" Excel file.

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¹Student's t distribution confidence interval for the mean.

Appendix A. Process Concerns

The committee identified the following concerns and caveats about their work and results. Please note that, although there is committee consensus on many of following, there is not consensus on all of them and there is strong disagreement on some of them within the committee.

- Limited Time. The committee agreed that there was insufficient time to have the deep discussions that were needed to best evaluate the units, to explore why certain units were performing the way they were, to consider the interrelationships and interdependencies among units, to Develop Data and Methods, to conduct in-Depth Qualitative Analysis and to identify redundancies and opportunities for consolidations and reorganizations.
 - Interrelationships and Interdependencies Not Explored. There was not enough time for the
 committee to consider the interrelationships and interdependencies among units. The
 elimination of some programs would have a major impact on other majors that depend on
 their classes. Some Strategic Visioning Analysis reports discussed consolidation and/or
 reorganization opportunities, but the committee did not have an opportunity to discuss
 these.
 - More Time Needed to Develop Data and Methods. Timeline in which the committee was asked to come up with reliable metrics and evaluation criteria contributed to a flawed process.
 - In-Depth Qualitative Analysis Not Conducted.
 - Lost value of this committee being unable to discuss roles and contexts of the units.
 - No effort was made to determine how the work of one unit makes possible the work of other units, i.e. cross-dependencies.

• Problems with Critical Comparable Data

- Quality and Length of Strategic Visioning Analyses (SVA). Quality of the writing and
 information provided in the SVA's varied substantially, and this variation influenced how
 units were evaluated. Some SVA's were very well-written; a few were written very poorly
 and with very little effort invested; most lay in between. Furthermore, some units' SVA's
 greatly exceeded the page limit.
- <u>Lack of Consistent, Reliable Data Provided by Units and by the Institution</u>. For example, some units left some things blank and were scored accordingly.
- Some od the data available were highly skewed (not normally distributed) and insufficiently contextualized.
- Inadequate Financial Data. The unrestricted statement of net activity figures provided by Budget and Finance did not take into account the full revenue picture. Furthermore, the salaries for some units were not budgeted under these units for all years of financial data available to the committee.
 - A unit's contribution should not be determined in a vacuum. If cost-cutting drives potential eliminations, the most important piece of data is how much money any elimination would save. The data provided doesn't give us any idea of several key factors:
 - Expenses without revenue some programs could likely be eliminated without significant loss of revenue, but others could not. Revenue impact is a critical and missing piece.
 - Ongoing teaching needs some programs could be eliminated entirely, but for others, many courses would still need to be taught. Expenses that will continue to exist independent of program/department/unit elimination should be delineated.

- Even setting aside potential eliminations, it makes no sense to evaluate contributions without weighing net cost of the contribution.
- Minority Student and Personnel Data. Although commitment to DEI (diversity, equity, and inclusion) is more than representation, low counts for many programs may have been used by evaluators to score them lowly regarding the Inclusion Pillar. Likewise, individual perceptions and opinions of commitment to DEI may have led to inconsistent scores across units for the Inclusivity Pillar.
- <u>Lack of National-Level Comparative Data</u>. The committee did not have access to any agreedupon and reliable data on how UW units compared within their disciplines, nationally. In particular, the following would have been very helpful:
 - national scholarship rankings or scoring;
 - market/employer demand for graduates; and
 - job placements.
- Scholarship Data Too Simplistic. Aside from the often limited information about quality of scholarship given in a unit's Strategic Visioning Analysis, the available scholarship data were too simple (e.g., counts of refereed articles, books, juried performances, etc., as well as these counts relative to research FTE) and did not offer perspective on quality of scholarship conducted by a unit. The committee had no perspective on a discipline's or unit's scholarship expectations. Therefore, for example, it was not clear how to compare various metrics of scholarship production across units.
- <u>Key Data Focused on Efficiency</u>. Although extensive metrics about each unit were made available to the committee, the committee had requested a crucial data summary table to provide some key metrics. This table included some raw counts (e.g., enrollments, degrees, FTEs) but most of the data provided in this table were counts relative to FTEs (e.g., undergraduate degrees relative to teaching FTE). These key metrics measured efficiency more than impact, need and contribution. For example, the metrics on teaching measure how efficiently each unit teaches, rather than the quality of their teaching. Less efficient units should be at the back of the line for new hires, but such units are not necessarily contributing less to the university as teachers.
- Lack of Metrics to Measure Impacts on State Needs. State needs and contributions are vital. Metrics should be developed to measure value of such contributions across units.
- After the rankings were established, the faculty members present at the last meeting all attested that they did not consider the quintile ranking in their own college as realistic.

