

## **Recommendations from the Reflection, Assessment and Lessons Learned Working Group**

May 17, 2020

Respectfully submitted by: Dave Aadland, Christine Boggs, Ann Marie Hart, April Heaney, Jayne Pearce, Tim Robinson, Leslie Rush, Dave Sprott, Kat Vick, Christine Wade, Jason Williford, and Margaret Wilson.

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The Reflection, Assessment and Lessons Learned Working (RALLW) Group tackled a variety of issues regarding UW's reaction to and planning for impacts of COVID-19. Questions assigned to this group varied considerably; we have structured our work around four broad sets of questions:

### **Student Support – Group 1**

- How do we support incoming graduate students who may have had difficulty completing their undergraduate requirements this Spring?
- How can we provide expanded academic support for students, including tutoring and academic coaching?
- How do we support and monitor academic progress for students (new / returning)?
  - Members: Dave Aadland and Jason Williford

### **International Student Travel – Group 2**

- How do we mitigate the impact of travel restrictions on international and other student groups as the Fall approaches?
  - Members: Dave Sprott and Kat Vick

### **Online Lessons and Next Steps – Group 3**

- What have we learned from online delivery in Spring 2020? Changes needed going forward.
  - Members: Christine Boggs, April Heaney, Jayne Pearce, Tim Robinson, and Margaret Wilson

### **Continuous Improvement – Group 4**

- Continuous improvement and quality assurance (e.g., credentialing, assurance of learning, long term implications, etc.)
  - Members: Ann Marie Hart, Leslie Rush, Kat Vick, and Christine Wade

The report is structured around the preceding questions. While groups working on questions involving student support and international student travel have finished their work, the online and continuous improvement groups will continue work going forward during summer 2020.

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**How do we support incoming graduate students****who may have had difficulty completing their undergraduate requirements this Spring?**

We should consider it our obligation to aid students who have a lack of preparation due to the COVID-19 pandemic. It is possible that due to the widespread transition to online delivery of courses in the spring semester of 2020, there may be significant gaps in understanding of the material and inadequate preparation for graduate school.

Some prerequisites are needed for overall maturity in the subject, while others may have specific essential skills (lab skills, etc.) that are indispensable for the subsequent courses. For the purpose of this document we will call the former a “maturity prerequisite” and the latter a “mastery prerequisite”. The assumption going forward is that gaps in mastery prerequisites may require more structured and immediate remediation.

We believe that each department is best able to determine the type and degree of action needed for their students. We offer some suggestions which may be helpful depending on the program need, as well as some suggested actions on the part of UW administration.

**Suggestions for Departments:**

- a. Staff or graduate coordinators for departments can identify S20 courses on incoming grad transcripts that are mastery prerequisites for first-year grad courses. These students can be contacted during the summer to help assess if there is a deficiency that needs immediate attention.
- b. For remediation, if the deficiencies are significant and affect multiple students the department can hold an online boot camp (1 credit hour or no credit) prior to the term.
- c. An alternative to (b) would be an in-person, supplemental 0-1 CH class/lab during some part of the term, particularly if the skills in question do not translate well to online teaching (such as lab skills, art, performance, etc.).
- d. For deficiencies in individual students, issues with maturity prerequisites, or smaller issues that don't require a boot camp/supplemental course, extra tutoring or review materials could address this.
- e. If a department feels there is a need for graduate tutoring in the fall, but do not feel they can offer quality tutoring, they can consider using/extending UW's agreement with NetTutor to graduate courses for this purpose. If interested, contact Jess Willford for details on obtaining these services.
- f. Consider online community building activities before start of term for retention. For example, the Chemistry department is offering a one-week online seminar course to inform their graduate student population (and research-active undergraduate majors who might be impacted) about how COVID-19 may affect their progress towards their degrees and financial support.
- g. Departments may wish to update their orientation materials to reflect how COVID-19 has impacted life at UW and in Laramie.

**Action Items for Administration:**

- a. Create a simple process for departments to obtain additional funds to run boot camps or supplemental courses/labs as needed. This should include a budget for personnel and materials needed to run it.
- b. Designate funds for additional tutors, and a similar (perhaps simpler) process for accessing these funds.

