Lory Student Center Ballroom: Aug. 12, 2020

REPORT OF THE TEACHING CONTINUITY AND RECOVERY TEAM

2020-2022

During the COVID-19 pandemic, the Teaching (and Learning) Continuity and Recovery Team (TCRT) was charged with identifying and addressing Colorado State University's academic needs while fostering both the quality of our learning environments and well-being of faculty and staff. The membership of TCRT grew to represent a broad set of offices and collectively developed a distinctive and detailed knowledge of academic functions, processes, and policies. This report, prepared for Provost and Executive Vice President Mary Pedersen, covers the history of the TCRT from its formation in March 2020 to May 2022, a period beginning with the pandemic's global rise, continuing throughout a series of surges, and ending with the decline of BA.1 in the United States. The recommendations for future work seek to apply lessons learned and transformations undergone during the pandemic to support, advance, and improve the integrity of CSU's academic enterprise.

Table of Contents

Managing the Academic Response to COVID-19
March 2020 – May 2022

While the Pandemic Preparedness Team (PPT) led Colorado State University's public health response to COVID-19, several critical working groups including the Teaching (and Learning) Continuity and Recovery Team (TCRT) assisted in building comprehensive strategies to support our community. These working groups were appointed by President Joyce McConnell at the onset of the pandemic to protect institutional priorities. The TCRT managed CSU's academic response to COVID-19, focusing its work on protecting the integrity of CSU's academic mission, mitigating teaching and learning impacts, and identifying resource needs for faculty and students.

The TCRT operated under the leadership of the Office of the Provost and Executive Vice President: Provost Rick Miranda from March to August 2020, and Provost Mary Pedersen from August 2020 to May 2022. This overview provides context for the contributions made by the TCRT in response to the pandemic's impacts and documents the extraordinary teamwork and collaboration of this group.

TCRT Membership
The membership of the TCRT has changed frequently since first convened in March 2020, expanding as our challenges on behalf of the academic enterprise grew. All those listed below provided significant service:

Brandon Bernier, *Vice President for Information Technology*
Kristi Buffington, *Facilities Management Planning Specialist*
Steve Dandaneau[+], *Associate Provost and Executive Director of the Reinvention Collaborative*
Sue Doe, *Professor of English and Chair of Faculty Council*
Jody Donovan, *Associate Vice President for Student Affairs*
Gwen Gorzelsky, *Executive Director of The Institute for Learning and Teaching*
Cheyenne Hall, *Office of the Provost Business Manager*
Pam Jackson, *Associate Vice Provost for Communications*
Sue James, *Vice Provost for Faculty Affairs*
Chris Labelle, *Director of CSU Online*
Kelly Long[*+], *Vice Provost for Undergraduate Affairs*
Julia Murphy, *Associate Registrar*
Jan Nerger[+], *Dean, College of Natural Sciences*
Nik Olsen, *Office of the President Assistant Chief of Staff for Communications and Outreach*
Ken Quintana, *CSU Emergency Management Coordinator*
Mary Stromberger. *Vice Provost for Graduate Affairs and Dean of the Graduate School*
D. Tobiassen Baitinger, *University Registrar*
Beth Walker, *Dean, College of Business*

Benjamin C. Withers*+, *Dean, College of Liberal Arts*
Lise Youngblade+, *Dean, College of Health and Human Sciences*

+*Continuous service on TCRT since March 2020*
*Chair or co-chair of the TCRT

Winter 2020: Early Pandemic Response and Groundwork for Remote Instruction
In the earliest stage of pandemic planning in late February and early March 2020, discussions involving academics were led by then-Provost Rick Miranda in the Council of Deans meetings, which included VPs and other executive leadership. On March 11, 2020, President Joyce McConnell announced that all courses at all levels would move to remote instruction through at least April 10, 2020. As this decision was unfolding before spring break, CSU delayed students' return to campus by three days to allow faculty more time to prepare for all remote instruction. In mid-April, Provost Miranda identified five individuals to lead a group focused on broad undergraduate concerns: Vice Provost for Undergraduate Affairs Kelly Long, Associate Provost Steve Dandaneau, and deans of the three largest undergraduate colleges: Jan Nerger (CNS), Ben Withers (CLA), and Lise Youngblade (CHHS).

Late Spring 2020: Campus Planning and Charge to the Undergraduate Subcommittee
On April 29, President McConnell outlined a COVID-19 recovery plan of four phases in a campus message. Her clearly stated goal established parameters for planning: "... We fully intend to be back on campus and operational for Fall semester." She charged the campus to be prepared to respond to any contingency through careful and coordinated preparations. President McConnell's message identified two leadership teams: the Recovery Decision Committee (RDC), co-chaired by the President and the Provost, and the Recovery Advisory Committee (RAC), which reported directly to the RDC.