Overall Process

- Insufficiently Guided by Strategic Planning. The Strategic Scenario Planning group and committees have been working simultaneously with the SPR committee, rather than producing planning and guidance (e.g., regarding weighting of criteria) that could be used by the SPR committee.
- Evaluative Criteria Determined After Materials Were Submitted. Lack of communication to units regarding how the Strategic Visioning Analysis (SVA) reports would be used and how the units would be evaluated prior to their submitting their reports. Ideally, the criteria for evaluation should have been clearly articulated to units in advance so that: (a) units have notice and an opportunity to speak directly to each element on which their unit will be evaluated, and (b) appropriate data supporting each element can be gathered.
- Non-Holistic Process. Timeline, criteria, available data, and desired output (rankings) caused the process to be largely decontextualized, not holistic. Because of this we were not able to examine why departments ended up where they did and why.
 - We were not able to identify the programs that are redundant across the campus that can potentially be consolidated and reorganized with other programs.

- There was no effort to consider how different colleges would be affected with different severity by our rankings, possibly rendering them dysfunctional.
- Production of Rankings as the Charge. We were asked to do rankings, but making rankings was probably not the appropriate charge for the committee. A "constant goodness" was noted across the units. Being asked to do rankings does not get at the more important things that could have come from a lengthier discussion of and focus on SWOT analyses provided by the reviewed units.
- Concerns with the Primary Evaluative Criteria.
 - Some of the evaluative criteria being used, such as UW Mission, were created for different purposes and do not align well with a fair assessment of overall contribution that would be useful for ranking units into quintiles.
 - Four Pillars. Although the committee assessed each unit's potential to contribute to these pillars (rather than its past, relevant accomplishments), the reviewed units did not know that they would be assessed on the pillars. Being that the four pillars were introduced to campus only last fall, using them in the evaluations may be unfair (or, at least, perceived that way by many). Although the majority of units reported on here at least mentioned one or more of the four pillars in their Strategic Visioning Analysis reports, many did not explicitly call out the "four pillars" by exact name(s). Therefore, some evaluators may not have sufficiently recognized every unit's potential contributions to the pillars. In recognition of this concern, the committee did use one weighting scenario that excluded the pillars completely ("Compromise" Weighting Scenario), and one other weighting scenario ("Sugg 1") weighted them fairly low.
 - Short term goals set forth in a strategic plan or the Four Pillars are ill-suited to answer long-term value questions.
 - Different levels of criteria: Mission, Strategic Plan, and Land Grant are large umbrella criteria versus some of the specific criteria such as Scholarship and Student Demand.
 - Variation in the functions, roles and opportunities of units meant that criteria were not equally important for all units. For example, some academic units do not pursue or rely on outside grants as part of their mission (e.g., their college may rely more on endowments). Yet, these units may have received some grant support meaning that a "Not Applicable/Not Able to Judge Score" was not relevant. There was no way to differentiate these "low-grant" units, so they may have received a low ranking—thereby perhaps penalizing units for following their mission.
 - After our process was vetted by WySAC under the assumption that we would randomly assign reviewers to a unit. Instead, we assigned reviewers randomly from a smaller group after dividing up into two slots for faculty, one student, and two administrators. The basis for the randomization (N=1 and N=2) does not really lend itself anymore to meaningful randomization statistics.

Taxonomic and Comparability Issues:

- Units under consideration varied greatly in size and scope.
- The committee's classification of units was perhaps not consistent with how other committees grouped units. For example, the Haub School, Honors College and the School of Energy Resources were all grouped with and, in many ways, compared with more traditional departments. Furthermore, degree-granting units were compared with non-degree granting units, and units with academic and staff personnel were compared with programs without any dedicated academic and/or staff personnel.