- c. Some graduate students may be considering to not come to Laramie under the present circumstances. Development/Distribution of information on life in Laramie, especially in light of changes due to COVID-19 may help mitigate some of the uncertainty driving these decisions.
- d. Some additional funds for departmental community-forming activities, and a process for applying for them. Also, online tours of the town and campus to sell the benefits of life in Laramie.
- e. If a department wishes it, UW's contract with NetTutor can be extended to graduate studies (the service includes graduate-level support in all areas, but UW's contract currently serves undergraduates only). The only cost for the expansion will come if student appointments exceed what UW has already purchased. Cost for additional space in online tutoring run \$3,000 – \$5,000 per academic year, which the administration can provide funds for if needed. This should only be done for departments that request it; for some departments such tutoring may be inappropriate and/or conflict with the goals of the program.

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**How can we provide expanded academic support  
for students, including tutoring and academic coaching?**

We lost a week of classes, our classes went into an experimental online mode in a hurry, and many technical problems arose with connectivity, equipment on both the University's and student's part. For this reason the student knowledge of the course content of our own spring 2020 classes after spring break may have serious gaps. This should not be considered a failing of the instructors or students, since we all had to improvise in difficult circumstances to a new mode of delivering course materials.

**Suggestions for Departments:**

- a. For F20 courses with mastery prerequisites the instructor can contact the S20 instructor(s) for the prerequisite to find out what was taught after spring break, and what content was omitted for lost time (if any).
- b. S20 Instructors for courses which are prerequisites to many courses on campus should consider making a list of this content for distribution to F20 instructors.
- c. Some departments may consider remediation within the course is the best option. For additional remediation, the department can consider an undergraduate boot camp or 1 credit hour supplemental course. In other cases, additional tutoring may be a better option.
- d. If the department normally supports little or no tutoring for the class(es) in question but intends to implement it for next year, some form of tutor training is appropriate. Departments can contact Jess Willford at STEP for guidance.

**Action Items for Administration:**

- a. Create a simple process for departments to obtain additional funds to run boot camps or supplemental courses/labs as needed. This should include a budget for personnel and materials needed to run it.
- b. Designate funds for additional tutors or tutoring resources, and a similar (perhaps simpler) process for accessing these funds.
- c. The university can offer free audits that students can apply for to retake courses of S20 if it is deemed necessary (perhaps also unofficial audits, at the instructor's discretion). If official, the student should be allowed to retain their original grade.
- d. Offer general tutor training for departments that don't have the necessary infrastructure.
- e. Consider providing additional resources for the Writing Center, Office of Academic Support for Athletics, etc.
- f. Provide additional resources for the creation of peer tutoring networks.
- g. Share current tutoring and supplemental instruction offerings with departments and students in a more targeted fashion. Encourage faculty who teach high demand/high challenge courses to include resources in their syllabi and materials over the semester.
- h. Share Jess Willford, Manager of the STEP Tutor Center, contact with department heads who are thinking of developing expanded options for academic support/tutoring within the department. They can receive guidance from Jess on training and quality control for tutors and add their offerings to the centralized support webpage and communications to UW students.

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**How do we support and monitor academic progress for students (new / returning)?**

We should try to use existing student support systems but to a greater degree.

**Suggestions for Departments:**

- a. Greater usage of the Early Alert program.
- b. Suggesting faculty give unofficial midterm evaluations and regular updates on grades.
- c. Advisors should check in periodically on their advisees during the term. For those with a large number of advisees, this can be done with a simple, mass email to all advisees asking students to contact you if they are having trouble in their courses. This opens the door for the student to initiate a conversation if they are having difficulty.
- d. Activities for student morale. Kick-off “we’re back” activities by departments that still follow whatever COVID-19 guidelines are in place. Other possibilities: care packages, movie nights. Student Clubs, Student Affairs, SLCE, SOAR, the Student Entertainment Committee, etc are good resources for ideas on community building activities. As types of covid friendly activities are developed by these various groups, a list of such activities could be shared with departments to help them develop activities for their own students.

**Action Items for Administration:**

- a. For colleges with an advising center, coordinate advising center’s efforts to reach out to students periodically.
- b. Funds and a simple application process for money to run small community building activities.
- c. Design campus-wide activities for larger community engagement. What can we do in place of things that are now inappropriate post-Covid, like live music, parties and free hugs? Student Clubs, Student Affairs, SLCE, SOAR, the Student Entertainment Committee, etc, can develop these activities, and should be able to request extra funds to support this if needed.
- d. Greater advertising of University counseling services.

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**How do we mitigate the impact of travel restrictions  
on international and other student groups as the Fall approaches?**

**Required Policies:**

- All student travel related situations must follow travel-related policies developed in response to the COVID-19 by working groups and instituted by UW.