The President organized several functional groups under the RAC, including the Teaching and Learning Continuity and Recovery (TLCR, which later morphed into the TCRT). This group was led by Provost Rick Miranda, who divided the TLCR into three primary areas of focus: undergraduate, graduate/professional, and implementation. The Undergraduate Subcommittee was charged with developing a plan for undergraduate instruction in Fall 2020. In accordance with President McConnell's commitment for CSU to be back on campus and operational for Fall semester; deliberations focused on the open campus "best-case" scenario, though recommendations for the "middle-case" and "worse-case" scenarios also were considered. The outcome was a May 13, 2020, report that provided specific implementation recommendations and urgently needed actions.

In late May, Dean of Students Jody Donovan and Associate Executive Director of University Housing Laura Giles were tasked with co-chairing the University Social Norming Task Force to educate and shape student behavior related to public health measures. The Social Norming Task Force was made up of 25 faculty, staff, and students from across the University and met for over a year and half, focused on correcting misinformation and approaching students' behavior in a positive rather than penalizing manner

Summer 2020: Teaching and Learning Continuity (TLC) Task Force Implementation
Upon approval of the President's plan by the Board of Governors in mid-May, CSU established a foundational premise for work in the Implementation Phase: in all course formats, and with community health at the fore of our considerations, CSU will provide learning experiences characterized by academic rigor, belonging, and joy of learning. In support of that premise, Provost Miranda charged a

Task Force for Teaching and Learning Continuity under the direction of academic leadership of Kelly Long, Jan Nerger, Ben Withers and Lise Youngblade. The TLC formed specialized subcommittees:

- **Liaison with CSU Advising** and Undergraduate Education at Research Universities (UERU): Steve Dandaneau
- **Space and Scheduling Subcommittee:** D. Tobiassen Baitinger and Julia Murphy of the Office of the Registrar to work with colleges to identify appropriate instructional spaces
- **Instructional Technology and Faculty Development:** Gwen Gorzelsky, Chris LaBelle, Brandon Bernier to prepare training and workshops consistent across all colleges in collaboration with the Online Implementation team. This work included scaling up classroom technology, innovating and preparing online offerings of professional development for faculty across all sectors of campus.
- **Classroom Hygiene and Safety:** Kristi Buffington and Ken Quintana of Facilities Management to develop protocols based on state and campus recommendations, ensure supplies are available and adequate, prepare guidelines for faculty and staff, stand ready to adjust protocols as needed.
- **Graduate School/GTA Coordination:** Dean Mary Stromberger.
- **First-year Academic Experience:** Ryan Barone, Assistant Vice President for Student Success. This extended team met regularly to find ways to pair courses, imbed a small seminar course to support students during the transition, and offer continuity to their studies and engagement with the University in their "remote" first year.

This was a time of intense activity, marked by daily meetings and long hours that regularly extended to weekends and evenings. The summer was divided into two clear phases of work:

- **Phase I** (May 15 to June 15) focused on further developing approaches to key priorities of health and safety, how to right-size in-person offerings based on academic need, course type, available spaces, and enhancing instructional technology and instructors' ability to use it effectively.

  This phase focused on providing classroom capacity measurements, analysis of course sizes, and decisions about which courses could be offered in-person. The Registrar's Office room scheduling team rewrote the complete course schedule for Fall and within a few weeks' time moved large enrollment sections online. Facilities Management adjusted hundreds of rooms to accommodate social distancing, addressed building ventilation, and provided personal protective equipment. IT inventoried classrooms, upgraded remote classroom technologies and infrastructure, equipped more than 140 classrooms with lecture-capture technology, and provided individual instructor microphones. TILT provided extensive professional development trainings in teaching hybrid or 100% online modalities: 420 instructors completed at least one full TILT course, 980 completed a webinar or workshop, and more than 100 faculty attended trainings for Canvas and Echo360. Vice Provost Long attended to the needs of first-year students by appointing Assistant Vice President for Student Success Ryan Barone to develop programs to enhance the first-year experience such as the creation of new courses and moving selected courses to 4-8 p.m. timeslots where possible, all designed to maximize engagement and academic success.

- **Phase II** (June 15 to August 15) focused on the implementation of these decisions and, as the start of Fall semester approached, concentrated on how to communicate with faculty, staff, and students about what to expect on the first day of classes.

These two months were crucial for the successful start of the semester. Key elements included:

- o Finalizing the process of moving sections, when possible, to larger spaces.
- o Wayfinding and egress/ingress protocols for buildings.
- o Working with departments to address instructional preferences for the faculty and accommodations for students.
- o Reviewing funding requests.
- o The creation of appropriate communication to the various constituencies on campus about course modalities, safety protocols and academic expectations.

At the request of TCRT, Provost Miranda began to convene regular meetings of chairs and co-chairs from all academically directed RAC subgroups, including TCRT, Student Affairs and Research.