- Some reviewed entities were single degree programs without tenured faculty associated with the unit (e.g., Hydrology, Ecology, and Life Sciences). These were difficult to evaluate in comparison to full academic departments, divisions, or schools. Some of these programs' scores may have been affected, accordingly. For example, contributions to scholarship were difficult to assess for these units, since (usually) their associated faculty had other and different home departments.
- One of the most difficult aspects of this task was trying to compare apples and oranges across so many units/departments/entities. In order to give more objective metrics to at least some of the evaluation, the university needed to come to a consensus in advance on comparable measurements across units/departments, especially for scholarship and grants.
- Comparing smaller programs to larger units is problematic in producing any reliable outcome. In particular, the major problem in comparing smaller programs to larger units includes the areas of scholarships, teaching, grants, and student demands.
- Some units' characteristics are shaped by accreditation requirements and other external forces. The committee's process did not account for these, systematically, and scores for some such units maybe have been affected, accordingly. For example, some units' accreditations sharply limit the service teaching that they are able to perform.
- Professional programs have different roles and functions than traditional academic programs.
- The process did not allow the committee to effectively consider mitigating circumstances such as how relatively new or old a unit is, the impacts of past impacts of budget cuts, and loss of personnel. The mission statement and land grant history are better suited to consider value but, standing alone, are so vague as to provide little guidance
- Unit of Analysis. Given that the committee's level of analysis was the unit, its evaluations lacked sufficient resolution to evaluate individual degree programs and/or other entities existing below the unit level.
- <u>Limited Expertise</u>. The evaluation process was designed by a committee that lacked expertise, particularly in the particular assessment, evaluation, survey design and statistical analysis involved in the committee's assigned task. WySAC was consulted very late into the committee's process development.
- Process Lacked Assessment of Quality. Reliance upon limited data and insufficient qualitative information means that quality of the various units was insufficiently gauged.
 For example, many metrics available measured quantity and efficiency, neither of which necessarily measured quality.
 - These quality issues, including impacts and outcomes could be better understood through more dialogue with units and colleges. Of course, most units did not have representatives on the SPR committee.
- Demand of Students. The committee decided that the Demand of Students (enrollment and degrees and, thus, the wants of the students) was no more important than any other question (except in one weighting scenario where the 4 pillars were not considered) and significantly less important than many of the questions. In one of the weighting schemes the wants of the students was not considered.

Questionnaire Structure and Process

 Judgment/Opinion-Based Evaluations. The criteria and the structure of the evaluation questionnaire process meant that rankings were largely based on the opinions of the 5 committee members assigned to the individual units rather than metric-based.

- Not Applicable Scores. Inconsistent use of the Not Applicable/Not Able to Judge scores.
 Different evaluators had different understandings of when a criterion was not applicable to a given unit. Although total scores were calculated so as to account for Not Applicable/Not Able to Judge selections, there may have been some criteria for some units that should have been determined as not applicable before evaluations were performed.
- Opinion-Based Evaluations. The criteria and the structure of the evaluation questionnaire
 process meant that rankings were largely based on the opinions of the five committee
 members assigned to the individual units rather than metric-based.
- <u>Lack of Common Definitions for Criteria</u>. The committee was not able to settle on singular, common definitions for most, if not all, of the evaluation criteria. This led to inconsistency of evaluations.

Likert Scale.

- Likert definitions and scoring were not calibrated and there was no rubric for definition of scores. This created biases in terms of how things were ranked which led to biases and outliers.
- The committee decided not to adopt WySAC's recommendation that it use a 7-point Likert scale rather than a 5-point one. Using a 7-point scale (or even a 10-point one), outliers and spread may have been elucidated better.
- <u>Lack of Evaluator Comments</u>. Although entering comments was encouraged, many of the evaluations submitted did not have comments included. Thus, these evaluations lacked explanations for scores and other potentially useful information.
- No Scoring Bias Assessment. The ranking of programs was very sensitive to small differences in evaluator scoring where an individual evaluator methodology could significantly change the ranking. The committee did not assess or account for evaluator scoring bias.