**Resources:**

- There are no resource requests associated with this issue, but we acknowledge that communications with incoming students will likely increase workloads associated with staff in key departments (e.g., staff within academic departments with large numbers of incoming/returning students from outside of Wyoming) and central units who support international student travel (e.g, the Cheney center).

**Recommendations for UW units:**

- Students should not make any concrete plans for any Fall travel regarding UW until broader UW travel policies are approved by the UW Board of Trustees (expected mid-June).
- We recommend that all units on campus interfacing with students traveling to Laramie (from within or outside of the UW) provide communication regarding travel policies related to returning to Laramie and offer assistance of staff.
- Produce an FAQ or similar document to provide student-facing information regarding travel and related policies regarding the return to Laramie and subsequent UW-related travel.

**Other Points of Consideration:** Other working groups are developing travel restrictions / policies that must be considered here. Based on feedback from Academic Affairs, this question is focused on UW students who may be unable to travel in time for fall semester start. In addition, the idea was to consider students who plan for study abroad in the fall and may be unable to begin the semester in the abroad location.

Additional comments from Shelley Jewell (Cheney Center) are included below, which were reviewed and considered appropriate for additional consideration:

**Incoming International Students/Scholars**

Currently, no US consulates are taking visa appointments and the wait time when the consulates open for appointments is anticipated to be long. Therefore, our ability to bring in any new international students or scholars is challenging. This is compounded by the fact that if we are online only for the fall, due to US immigration restrictions we will not be able to welcome any new international students. The Department of Homeland Security stipulates that int'l students on F1 visas can take at most a single online course ([details here](#)). Continuing students would be allowed to return to the US if they wanted but again they most likely would not be able to obtain the appropriate visa if their previous one expired. If we are online, then both new and returning groups could obviously begin/continue their coursework from home. The start and end dates of the semester are on immigration documents as well which ties into students' post-grad work authorizations so once we determine the start/end dates of the semesters we could begin issuing the documents from our end that would be necessary for students/scholars whenever they can schedule appointments. Dependent upon our ability to have students return in the fall we would need to make considerations for our international students who arrive late- asking faculty to allow these students to 'catch up' or begin work from abroad.

Outgoing Study Abroad Students

As for the 38 students who plan to spend the fall semester abroad, we have asked that they all register for coursework at UW that could be dropped if they are able to go abroad if their program is running and they can obtain the necessary visas as well. This group would not be on the UW campus at all so it seems they should also be able to request an exception to the university policy with the addition of signing a waiver (similar to the 8 we currently have abroad) and allowed to continue their planned semester/academic year abroad.

Outgoing Faculty/Staff

Even with the DOS global travel advisory, it seems faculty should be able to request an exception to the university policy by contacting their department head, dean or vice president if they feel travel for research is essential/mission critical and they are willing to take the personal risk. Granting of exceptions to the travel restrictions should require reasoned consideration of all factors. Additionally, they should be asked to self-isolate for 14 days upon return from international travel.

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**What have we learned from online delivery in Spring 2020?  
What changes are needed going forward.**

The working group was able to use faculty and student surveys and interviews with key student support offices to evaluate the shift to remote teaching for the last 6 weeks of the spring semester. This data is in Appendices I & II. In general, faculty were able to shift to remote teaching with greater success than they had anticipated and noted the importance of working with the ECTL and IT in the transition. About half of faculty noted that slightly fewer course outcomes were met and it was clear that there was an increased workload for the transition to remote teaching. Student responses were generally positive, with appreciation both for synchronous teaching and recorded lectures, along with access to technology and online materials. However, many noted that they felt less motivated to study for online assignments and some noted that the workload increased for the courses. Based on the responses received so far, and our professional judgement, this committee is providing 5 key UW recommendations to prepare for Fall 2020:

- **Recommendation 1: Faculty Need Guidance**

Faculty need support and guidance in HyFlex (for definition please see Appendix III) and Online teaching. Faculty need financial support, equipment, and technological training, as well as extra time if they are to adopt Hyflex or Online teaching. Thirty two percent of faculty spent more than 31 hours per class preparing to remote teach, at least one spent upwards of 30 hours/week for 4 weeks preparing a course for summer. Eighty one percent of faculty weekly teaching time commitment has increased a significant amount. Sixty four percent of faculty spent less than \$100 of their personal money on remote teaching and 16% spent more than \$200. A great many are using their personal equipment from home.