Summer Session courses provided a chance to implement on a smaller scale various public health measures, such as social distancing, masking, and classroom hygiene, planned for fall. At Provost Miranda's suggestion, Steve Dandaneau and a team from Facilities, led by Ken Quintana, identified and prepared spaces for three classes taught by faculty members Mike Mansfield, Sharon Anderson, and Rocky Coleman as part of a pilot initiative testing COVID health protocols in the classroom. The students in the three classes and those enabling this pilot describe their experience in a SOURCE article. As Dandaneau remarked, "[The pilot] was also a key transition point, and even felt that way at the time. It would have been nice to have more classes and students, but such were the conditions and the times."

August 2020:
Thanks to the campus-wide team effort, when the Fall semester got underway on Aug. 24, about 64% of classes were either entirely face-to-face or a hybrid model with some in-person instruction.

The arrival of Provost Mary Pedersen brought new leadership and direction to the TCRT. At her direction, and in addition to monitoring the progress of Fall semester, we began planning and preparations for Spring 2021. Provost Pedersen saw the need to create as much flexibility as possible for the academic schedule, given the still evolving pandemic environment.

Major efforts focused on the development of a communication strategy for faculty and students, particularly around contact tracing, OEO accommodations/pandemic-related work arrangements, Temporary Teaching Arrangements (TTAs), and academic policies. Dean Beth Walker, who joined the TCRT in the fall, led the creation and implementation of a faculty survey to help shape those efforts. Based on input from CSU contract tracers, IT, Facilities, and the Registrar's Office spent considerable effort in the creation of a new online application for seating charts (link here for video). Looking forward to Spring semester, the TCRT developed and recommended the creation of a three-phase teaching plan to allow the University flexibility considering the constantly changing conditions. This plan called for an all-remote start to the semester and phased return to face-to-face and hybrid teaching.

Students, faculty, and staff responded well to the social norming messaging that reduced fears related to in-person engagement. Ongoing surveys, focus groups, and observational data provided outstanding documentation that students wanted to be in-person and were willing to adjust behavior to accomplish this goal.

The President and Provost allocated $1.52 million for emergency pandemic-related costs. The TCRT approved expenses in these broad categories:

- $1.28 million in salaries and fringe (mostly faculty and GTAs) to account for the additional classes needed for the social distancing requirements
- $81,500 for student hourly assistance
- $51,000 for additional proctoring
- $68,000 in Mauve Fees for GTAs to assist international students who could not get into the United States to work
- $19,5000 Operating Expenses (e.g., masks, face shields, microphones, etc.)

Out of the $1.52 million approved budget, $1.05 million of expenses were incurred in Fall 2020.

January 2021: Recalibration and Recovery
In an announcement right before the start of the semester, President McConnell recalibrated the University's pandemic response structure. This updated the teams put in place in Summer 2020, based on lessons learned, to facilitate reporting and decision-making processes. The TCRT, along with several other teams that focused on budgets, communications, data governance, logistics, policy and legal review, and public health, reported to the Pandemic Planning Team.

TCRT's primary focus at this time was to communicate clearly and effectively the implications of the three-phase teaching plan for Spring semester:

- Phase 1 – Jan. 19-22 (First Week of Classes): All courses will begin online.
- Phase 2 – Jan. 25 (Second Week of Classes): Selected, already determined, courses with high priority for in-person learning will shift from online to face-to-face (100% in-person). Select hybrid courses will also return to in-person during Phase 2.
- Phase 3 – Early February: On Feb. 5, faculty scheduled to teach courses in the hybrid modality will be updated on the status of course transition from remote to hybrid (introducing a face-to-face component) based on Larimer County Public Health guidelines.

Spring break was moved to April 10-18 (nearly a month later than normal), and all courses moved online for the remainder of the semester after break.

The TCRT prepared messages for administrators and faculty and templates for instructors to share with students based on the type of instruction assigned. Other work centered on extension of academic policies (Late Withdrawal and S/U in particular).

This committee approved a total budget in Spring 2021 of $1.91 million:

- $1.2 million in salaries and fringe (mostly faculty and GTAs) to account for the additional classes needed for the social distancing requirements
- $400,000 Student Hourly Assistance (requests approved at the beginning of the semester and again in the middle due to needs expressed to Provost Pedersen)
- $235,000 Proctors/Training Programs
- $54,000 in Mauve Fees for GTAs to assist international students who could not get into the U.S. to work.
- $11,000 Operating Expenses (masks, face shields, microphones, etc.)

Out of the $1.9 million approved budget, $1.65 million of expenses were incurred in Spring 2021.

Spring 2021-December 2021: Recovery and Rebound

The CSU System decided in spring that vaccines would be required for all students and employees. CSU leadership announced that the University would be moving the vast majority of course sections to a face-to-face format in the fall, and CSU would resume full in-person operations.