Data Analysis

- <u>Limitation of the five-reviewer-per-unit approach</u>. The rankings, as given, appear to reject the null hypothesis of no difference across the units' evaluations. However, the combination of just five reviewers per unit, variation among individual evaluations for some units, and a lack of spread in scores across the units, meant that the unit rankings actually lack statistical power. This is illustrated by the overlap in confidence intervals for many of the unit evaluations' average scores in Appendix E.
- Optential effect of outlying evaluations. The ranking of programs was very sensitive to small differences in evaluator scoring where an individual evaluator methodology could significantly change the ranking. For a small number of units' evaluations, outlying evaluation scores shifted the overall score averages. See the "2021.04.22 Outlier_Analysis Groups 1 & 2 Evaluation STAGE 1" Excel file.
- Not all units have "components" that matched all of the criteria. The use of N/A was
 important so as not to penalize units for criteria for which they are not responsible by
 design. For example, a unit may have graduate teaching, undergraduate teaching, both or
 neither (e.g., some of the Group 2 units).

Bias Challenges

- <u>Fatigue Bias</u>. Although the method employed of assigning just five reviewers to each unit was intended to lessen fatigue bias, and likely did so, fatigue bias remained a problem as demonstrated by the lack of comments submitted for many reviews.
- Group-Think. The committee was a relatively small group of people coming together under a lot of pressure and a short timeline. As a result, the loudest/most vocal perspectives may have been adopted rather than the best ones.

- o <u>Potential Privilege Bias</u>. Many of the low-ranked subjects are identified with women and people of color: Culture, Gender, and Social Justice, Social Work, and Modern and Classical Languages.
- Potential Evaluator Personal Bias. There may be instances where evaluator personal bias scored units higher or lower leading to significant changes in the rankings.
 Scoring Bias. Although an outlier analysis was conducted, time constraints meant that a more indepth analysis of potential scoring bias could not take place.
- Lack of Support for the Process. The process employed is seriously flawed. The following bullet list are issues that render the results suspect. The results are not defendable.
 - Using 5 reviewers per unit did not accomplish statistical reliability (this is a significant issue that was not addressed – WySAC's advice did not help).
 - No rubric or definitions of scores (huge issue) causing scoring problems and bias, inconsistency and bunching of scores.
 - Natural scoring bias (difference in definition of scores between reviewers, averages, etc) had a large impact on ranking. Differences in reviewer's scoring (one point increase) can move a program one quintile
 - Scoring and personal bias has a huge impact on unit ranking.
 - Questionnaire for ranking with no criteria (or very weak criteria) for the questions only suggestions.
 - 65 82% of results based on personal opinion of only the 5 reviewers with little to no guidance on what opinion based upon.
 - Only 18 35% based on metrics (unclear multiple general metrics), but many ignored the metrics and offered personal opinion on these also.
 - The wants of the students (their wants, enrollment and tuition generation) less important than the 4 Pillars (except for one weighting scheme where the 4 pillars had zero weighting).
 - The wants of the students no more important than any other category.
 - Demand of Students lowest weighted, although others also had the same weighting.
 - o In one weighting scheme, wants of students was weighted as zero not even considered.
 - The resulting rankings cannot be justified by criteria only opinion of the 5 reviewers.

Appendix B

Groups 1 & 2 Evaluation Questionnaire (D5)

Unit Metrics and Unit Financials are available in the WyoGroups site.

Metrics: Files -> Strategic Portfolio Review - Metric Data

Financials: Files -> Strategic Portfolio Review - Financial Data

A NOTE ON NON-APPLICABLE SCORING

If a particular criterion does not apply to a discipline or unit, please score it as "Not Applicable." Your total score for a unit will be normalized relative to those criteria that you do score the unit on. If you select "Not Applicable," please explain in the appropriate comment box why you scored it as such.

University of Wyoming's Mission

http://www.uwyo.edu/president/mission-statement/index.html (http://www.uwyo.edu/president/mission-statement/index.html)

We honor our heritage as the state's flagship and land-grant university by providing accessible and affordable higher education of the highest quality; rigorous scholarship; the communication and application of knowledge; economic and community development; and responsible stewardship of our cultural, historical and natural resources.