Faculty also need guidance and training in Hyflex and Online teaching. Despite the fact that ninety two percent of faculty feel confident in their ability to teach online in the future, they also felt that only 32% of their students mastered as much content than previous semesters. Faculty data also indicated that they felt student were less engaged in the online format. This is echoed by the College of Business student survey that indicated only 16% of students felt engaged in online classes.

Faculty indicated that they needed training in: engaging students, having students "do" (e.g., perform a lab, practice a movement, engage in an activity). They also need guidance in delivering material meaningfully, making pedagogical decisions to accommodate potential COVID related student challenges like absenteeism, lateness, etc., designing and maintaining accessibility features to support different learners, facilitating active learning in online & virtual environments, lab and fieldwork at a distance, and increasing student self-assessment, self-efficacy and self-regulation skills.

- **Recommendation 2: Supporting Our Students**

Students' feedback on their experiences in the move to online learning show a wide range of reactions, successes, and challenges. **While two-thirds of survey completers report possessing sufficient technology for online success, only 45% report feeling prepared for online courses.** In the coming months, we should increase efforts to offer more targeted support to students as they look to (likely) interaction with multiple course formats. Feedback from faculty, ACES, Dean of Students (DOS), and University Disability Support Services (UDSS) reveal that



many students experienced a slump in success following Spring Break. College advisors also indicated that students who showed any signs of struggling with coursework early in the semester were significantly more likely to disengage or disappear in the shift to online learning. **All academic support units reported that students need a more robust training for online learning, including habits for managing online coursework, guidance for accessing needed resources, and tips for engaging with common course technologies.** The following suggestions can function hand-in-hand with faculty training efforts to bolster student success in the next semesters:

- Mobilize a small taskforce to develop short trainings for students on moving to HyFlex or online formats. The team might consider short videos, Canvas modules, and/or department-specific guidance for different course formats. These should include key contacts for common student issues.
  - As soon as possible, ask faculty to report the format for delivering their Fall courses (e.g. HyFlex, online, etc.). Share with students the course format for Fall as soon as possible. For incoming first-year and transfer students (~2,500 students), college advisors and University Disability Support Services can counsel students based on their needs to maximize their potential for success in Fall. For continuing students, this information will allow for shifts in schedules to better attend to students' preferred learning formats (as capacity allows).
  - Continue communication with families to ensure their continuing support of student success and knowledge of resources. Students' families have performed an increasing role in helping students navigate the move to online learning and planning for return to UW and/or courses in Fall.
  - Continue the DOS WYOCares submissions as a form of ongoing Early Alert reports through Fall. ACES contacted several hundred referred students in the last two months of spring semester. Approximately 50% of students contacted responded immediately to the advisor connection, and the remaining were often addressed during regular advising meetings for Fall registration.
  - DOS recommends continuation of tele-health and online counseling into the next semester(s) to reduce in-person traffic and offer several formats for student connections.
- **Recommendation 3: Leverage Existing Online Courses**

There are traditionally fewer online courses offered in the fall than the spring. We should we take a closer look at this during the summer and provide more online learning opportunities for key courses where pressures might exist. It is critical for us to understand the size of the problem we are facing for Fall 2020. There will be a number of courses offered fall that were not offered this spring and those faculty may need additional support. Faculty have voiced concerns for returning to face to face teaching, so need support in creating effective online teaching platforms.

We should also look leveraging courses that have been taught online in the past and could be quickly and easily updated for the Fall. The ability to offer to students a wide range of online

courses to fill out their schedule may make the difference in keeping them on track. This is the current breakout of the courses already scheduled for Fall 2020:

Fall 2020 Courses-unique CRNs	
698	Distance courses
4389	Main Campus courses
56	UWC
5143	Total number of unique CRNs

Of the Distance Courses	
76	Freshman (1000) level courses
53	Sophomore (2000) level courses
95	Junior (3000) level courses
139	Senior (4000) level courses
335	Grad level courses
698	Distance Courses

- 116 of the total courses have a campus and distance section presenting opportunities within each department if GA/TA and faculty incentive funds become available
- Determine if the committee that was run by Anne A ('strike force') is still meeting in some fashion, as they will be good partners in this effort to determine what distance courses we should be adding in the fall
- Larger campus courses will need additional GA/TA assistance if we are remote teaching in the fall
- Attention should be paid to lower division USPs.
- Should look at pass/fail rates in the spring classes to assess the need for potential new course listings in the fall