The Fall 2021 semester saw over 88% of course sections and 86% of seats offered in-person and a return to near pre-COVID enrollments, with a total of 5,177 students in CSU's 2021 first-year class compared to 4,563 in 2020. Fall 2021 enrollment was the third largest in CSU history. Total enrollment for 2021 on the main campus was 28,580 students, up slightly from 28,440 in 2020.

TCRT continued to meet weekly, with academic deans adding a second weekly meeting to address issues as they arose. Planning for Spring 2022 emphasized a return to even higher levels of in-person instruction, allowing for about 5% of sections to be taught remotely. The team prepared documents for campus addressing how to handle faculty teleworking requests, student absences, and non-compliance.

The activities of the committee gradually turned to how to manage the resumption of in-person learning and how to weave lessons learned from the height of the pandemic into academic practices and policies.

The TCRT committee approved a total budget for Fall 2022 of $1.53 million:

- $1.5 million in salaries and fringe (mostly faculty and GTAs)

Out of the $1.53 million approved budget, $1.2 million of expenses were incurred in Fall 2021.

Spring 2022: Omicron Variant and Beyond

TCRT activity slowed during late Fall 2021 semester. Vice Provost Long recognized the hard work of the team with certificates and an in-person celebration on the Oval. During the fall, the committee put in place plans for a near "normal" semester, with 94% of sections and 93% of seats to be offered in-person in the spring.

However, in late December and early January, concerns about the transmissibility of the Omicron variant of the coronavirus led to renewed activity of the TCRT in the first several weeks of Spring 2022 semester. During several intense meetings, TCRT quickly identified several strategies, including remote sections for the first week of the semester. Under the direction of the PPT, the TCRT closely monitored predictions about the spike in cases for the first several weeks, though mid-February. The TCRT provided weekly updates for deans, chairs, and unit heads for the first month of classes on the rapidly changing situation based on results of campus testing. The TCRT committee approved a total budget in Spring 2022 of $48,000, all for Student Hourly Assistance.

TCRT meetings tapered off as the semester progressed. True to its two-year attention to teaching and learning continuity, the focus of the committee turned to identifying lessons learned and the opportunities and challenges for the future. The team summarized these lessons in four documents around the themes of policies, practices, spaces, and places, presented in the following sections of this report.

Bibliography of Selected Presidential Communications, SOURCE Stories

McConnell, Joyce. "Important public health message to the CSU campus community." Office of the President, March 11, 2020. https://president.colostate.edu/important-public-health-message-to-the-csu-campus-community/

McConnell, Joyce. "CSU moving to online instruction for the remainder of the Spring 2020 semester." Office of the President, March 16, 2020. https://president.colostate.edu/speeches-and-writing/csu-moving-to-online-instruction-for-the-remainder-of-the-spring-2020-semester/

McConnell, Joyce. "President McConnell's message regarding COVID-19." Office of the President, March 19, 2020. https://president.colostate.edu/message-on-COVID19/

CSU MarComm Staff, "President McConnell outlines COVID-19 recovery plan." SOURCE (April 2020). https://source.colostate.edu/president-mcconnell-outlines-COVID-19-recovery-plan/

Dodge, Jeff. "About two-thirds of CSU classes have an in-person component, thanks to dedicated teamwork.": SOURCE (Aug. 27, 2020) https://source.colostate.edu/about-two-thirds-of-csu-classes-have-an-in-person-component-thanks-to-dedicated-teamwork/

Long, Kelly. "President McConnell's message on Spring Semester schedule." Email to faculty (Jan. 21, 2021). https://canvas.colostate.edu/wp-content/uploads/sites/41/2021/01/1-Communication-to-Faculty.pdf

Manning, Anne. "All-Campus town hall outlines what to expect for Spring 2021." SOURCE (January 2021). https://source.colostate.edu/all-campus-town-hall-outlines-what-to-expect-for-spring-2021/

Olsen, Nik. "Colorado State calibrates pandemic response for spring, building on lessons learned." SOURCE (January 2021). https://source.colostate.edu/colorado-state-calibrates-pandemic-response-for-spring-building-on-lessons-learned/

Pedersen, Mary. "Spring Semester update: Transition to Phase III begins Feb. 15." SOURCE (February 2021). https://source.colostate.edu/spring-semester-update-transition-to-phase-iii-begins-feb-15/

Dodge, Jeff. "Charging forward: CSU community excited for in-person learning this fall." Source (June 2021). https://source.colostate.edu/charging-forward-csu-prepares-for-return-to-in-person-learning-in-the-fall/

Sylte, Allison. "First-year enrollment at CSU bounces back to nearly pre-pandemic levels." SOURCE (September 2021). https://source.colostate.edu/csu-2021-enrollment-COVID/