In the exercise of our primary mission to promote learning, we seek to provide academic and cocurricular opportunities that will:

- Graduate students who have experienced the frontiers of scholarship and creative activity and who are prepared for the complexities of an interdependent world;
- Cultivate a community of learning energized by collaborative work among students, faculty, staff and external partners.
- Nurture an environment that values and manifests diversity, internationalization, free expression, academic freedom, personal integrity and mutual respect; and
- Promote opportunities for personal health and growth, physical health, athletic competition and leadership development for all members of the university community."

UW's 2017-2022 Strategic Plan: Breaking through http://www.uwyo.edu/strategic-plan/full-plan/index.html (<a href="http://www.uwyo.edu/strategic-plan/full-plan/full-plan/full-plan/full-plan/full-plan/full-plan/full-plan/full-plan/full-plan/full-plan/full-plan/full-plan/full-plan/full-plan/full-plan/full-plan/full-plan/full-p

http://www.uwyo.edu/strategic-plan/full-plan/index.html (http://www.uwyo.edu/strategic-plan/full-plan/index.html)

President Seidel's Four Pillars (Digital, Entrepreneurial, Inclusive, Interdisciplinary)
See: https://uwy-my.sharepoint.com/:b:/g/personal/jahern_uwyo_edu/EcgGIaiq6LJOiAvy7cHSLd8BX7sraF5feQv3VRuuCr04jg?e=NwGc0G (https://uwy-my.sharepoint.com/:b:/g/personal/jahern_uwyo_edu/EcgGIaiq6LJOiAvy7cHSLd8BX7sraF5feQv3VRuuCr04jg?e=NwGc0G (https://uwy-my.sharepoint.com/:b://uwy-my.sharepoint.com/:b://uwy-my.sharepoint.com/

 $\underline{my.sharepoint.com/:b:/g/personal/jahern \ uwyo \ edu/EcgGIaiq6LJOiAvy7cHSLd8BX7sraF5feQv3VRuuC} \\ \underline{r04jg?e=NwGc0G)}$

Evaluation

1.	Sel	ect the unit or program that you are reviewing:
	\bigcirc	Accounting & Finance
	\bigcirc	Agricultural & Applied Economics
	\bigcirc	Agricultural Communications
	\bigcirc	Ag. Experiment Station & R&E Centers
	\bigcirc	Air Force ROTC
	\bigcirc	American Studies & History
	\bigcirc	American Heritage Center
	\bigcirc	Animal Science
	\bigcirc	Anthropology
	\bigcirc	Army ROTC
	\bigcirc	Art Museum
	\bigcirc	Atmospheric Science
	\bigcirc	Biomedical Sciences
	\bigcirc	Blockchain and Digital Innovation Center
	\bigcirc	Botany
	\bigcirc	Chemical Engineering
	\bigcirc	Chemistry
	\bigcirc	Civil & Architectural Engineering
	\bigcirc	College of Law
	\bigcirc	Communication Disorders
	\bigcirc	Communication & Journalism
	\bigcirc	Computer Science
	\bigcirc	Criminal Justice & Sociology

4/24/2021

Distance Education

	○ Ecology	
	Economics	
	C Ecosystem Science & Management	
	○ eCTL	
	Education Abroad	
	Electrical & Computer Engineering	
	English	
	Family & Consumer Sciences	
	Geology & Geophysics	
	Graduate Education	
	Haub School for Environment and Natural Resources	
	Health Sciences Rural Health Initiatives Reorganization	
	O Honors College	
	Hydrology	
	Cinesiology & Health	
	Libraries	
	LIFE Science Program	
	Management & Marketing	
	Mathematics & Statistics	
	МВА	
	Mechanical Engineering	
	Modern & Classical Languages	
	Molecular & Cellular Life Sciences	
	Molecular Biology	
1	○ Music	