● **Recommendation 4: Need for Instructional Support**

UW faculty need additional instructional support to be prepared for Fall 2020; the university is simply under-resourced for the task ahead. While the actual demand for online teaching support is being assessed by Academic Affairs, we need to be prepared for significant demand from faculty to support their moving traditional courses to either the hyflex model or fully online. We recommend three sets of required resources:

- *External Support:* We recommend that UW begin exploring external firms (e.g., Wiley, Pearson) who can offer immediate assistance for course development and related tasks. We believe that a fee-for-service model is worth consideration for the near term (summer 2020).
- *Internal Capacity:* We strongly recommend that UW builds internal capacity as we ready for fall, including the addition of staff (permanent or temporary) who can help with the course development needs of the faculty. Additional capacity should be aimed at supporting faculty for the move to hyflex / online learning during Fall 2020 (e.g., funding for faculty development workshops, provide stipends for summer work, purchase of equipment as required).
- *Technology:* Continued (perhaps expanded) funding for technology supporting hyflex / online teaching (e.g., Vidgrid, Honorlock, Canvas, Zoom, etc), along with IT services to ensure these key investments are appropriately supported.

Preliminary social network analysis indicates that the entities from whom faculty sought support were, in order of number of connections: ECTL, IT, LAMP, and LeaRN. ECTL was named 42 individual times and IT 16. In addition, individuals from ECTL were named 59 individual times. These entities have proven to be invaluable resources in the transition to remote teaching this spring and the ECTL has proposed additional training and support for summer and fall. Within ECTL there are three 12-month Educational Developers with expertise in Distance Teaching and one 10-month Educational Developer. There are three additional Educational Developers with expertise in pedagogy and assessment. This group is supported by only two administrative staff. In order to meet the demand of all fall courses using a HyFlex model or going totally online additional instructional and administrative support will be necessary.

Compensating faculty for the extra work that will be required to teach quality courses in either the HyFlex or Online format is substantial. Thirty two percent of faculty spent more than 31 hours per class preparing to remote teach, at least one spent upwards of 30 hours/week for 4 weeks preparing a course for summer. Eighty one percent of faculty weekly teaching time commitment has increased a significant amount. This time spent on teaching tasks is impacting their abilities to continue their research and write for grants. In addition, many faculty are nine-month employees with other commitments during the summer. If we expect faculty to spend substantial time reimagining courses they need additional financial support.

While this disruption to our normal course delivery pattern resulted in a 'triage' approach to helping faculty and students finish the semester, we must be committed to supporting high quality online teaching for the fall. Beyond that, with a full campus aware of the practicalities and possibilities of online teaching, this is a time to invest in the development of high quality and innovative courses for the future. We recommend institutional support for faculty and departments to engage in effective online/remote teaching opportunities for the development of better courses, innovative pedagogy and ways to enhance enrollment around the state.

- **Recommendation 5: Strategic Planning Effort / Working Group for Beyond Fall 2020**

We strongly recommend that Academic Affairs create a task force that will develop a strategic plan for advancing online / distance education at UW beyond Fall 2020. The hiring of the recent consultant from Nebraska is a useful first step, however, the lack of leadership and direction in this area has left UW in a precarious position. An interdisciplinary working group can develop a go-forward strategy for UW and should commence immediately.

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**Continuous improvement and quality assurance**  
(e.g., credentialing, assurance of learning, long term implications, etc.)

***Recommended Policies:***

Wherever possible, we strongly suggest that implementation and decisions on the following policies be made at the departmental or college level.

**We recommend the following:**

- Operationalize support (both instructional and administrative) from the Careers Everywhere Task Force.
- Extend access to LinkedIn Learning for graduates for a specified period of time.
- Extend access of this year's graduates to their UW email addresses for a specified period of time.
- Provide current students with information about access to LinkedIn Learning and promote the use of this service.
- Provide flexibility to students whose programs require internship/practica, allowing students to successfully complete programs without lengthy processes and approvals. These decisions should be controlled by program faculty and coordinators and implemented collaboratively with the Office of the Registrar.
- The University Testing Center should be supported with additional resources to carry out a collaborative relationship with testing agencies, such as ETS and others, that are establishing at-home or distance options for testing.
- In order to support graduating students who may not have received adequate practical/internship experiences, faculty should be provided with workload for contacting graduates and for providing additional professional development, as needed by graduates. Funding to support this instruction should be provided at a university level, so that students don't have to pay additional tuition/fees.