Beardsley, Chelsea. "Teamwork keeps COVID pandemic in check at CSU." SOURCE (December 2021). https://source.colostate.edu/teamwork-keeps-COVID-pandemic-in-check-at-csu/

Town Hall Information Sessions: https://COVID.colostate.edu/kb/town-halls/

Policies: Expectations as We Approach the Post-Pandemic Era

CSU changed key academic policies in response to the pandemic to help students with academic challenges and other COVID-related impacts. This section provides a history of Faculty Council processes for emergency and permanent approval of academic policies and a detailed description of the three most prominent changes and their potential ramifications:

- Extended Course Withdrawal Policy
- S/U Grading Policy
- Faculty Council Policy for approval of online and in-person delivery modes

Faculty Council Pandemic-driven Policy Approval
Changes to S/U and late/extended course "W" policies were made quickly with Executive Committee emergency approval of at least one and perhaps two requests on the recommendation of the policy review committee, and apparent endorsement/recommendation of the Office of the Provost and Executive Vice President. (See the Appendix for the dates of these decisions.)

The presiding body for the initial development of these policies was the Academic Policy Review Committee, formed by Vice Provost Kelly Long before the pandemic. This committee is NOT a standing committee of the Faculty Council but has run somewhat parallel to it, providing advice and recommendation. Formal responsibility for these policies is with the Committee on Teaching and Learning (Shawn Archibeque and Lumina Albert, co-chairs) and Committee on Scholastic Standards (Karen Barrett, then-Chair).

"W" Individual Course Withdrawal (Late Withdrawal)
The traditional deadline for course withdrawal was at the end of the eighth week of classes. In late Fall 2020 and Winter 2021, proposals emerged to offer students the option of an extended deadline to withdraw from a course up until the last day of classes, prior to final examinations. The Faculty Council agreed to move the individual course withdrawal deadline for full semester courses from Monday, Oct. 18, to Friday, Dec. 10 (last day of classes) for Fall 2021. In December 2021, Extended Withdrawal was permanently moved to the end of the 12th week of classes.

As part of the concern about continuity and recovery, TCRT reviewed several reports prepared by Heather Novak in Institutional Research, Planning and Effectiveness. The reports include information from Spring 2020 and Fall 2020 and the TCRT commissioned a follow-up report to review data through March 2022. An earlier IRPE report for SP20 can be found at this link.

Ongoing Challenge: Based on examination of the IRPE reports, TCRT observes the following:

- The extended course W deadline shifted the timing of a student's decision to withdrawal from a course.
- During the 2020-2022 pandemic timeframe:

- o The extended course W deadline increased the number of course withdrawals (from 3,754 in Fall 2018 to 6,628 in Fall 2021).
    - o The number of U, D and F grades also declined relative to the same timeframe, pre-pandemic.
- The late course W seemed to be linked to greater persistence in the short-term relative to the earlier withdrawal period and for no course withdrawal (see Table 1 from IRPE report).
- The number of enrollments in Credit Recovery Courses (CRC) courses declined in many courses, but increased overall due to the addition of new CRC (MATH).
- The impact of the late withdrawal policy on the number of students who fall below 12 credits/term (important for financial aid and some scholarships), longer-term persistence, and time to graduation is unknown.

TCRT agrees that employing an extended withdrawal policy results in a positive impact on retention and GPA, at least in the short term during a disruptive event like a pandemic. Some critical longer-term outcomes are not known. The impact of late withdrawal on full-time status and time to graduation (due to the loss of an opportunity to make up credits through Credit Recovery Courses) cannot be seen in the short term. For this reason, we recommend that the Provost ask IRPE to provide further, regular longitudinal studies of these policies.

TCRT recommends *that the Provost ask Institutional Research to provide yearly regular longitudinal studies of the impact of extended course withdrawal on persistence and time to graduation.*

S/U Grading
As an emergency measure in Spring 2020 and upon the recommendation of the TCRT in Fall 2020, CSU implemented an academic policy adjustment to allow students to switch any of their earned letter grades to a Satisfactory or Unsatisfactory grade (S/U grades) after semester grades posted.

An Institutional Research, Planning and Effectiveness report summarizes the SP20/FA20/SP21/SU21 correlations between the S/U grade option and course withdrawal extension with student success metrics as well as describing the students who use the S/U grading.

- In SP20 there were 4,377 students who took the S/U option for at least one of the courses (about 19% of the students who completed any credits); in FA20, the number was 4,107 (18%).
- Students who used S/U did so for about 45% of their total credits or about two courses (on average, students opted into the S/U option for 5.8 credits).
- IRPE concluded that the S/U option is positively correlated with persistence among students with GPAs below 2.0. However, longer-term impacts, such as impact on graduate school readiness, are unknown. The impact of these policies needs to continue to be tracked, but these data suggested that CSU should continue to offer these academic policies at least through the SP21 semester.
- There was no S/U grading for FA21 (other than the normal policy that requires the formal request) for either all undergraduate students (as in other pandemic semesters) or just new first-year students (proposed by Steve Dandaneau).