Neuroscience
O Petroleum Engineering
O Pharmacy
Philosophy & Religious Studies
O Physics & Astronomy
O Plant Sciences
Psychology
School of Counseling, Leadership, Advocacy, and Design
School of Culture, Gender, and Social Justice
School of Energy Resources
 School of Nursing
School of Politics, Public Affairs, and International Studies
School of Teacher Education
Science and Math Teaching Center (SMTC)
○ Social Work
○ Theater & Dance
O UW Casper
○ UW Extension
O Veterinary Sciences
○ Visual & Literary Arts
Wyo Institute for Disabilities (WIND)
Wyoming Geographic Information Science Center (WyGISC)
Wyoming Institute for Humanities Research (WIHR)
Wyoming Reclamation and Restoration Center
Zoology & Physiology

	Very Low	Low	Neutral	High	Very High
LAND GRANT University (liberal & practical education including agriculture & mechanical arts, serving public good). See: https://www.ourdocuments.gov/doc.php? flash=false&doc=33&page=transcript (https://www.ourdocuments.gov/doc.php? flash=false&doc=33&page=transcript)	previous que	estion:			

		Very Low	Low	Neutral	High	Very High
	Relevance to and					
	support of UW's					
	MISSION. See above &					
	http://www.uwyo.edu/p					
	resident/mission-					
	statement/index.html					
	(http://www.uwyo.edu/					
	p <u>resident/mission-</u>					
	statement/index.html).					
	Relevant Table 8					
	Metrics: All.					
5. 0	Comments regarding the	previous ques	stion:			
_						

	Very Low	Low	Neutral	High	Very High
Relevance to and support of UW's 2017-2022 Strategic Plan. See: http://www.uwyo.edu/strategic-plan/full-plan/index.html). Relevant Table 8 Metrics: All.					
7. Comments regarding th	e previous que	estion:			

	Very Low	Low	Neutral	High	Very High	Not applicable/N ot able to judge
Potential to Contribute to the DIGITAL PILLAR. See: https://uwy- my.sharepoint.com/:b:/ g/personal/jahern uwy o_edu/EcgGlaiq6LJOiAv y7cHSLd8BX7sraF5feQv 3VRuuCr04jg? e=NwGc0G (https://uwy- my.sharepoint.com/:b:/ g/personal/jahern uwy o_edu/EcgGlaiq6LJOiAv y7cHSLd8BX7sraF5feQv 3VRuuCr04jg? e=NwGc0G)						
9. Comments regarding th	e previous q	uestion:				

	Very Low	Low	Neutral	High	Very High	Not applicable/N ot able to judge
Potential to Contribute to the ENTREPRENEURIAL PILLAR. See: https://uwy-my.sharepoint.com/:b:/g/personal/jahern_uwyo_edu/EcgGlaiq6LJOiAvy7cHSLd8BX7sraF5feQv3VRuuCr04jg?e=NwGc0G(https://uwy-my.sharepoint.com/:b:/g/personal/jahern_uwyo_edu/EcgGlaiq6LJOiAvy7cHSLd8BX7sraF5feQv3VRuuCr04jg?e=NwGc0G)						
11. Comments regarding the	e previous q	uestion:				

	Very Low	Low	Neutral	High	Very High	Not Applicable/ Not able to judge
Potential to Contribute to the INCLUSIVE PILLAR. See: https://uwy-my.sharepoint.com/:b:/g/personal/jahern uwy o edu/EcgGlaiq6LJOiAvy7cHSLd8BX7sraF5feQv3VRuuCr04jg? e=NwGc0G(https://uwy-my.sharepoint.com/:b:/g/personal/jahern uwy o edu/EcgGlaiq6LJOiAvy7cHSLd8BX7sraF5feQv3VRuuCr04jg? e=NwGc0G). Relevant Table 8 Metrics: %Minority of Undergraduate Students, %Nonresident Alien of Undergraduate Students, %Nonresident Alien of Graduate Students, %Nonresident Alien of Graduate Students, %Nonresident Alien of Graduate Students, %Minority of All Students, %Minority of Current Academic Personnel, %Minority of Current Staff, %						
Minority of Total Personnel						