Data on impact and substitutions for internship/practica is available in appendix IV.

***Resources:***

- Costs incurred in implementing recommendations above.

***Recommendations for UW units:***

- We recommend that faculty and staff intentionally reach out to graduating students to determine additional support needs and to provide instruction to resolve those needs; this additional work should be recognized by department heads in workload adjustments.
- Similarly, we recommend that department heads/deans acknowledge and reward the increased workload for faculty/staff who arrange and support practicum and internship experiences, because of the impact of COVID-19 on those settings.

***Other Points of Consideration:***

In relation to completion of programs that lead to licensure, and any impact on successful licensure from COVID-19, data collection is underway. The following information is known:

- For programs that lead to educator licensure by the Wyoming Professional Teaching Standards Board, that agency has approved an "Exception Authorization" that would allow completers to gain a short-term license, even if COVID-19 prevented them from completing their programs;

- The accrediting body for Nursing, the Commission on Collegiate Nursing Education (CCNE), has been supportive of programs during COVID-19 and has indicated that programs do NOT need to submit/report temporary curricular changes resulting from COVID-19 and has extended their grace period from the end of August through the end of December 2020;
- The accrediting body for the dietetics program, the Academy of Nutrition and Dietetics (ACEND), is allowing online courses to count towards accreditation standards and are providing resources for meeting in-person requirements;
- The accrediting body for business, the Association to Advance Collegiate Schools of Business (AACSB) has advised that business schools do whatever is necessary to assist students provided all decisions and changes made follow the mission of the school.
- Closure of testing sites has impacted the timeliness of gaining licensure for graduates.

In relation to substitutions made for practica/internships because of COVID-19, data collection is underway and preliminary data is provided in appendix IV. The following information is known:

- Many instructors/program coordinators developed alternate requirements/ substitutions for students who were not allowed to be in the spaces that were initially required for their practica/internships, thus allowing them to successfully complete their programs.

**APPENDIX I:****Summary of Survey Results – What We Learned from moving online in Spring 2020*****Data from faculty perception survey (309 respondents)***

- Primary Teaching Methods: 84% Face to Face
- After COVID-19 50% of faculty met live less than 50% of the time. 27% met 100% of the time.
- Feelings of effectiveness in fully remote teaching: 56% effective or very effective, 18% slightly effective, 24% Not as effective as I'd like to be, 2% not effective at all.
- Student Outcomes: 32% students mastered the same or more than previous semesters, 53% slightly fewer, 10% far fewer
- Student engagement: 88% engaged, down from 97% engaged pre-COVID
- Student risk of failing: 36% increased, 54% stayed the same, 9% decreased
- Faculty Competency in remote teaching prior to CODVID: 84% competent
- Faculty Competency in remote teaching after to CODVID: 95% competent
- Confidence in teaching online in future: 92% confident
- Faculty Investment (time & money)
  - 32% of faculty spent more that 31 hours per class preparing to remote teach.
  - 81% of faculty weekly teaching time commitment has increased
  - 64% of faculty spent less than \$100 of their personal money on remote teaching. 16% spent more than \$200.
  - Many are using their personal equipment from home.
- All things considered, how well has the University as a whole supported your work as an instructor during this time?
  - 82% answered Moderately to Extremely well.

***Data from student feedback survey (268 responses) SFS & College of Business Student Survey (100 respondents) COB and summary from College of Engineering.***

- Very few technical issues for students on this survey, only 34 answers out of 264 respondents. SFS
- 61% of students like synchronous better, the other 39% prefer asynchronous or both. SFS
- 88% of student felt their instructor was Accessible and/or approachable. SFS
- For the open-ended questions, “What's working/not working in this course” -
  - 71% of comments were positive or neutral. These responses were typified by statements such as this: *“I was really nervous about the class moving online because I really appreciated the in class atmosphere of the course. I do think that the class has moved online well, and I even feel more confident in getting involved with the content than I did before.”*
  - 17% of comments were negative. These responses were typified by, *“Everything was fine up until we went online and then there was little contact from the instructor other than her posting minimal examples for us to look at. The exams were very difficult to work through in the allowed time with the way they were set up.”* SFS
- In the College of Business Survey all students had access to internet at home, 94% via broadband. COB
- 45% of students felt prepared to participate in online courses but 70% of them felt they had the technology needed to succeed online. COB
- 16% of students felt engaged in online classes and 49% think instructors provide effective instruction. COB

- 81% of students feel less motivated to study for online classes.
- Students felt that the top five features critical for online success in order of importance were: recorded lectures, access to tablets or laptops, discussion boards, online textbooks, and live lectures. COB

College of Engineering student survey summary: From Cameron Wright, Interim Dean.