Ongoing Challenge: The Faculty Council Scholastic Standards Committee has realized that despite University efforts to communicate with students about the S/U grading option, many students in the probation process were unaware or did not take advantage of the option to get a U grade if they failed a course. The Registrar's Office reported approximately 5,000 F grades remain from Spring 2020, Fall

2020, Spring 2021, and Summer 2021. A proposal was made to automatically change grades from an F to a U in with the continued option for students to change grades from a U to an F upon request. This proposal was reviewed by a subset of deans representing the TCRT.

*TCRT does not recommend that the University automatically change F grades, although this has been endorsed by the Scholastic Standards Committee. We see potential for liability in changing grades without prior understanding and permission from individual students whose grades will be affected. We know at least one student population, those using Post-9/11 GI Bill education benefits, would be harmed by having F grades automatically changed to U. **We recommend** that appropriate staff and/or faculty reach out to affected students.*

Approval of Course Delivery Platform
Prior to and during early pandemic planning in 2020, Provost Miranda argued that separate approval processes for courses presented in online and in-person modalities were creating obstacles to online delivery. In April 2020, FC agreed to have one approval process for a course regardless of instructional format.

As a result, the burden for assuring content and quality across delivery platforms lies with departments, not the University Curriculum Committee as previously required. Faculty Council in February 2021 created a resolution arguing for a clear statement prior to registration each semester about the instructional format so students and their families would be able to make living arrangements based on whether students would be on campus or not. The Faculty Council action can be found at this link.

TCRT recommends that further understanding is needed to determine whether online and residential instruction courses are sufficiently different as to require different forms of approval. Discussion of these issues may need to be conducted more broadly than as a matter of curriculum review, since questions that have emerged during the pandemic extend well beyond what was imagined when the single approval process was approved in February 2021. These issues need further examination:

- *How are departments held responsible for the quality of F2F and online courses?*
- *Is there a difference between CSU Expanded Campus and RI online courses?*
- *Can RI faculty now teach their courses entirely remotely at their preference?*

Appendices

Timeline of S/U and late/extended course withdrawal:

- March 24, 2020 – Executive Committee discussed a move to S/U grading with former Provost Rick Miranda.
- about Nov. 20, 2020 – a meeting was held with CoSS, CoNTTF, CoTL, CoRSGE and others about S/U and W.
- Jan. 19, 2021 – Karen Barrett presented the FAIR group's recommendations to the Executive Committee. No action taken.
- Feb. 2, 2021 – Karen Barrett presented the FAIR group's recommendations to Faculty Council. No action taken.
- June 2021 – the CoSS 2020-2021 annual report mentions S/U grading and what the committee was doing to help students.
- June 2021 – the CoTL 2020-2021 annual report indicates that CoTL made recommendations to Kelly Long and Provost Pedersen about implications and benefits of S/U and late withdrawal.
- June 18, 2021 – Executive Committee is asked to approve late withdrawal for Fall 2021. EC approves.
- September 2021 – Faculty Council is notified of EC's approval of the late withdrawal and is provided with a written document by Sue Doe indicating concerns/comments and the vote.
- Oct. 19, 2021 – Executive Committee discusses the late withdrawal policy and approves it as a discussion item for the November Faculty Council meeting.
- Nov. 2, 2021 – Karen Barrett presents at Faculty Council meeting the justifications for the late withdrawal. No action taken.
- Nov. 16, 2021 – Karen Barrett sends a motion clarifying the changes to the policy to update for the late withdrawal recommendation.
- Nov. 30, 2021 – Executive Committee sees the official motion. It is approved for the December Faculty Council meeting agenda.
- Dec. 7, 2021 – Faculty Council approves the motion to permanently extend the course withdrawal deadline. It moves to Week 12 of the semester (or three-quarters through a shorter course period).

Institutional Research, Planning and Effectiveness completed a report that summarizes the SP20/FA20 correlations between the S/U grade option and course withdrawal extension with student success metrics as well as describing the students who use the S/U grading.

- The overall percentage of students who withdrew from a course or earned a D, F, U grade decreased by about a percentage point in pandemic terms compared to prior terms without these policy adjustments. Notably, course withdrawals did increase but the number of students earning a D, F, or U grade decreased at a greater amount (see figure 1 in the IRPE report).
- Nearly 1 out of 5 main campus undergraduates used the S/U option in at least one of their courses in either SP20 or FA20. Table 8 in the IRPE report shows that students who used S/U did so for about 45% of their total credits or about two courses (on average students opted into the S/U option for 5.8 credits).
- There is slightly higher (2 to 6 percentage points) representation of diverse populations among S/U users compared to the representation among students who did not use the S/U option. For instance, the largest percentage point difference in representation is in FA20 among racially

minoritized students: 31% of the main campus undergraduates who used the S/U grading in at least one course are racially minoritized compared to 25% of students who do not use S/U grading. These data are in Tables 5-7 of the IRPE report.