	Very Low	Low	Neutral	High	Very High	Not Applica Not abl
Potential to Contribute to the INTERDISCIPLINARY PILLAR. See: https://uwy-my.sharepoint.com/:b:/g/personal/jahern_uwy						
o_edu/EcgGlaiq6LJOiAv y7cHSLd8BX7sraF5feQv 3VRuuCr04jg? e=NwGc0G (https://uwy- my.sharepoint.com/:b:/ g/personal/jahern_uwy o_edu/EcgGlaiq6LJOiAv y7cHSLd8BX7sraF5feQv 3VRuuCr04jg? e=NwGc0G)						

	Very Low	Low	Neutral	High	Very High	Not Applicable/ Not able to judge
Meeting the NEEDS OF THE STATE. Engagement & Outreach with and its Citizens. Economic Development.				Service to t	:he State and	
17. Comments regarding the	e previous q	uestion:				
18. Please rate the unit, bel A unit's scholarship sho	ow, on contr	ributions t	O SCHOLAR	SHIP.		
in the SVA reports.	uld be judge	d qualitati	ively, largel		ormation co	ontained
-	uld be judged Very Low	d qualitati Low	ively, largel		Formation co	Not Applicable/ Not able to judge

19.	Comments regarding the	e previous q	uestion:				
20.	Please rate the unit, belighted	ow, on conti	ributions t	o acquiring	EXTERNA	L CONTRAC	CTS &
	Please see any discussion Relevant Table 8 Metrics - Grant Dollars per Rese - Number of Grants per	s: arch FTE		SVA SWOT	analysis r	eport.	
	If not appropriate for dis	scipline, mar	k as "Not	Applicable"			
							Not Applicable/ Not able to
		Very Low	Low	Neutral	High	Very High	judge
	EXTERNAL CONTRACTS & GRANTS			\bigcirc	\bigcirc		\bigcirc
21.	Comments regarding the	e previous q	uestion:				

22	. Please rate the unit, below. (& Minors).	ow, on conti	ributions t	o UNDERGR	ADUATE	TEACHING	to Majors
	Please see any discussion Relevant Table 8 Metrics - Undergraduate Enrollm - Undergraduate Enrollm - Undergraduate Degree - Undergraduate Degree	s: nents (Fall 20 nents (Fall 20 es (2019-20)	020) per ⁻ 020) per Total	Total Acaden	nic FTE	eport.	
		Very Low	Low	Neutral	High	Very High	Not Applicable/ Not able to judge
	UNDERGRADUATE TEACHING to Majors (& Minors)		\circ		\bigcirc	\circ	
23	. Comments regarding the	e previous q	uestion:				
24	. Please rate the unit, belo Minors).	ow, on conti	ributions t	to GRADUAT	E TEACH	ING to Majo	ors (&
	Please see any discussion Relevant Table 8 Metrics - Graduate Degrees (20: - Graduate Degrees (20: - Graduate Enrollments of - Graduate Enrollments of	s: 19-20) per T 19-20) (Fall 2020) p	otal Acad	emic FTE	ŕ	eport.	
		Very Low	Low	Neutral	High	Very High	Not Applicable/ Not able to judge
	GRADUATE TEACHING to Majors (& Minors)	\bigcirc	\bigcirc	\bigcirc		\bigcirc	\bigcirc

ow, on contr	ributions t	to SERVICE [.]	TEACHIN	G to Non-Ma	ajors (&
n of this in t :: aching FTE FTE	the unit's	SVA SWOT	analysis r	eport.	
Very Low	Low	Neutral	High	Very High	Not Applicable/ Not able to judge
	\bigcirc				
e previous q	uestion:				
	n of this in the second	n of this in the unit's :: aching FTE FTE	n of this in the unit's SVA SWOT as: aching FTE FTE Very Low Low Neutral	n of this in the unit's SVA SWOT analysis restaching FTE FTE Very Low Low Neutral High	Aching FTE FTE Very Low Low Neutral High Very High