- We have done multiple informal surveys of our students, both by faculty for feedback related to individual courses and by our professional advisors who ask questions that span all the courses a student is taking. Overall, across all responses, it seemed to be split almost evenly between students who preferred synchronous Zoom classes and those who preferred asynchronous “recorded” lectures. For asynchronous delivery of lectures, it seemed to be very helpful to couple it with live Zoom sessions at the normal class time for group discussion and for students to “reconnect” with the professor and with each other.
- One of the responses I included below, “pre-recorded lectures have to remain under 50 minutes,” is an important point that many students raised. And related to that is the observation by about 25% of the students that many assignments seemed to get longer and more detailed once we went online, perhaps due to instructors erroneously thinking students “had nothing else to do.” There was a lot of angst and dissatisfaction about how exams were administered; that’s one of the biggest hurdles for UW in my mind. Finally, a small percentage of students complained that some material was uploaded almost at the last minute, but the due dates were never changed; that needs to be avoided in the future.

**APPENDIX II:****Faculty discussions facilitated by Rick Fisher, ECTL**

Rick Fisher (Director, Communication across the Curriculum (CxC), Ellbogen Center for Teaching + Learning, Associate Lecturer, Department of English) has conducted several faculty interviews on 'lessons learned'. This information is found in the appendix, but emerging themes include: Social context: Community matters, Teaching remotely requires/rewards different types of teacher performances than f2f teaching, embodiment matters—differently to different fields from art to science. Learning about technology was good, but infrastructure fluctuations in internet are a barrier.

Social context: Community matters

- Many students want to be connected to a community of learners; zoom is inferior to in-person settings but still helps for creating some sense of community.
- Students' living environments affect their attention/motivation/connection to learning.
- Good online teaching should build around smaller, not larger, groups of learners. (Re)creating and maintaining a sense of community remotely requires more effort and activity.
- Students' engagement in learning seemed to become more variable after the shift to remote delivery. (I.e., a number of students disappeared/completed fewer assignments after the shift to remote delivery)

Teaching remotely requires/rewards different types of teacher performances than f2f teaching

- Good remote teaching may require a wider variety of modalities (such as visual and audio feedback).
- Online, it is harder to be a "coach" for some courses/skills/content.
- Online, it may be effective to hand over some teaching/learning activities to peer groups.
- Making deep connections with students online require different skills/approaches than face-to-face teaching.

Embodiment matters—differently to different fields

- Course demos/activities that require real-time/instantaneous feedback are harder to create/deliver in an online environment.
- Embodied aspects of learning (in music, dance, geology, ... ) are harder to recreate/remediate online.
- Teachers who depend on non-verbal student cues may be frustrated in online synchronous settings (and even more in asynchronous settings).
- In some fields it may be easier to teach initial skills/movements online while in other fields students may be able to continue building skills if they have had some initial face-to-face instruction. Timing matters.
- Written activities can help supplement students' learning of embodied concepts and skills—to a point.

Technology adjustments

- Formal and informal faculty networks helped provide a sense of community/share approaches.
- Inadequate infrastructure in Laramie (and across the state) is a barrier to continuity of learning. Many technology struggles can be overcome, but at cost to faculty of the time for them to learn VidGrid's analytics can be really helpful for getting a sense of student engagement.
- Creating lecture videos is different than creating a live lecture.



**APPENDIX III:****Peer reviewed best practices compiled by ECTL**

**HyFlex Guidelines:** Our faculty need to have relatively clear guidance / benchmarks for what we are requiring in terms of various delivery models and approaches to the Fall. For example, Danny Dale's group proposed the use of "HyFlex" models but what does that mean for UW and our faculty. "HyFlex" follows the following structure and design:

- Students choose when/how to participate in the class: face-to-face synchronous, remote synchronous, remote asynchronous
- Each student's choices are fluid; students can move between contexts throughout the course
- Instructors create reusable, persistent learning objects for content delivery
  - Students access and consume content prior to engaging in learning activities
- Synchronous class meetings focus on active learning
  - Instructors facilitate and engage students in synchronous activities, e.g., answering questions and serving as resources -- for both face-to-face and remote participants
- Asynchronous and synchronous courses have "identical" outcomes, assignments, assessments, and timelines
- Since HyFlex is both online and F2F, there are comprehension checks towards objectives from learning activities that are integrated between online and F2F. The same objective is being measured with similar difficulty regardless of delivery mode.