- There are also some differences in S/U usage by class level (Table 3) and major college (table 4). Seniors are less likely to use the S/U grading option and undeclared students as well as students with majors in WSJCOE and CNS are slightly more likely to use the S/U option.

- The biggest difference in S/U usage is among students who would have an unadjusted (without the S/U option) GPA less than 2.0. About 25% of the students who used S/U would have an GPA below 2.0 if they did not have the S/U option (compared to only 6% of the students who did not use the S/U option). Nearly all of the students who use the S/U option have an increase in their GPA (average increase is .6 of a grade point). Overall at CSU, students' GPA trended upwards during the pandemic (link to interactive report).

- Persistence to the following term is very similar for students who used the S/U option compared to students who did not and this holds at all time points. For instance, the percent of students among the FA19 cohort who persisted to FA20 (second fall persistence) is similar by SP20 S/U usage. Fourth spring persistence among the FA17 cohort – the percent that persist to SP21 – is similar across FA20 S/U usage (Table 10 in the IRPE report).

- Among students with a semester GPA less than 2.0, persistence to the subsequent term is considerably higher (by about 20 percentage points) for students who used the S/U option compared to those who do not use the option. Using the FA19 cohort as an example, second fall persistence for students with an unadjusted SP20 GPA below 2.0 is 73% for those who used S/U in SP20 and only 54% for those that did not. These data are shown in Table 11 of the IRPE report.

- Persistence trends for two subsequent semesters after S/U usage are similar to what we see with persistence to the immediate next term. There are no meaningful differences among the entire population (Table 12), but there are large positive differences for the S/U students when the analysis is limited to students with a term GPA below 2.0 in the S/U semester (Table 13).

Practices: Teaching and Learning

During the various phases of our COVID response, CSU supported student learning through intentional, collaborative, University-level faculty development and technological support. Instructors received significant help building skills through an array of workshops and training provided by TILT, CSU Expanded Campus, the Office of the Vice President for Diversity (now the Office of Inclusive Excellence) as well as peer-led opportunities at the college and unit levels. Intensive efforts in Spring and Summer 2020 set the foundations for a focus on scale and fine-tuning in 2021, allowing the University to feature workshops and trainings relevant across course delivery modes.

Moving forward we see a need for these efforts to continue. The Teaching Effectiveness Framework provides a mechanism for continuing professional development opportunities and perhaps to engage colleges directly in supporting specific disciplinary or college-level needs. Still, direction, guidance, and resources at the campus level will be needed to address the opportunities and concerns listed below and others as they arise.

Student Skill Building (digital and durable) and Academic Preparation
Based on TCRT conversations on this topic, the TILT instructional design team plans to develop a workshop offered in AY 2022-23 just before the Fall semester. The workshop will focus on assessing and building on prior learning. While it will be beneficial for individual faculty, the workshop will be particularly useful for departmental teams.

TILT will invite these teams to work collaboratively to review key concepts/skills being taught in courses in a sequence. Through this process, faculty will identify strengths and gaps and develop plans to address the latter. The workshop will include a focus on students coming from high school into CSU courses. The long-term plan is to use the workshop as a basis for building an additional 15-hour course on a related topic.

TCRT recommends *that the Provost s*upport and promote TILT Workshops on Student Skill Building.

Student Classroom Attendance
Student absenteeism from in-person classes developed as a significant concern during all phases of the evolving pandemic. The TCRT faculty survey conducted in Fall 2020 found that attendance waned over the course of the semester.

Although student surveys indicated strong support for an in-person experience on campus, the Fall 2020 survey found that 65.5% of faculty respondents teaching in-person and 73% of those teaching hybrid/hyflex courses reported at least "somewhat decreased" attendance and engagement. Significant declines in attendance were reported by 23.5% of in-person instructors and by 43% of those teaching hybrid. The TCRT did not survey in later semesters in a similar, robust way, but reports continued of declining attendance and engagement even as a higher percentage of courses came back to campus.

The TCRT regularly returned to discussions about students' attendance and classroom engagement over the course of the pandemic, usually at times late in the semester when pointed complaints from instructors were brought to the team's attention. The committee noted that a conundrum exists in current CSU policy: We tell students that they "should attend all classes for which they are registered to obtain maximum educational benefits. Absence or lateness does not excuse students from required course work" while there is no set attendance policy. Instead, "Instructors and departments are responsible for establishing class attendance policies."