elow, on contr	ributions t	to meeting S	TUDENT	DEMAND.	
ics: 2019-20) s (Fall 2020) -20) all 2020) Ilments (Fall 20	020)	SVA SWOT	analysis r	eport.	
Very Low	Low	Neutral	High	Very High	Not Applicable/ Not able to judge
\bigcirc		\bigcirc			
the previous q	uestion:				
	sion of this in thics: 2019-20) s (Fall 2020) -20) all 2020) Ilments (Fall 20 ees (2019-20) -20) Very Low	sion of this in the unit's ics: 2019-20) rs (Fall 2020) r-20) all 2020) Ilments (Fall 2020) ees (2019-20) r-20)	sion of this in the unit's SVA SWOT actics: 2019-20) 25 (Fall 2020) 26-20) 27 (Fall 2020) 28 (Fall 2020) 29 (Fall 2020) 20 (Fa	sion of this in the unit's SVA SWOT analysis rics: 2019-20) s (Fall 2020) -20) all 2020) llments (Fall 2020) ees (2019-20) -20) Very Low Low Neutral High	Very Low Low Neutral High Very High

Final Comments

This content is neither created nor endorsed by Microsoft. The data you submit will be sent to the form owner.

Microsoft Forms

Stage 1 (Groups 1 & 2) Basic Instructions

- 1. Consult the (https://uwyo2.instructure.com/courses/952/files/15016268?wrap=1) Groups 1 & 2

 evaluation assignments spreadsheet
 (https://uwyo2.instructure.com/courses/952/files/15107445?wrap=1)
 (https://uwyo2.instructure.com/courses/952/files/15107445/download?download_frd=1)

 to see which units you need to review.
- Access your units' SVA reports and raw numerical data in Files either in the "Strategic Portfolio Review - Academic Programs" folder or the "Strategic Portfolio Review - Support Services" folder.
- 3. Access metric data here: Version 7 (Version 6 (Version 6 (https://uwyo2.instructure.com/courses/952/files/14887963/download?download_frd=1) Version 6 (https://uwyo2.instructure.com/courses/952/files/14887963/download?download_frd=1) <a href="https://uwyo2.instructure.com/courses/952/files/14887963/downlo
- 4. Access unit cost data here: Unit FY21 costs v.4.xlsx
 (https://uwyo2.instructure.com/courses/952/files/14919283/download?download_frd=1)
 Unit FY21 costs v.4.xlsx
 <a href="https://uwyo2.instructure.com/courses/952/files/14919283/download?download.com/courses/952/files/1491
- 5. Review the Groups 1 & 2 Evaluation Questionnaire

(https://forms.office.com/Pages/ResponsePage.aspx?id=rdfN-

V2CAUaOnKMI4C1S2gYLV8d2q4xlgnQZE3byfnhUQVoyMVVVNEpYRjdROE5YTkgwVUZMVIJMWS4u)

. Make sure you are familiar with the Morrill Act (https://www.ourdocuments.gov/doc.php? flash=false&doc=33&page=transcript) (established Land Grant universities), UW's Mission Statement (http://www.uwyo.edu/president/mission-statement/index.html), UW's 2017-2022 Strategic Plan (http://www.uwyo.edu/strategic-plan/full-plan/index.html), and Seidel's Four Pillars (https://uwy-

<u>my.sharepoint.com/:b:/g/personal/jahern_uwyo_edu/EcgGlaiq6LJOiAvy7cHSLd8BX7sraF5feQv3VRuuCr04jg?e=NwGc0G)</u>.

- 6. Read all materials, review metric and cost data as you believe is appropriate.
- Complete and submit your evaluation of each unit using the <u>Groups 1 & 2 Evaluation</u>
 Questionnaire (https://forms.office.com/Pages/ResponsePage.aspx?id=rdfN-V2CAUaOnKMI4C1S2gYLV8d2q4xlgnQZE3byfnhUQVoyMVVVNEpYRjdROE5YTkgwVUZMVIJMWS4u)
 - A. Please note that you must select the unit that you are reviewing in question 1 of each submission.
 - B. If you encounter any problems with the questionnaire or have any questions, please do not hesitate to email Jim (<u>jahern@uwyo.edu</u> (<u>mailto:jahern@uwyo.edu</u>)) or Steve (<u>steveb@uwyo.edu</u> (<u>mailto:steveb@uwyo.edu</u>).