**APPENDIX IV:**

**Substitutions and Modifications made for internships/practica and the effects**

**Table 1: Summary Statistics for Survey of University of Wyoming Department Heads About Substitutions/Modifications for Required Internships/Practica Because of the COVID-19 Pandemic**

Survey Responses by College			Programs That ...	Count	% of Total
College	Count	% of Total			
Arts & Sciences	5	29.4%	Do not require internships/practica	6	35.3%
			And are affected indirectly*	3	17.6%
Agriculture & Natural Resources	4	23.5%	Have no changes to internships/practica	4	23.5%
Engineering	4	23.5%	And are affected indirectly*	2	11.8%
Health Sciences	4	23.5%	Have one or more courses with substitutions/modifications	7	41.2%
<b>Total</b>	<b>17</b>	<b>100.0%</b>	<b>Total</b>	<b>17</b>	<b>100.0%</b>
			*Programs that are affected indirectly are those which do not have required internships/practica, or to which there were no changes to required internships/practica, but have labs or optional internships affected as reported by the department head.		
<b>Total Number of Courses Affected</b>	<b>20</b>				

Key Words/Phrases	Count
Changed to simulations and/or observations**	4
Shorter placements**	4
On-site experiences replaced with online, remote, virtual, simulation, and/or telehealth experiences**	18
Offer courses as substitutes	1
Waive requirement or allow a substitution for up to 2 credit hours	1
Acquire experiences in other ways on their own, within or outside of the department.	1
Substitute research activities for the required hours	1
Relocation of practicum site	1
Case studies & virtual simulations	1
Additional assignments to complete internship hours	1
*Count of keywords and phrases exceeds the number of department heads reporting changes to required internships/practica and the number of courses affected because some responses fell into more than one category.	
**One department head listed all four courses affected in his department under a single course. The three reported substitutions/modifications were not differentiated by course.	

Key Words/Phrases	Count
May or will delay graduation	3
Impact of shortened or cancelled internship/practica sites**	
Some students will need to learn telehealth skills	4
Some students will need to get experiences in other ways & possibly on their own, within or outside of the department	1
Some students will not be able to get National Accreditation	1
Additional equipment needed by some students to remain safe at internship/practica sites	4
All students planning to graduate in the spring or summer of 2020 will be able to do so	2
None or not applicable	2
*Count of key words/phrases exceeds the count of department	
**In addition to or other than substitutions/modifications.	

**Guidance and Existence of Concerns from Licensing / Accrediting Agencies**

Program (Grad & Undergrad)	Licensing Agency	Program Contact	Accrediting Body	COVID-19 Guidance?	Any concerns?
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<b>College of Education</b>					
Teaching	Wyoming PTSB	Leslie Rush	AAQEP	Yes, by PTSB	Licensing: no/ Accreditation: no
<b>College of Business</b>					
Accounting	CPA	Nicole Choi	AACSB	Yes, by AACSB	Licensing: possibly/ Accreditation: no
MS Finance	CFP	Nicole Choi	AACSB	Yes, by AACSB	Licensing: possibly/ Accreditation: no
<b>College of Arts &amp; Sciences</b>					
Clinical Psychology PhD	ASPPB	Carolyn Pepper	APA	Yes, by ASPPB & APA	Licensing: yes/ Accreditation: no
Music Education	Wyoming PTSB	Crystal Sieger	NASM	Yes, by PTSB	Licensing: possibly/ Accreditation: no
<b>College of Engineering &amp; Applied Science</b>					
Engineering & Applied Sci. degrees	NCEES	Steve Barrett	ABET EAC/CAC	Yes, by NCEES & ABET	Licensing: no/ Accreditation: no
Construction Management	None	Francois Jacobs	ACCE	No	Licensing: n/a/ Accreditation: no
<b>College of Health Sciences</b>					
Nursing	WSBN	Sherril Smith & Dawn Carver	CCNE	Yes, by WSBN & CCNE	Licensing: yes/ Accreditation: no
PE Education	Wyoming PTSB	Tristan Wallhead	SHAPE America	Yes, by PTSB	Licensing: no/ Accreditation: possibly