It also came to the TCRT's attention that, because the pandemic disrupted the classroom environment, many students did not know that they could approach their instructors individually to address missed classes due to non-COVID illness or even inclement weather. These requests to make up classes were increasingly directed toward Central University offices and officials instead of being addressed individually by the student and instructor.

Short Term
We need to address the academic rationale for in-person attendance and develop policies and practices to support this rationale. There is a continuing national discussion about the pros and cons of attendance policies, summarized in recent reports by the Chronicle of Higher Education here. There is some evidence "...that stricter attendance policies are correlated with better attendance and that absences are negatively correlated with grades."

As noted above, attendance has been traditionally handled by individual faculty or departmental process at CSU. That approach provides both flexibility and great variation across campus that can produce confusion for students. It also means that faculty have few, if any, backups when students choose not to attend and, as the University of Oregon has recently put forward this adds stress for faculty too.

TCRT recommends re-establishing the Social Norming Workgroup for AY22-23, to reinforce the current CSU approach and explain why classroom attendance is important for academic success. This campaign should also be designed to assist students in knowing when and how to contact instructors when they NEED to miss class (snow, personal illness, etc.) and what to expect in reply.

Longer-Term View of Attendance and Engagement
In the longer term, CSU should begin to reconsider the necessity of "seat time" and encourage the development of hybrid/blended learning, where part of the instruction is asynchronous, and learning measured by demonstrated competencies. An influential review of prior empirical studies and other research have shown that achievement of learning outcomes is sometimes stronger in hybrid/blended courses than in either traditional face-to-face or fully online courses (Bernard et al., 2014; Schneider & Preckel, 2017; Means, Toyama, Murphy & Bakia, 2013; Means, Toyama, Murphy, Bakia, & Jones, 2009).

As some researchers have indicated, the crucial questions are less about which course delivery mode is most effective and more about what features of course design in each delivery mode facilitate stronger achievement of learning outcomes (Baepler, Walker & Driessen, 2014). Further, many students with marginalized identities reported during the pandemic that they felt more comfortable attending classes remotely because doing so reduced experiences of discrimination and isolation they had experienced at CSU as a predominantly white institution.

In pursuing hybrid/blended learning, the University would also need to rethink how the "credit hour" stands in for instructor workload or student learning. This rethinking might shift the focus from seat time to honing and assessing learning outcomes. Three crucial types of learning – robust, integrative, and self-regulated – are associated with a classic liberal arts education infused with deep disciplinary training (see this report's section on Place).

Focusing on how to promote all three types could benefit courses taught in all delivery modes (fully in-person, hybrid/blended, and fully online). This focus would encourage instructors and departments to integrate research-based course design and instructional approaches systematically throughout curricula.

Suggestions from Student Disability Center
These observations and suggestions were submitted by Justin Dove, Director of the Student Disability Center, at the start of Spring semester 2022. The TCRT has only briefly discussed them and sees merit in further consideration.

Accommodated Exams:

- Encouraging departments that have the space and capacity to administer their own exam accommodation. Faculty and department staff can always reach out to the specialist on the accommodation letter for support if they have questions on how to implement an exam accommodation.
- If the class has virtual exams, the faculty should be able to use Canvas and a proctoring platform to administer the exam instead of telling students with disabilities to come to the Student Disability Center. Faculty can add the extended time on their end. In addition, faculty can review how exams are formatted and create an exam in such a way that a proctor is not needed.
- Consider moving multiple choice, short answer exams into Canvas and using a proctoring platform that won't require additional space or a human proctor from the Student Disability Center.
- Here is a link for resources and support on how to administer exams: https://disabilitycenter.colostate.edu/fahb/providing-exam-accommodations/#Introduction.

Textbook Adoptions/Format of Materials:

- Whenever possible, faculty should take accessibility into consideration in choosing textbooks, adopting books that are in an inclusive format.
- Provide materials such as course syllabi and articles in an accessible format.
- Here is a link for resources and support on electronic accessibility: https://www.chhs.colostate.edu/atrc/electronic-accessibility/.
- Consider adopting open educational resource (OER) texts, which are free for students, or other affordable content, available to students at significantly reduced cost.

Use Universal Design for Learning in Courses:

- The Assistive Technology Resource Center (ATRC) and TILT offer great support in offering Universal Design for Learning tips to incrementally make a course more inclusive. When an instructor uses UDL, certain disability barriers are either addressed in advance or easier to accommodate because of the design.
- Here are links for resources and support from ATRC and TILT: https://www.chhs.colostate.edu/accessibility/ and https://tilt.colostate.edu/faculty.

Believe the Student and Feel Empowered to Accommodate/Make Changes in Courses:

- If a student discloses a disability to their instructor, that's significant and requires trust from the student. Believe them and discuss barriers they feel they encounter. Absolutely encourage the student to go to the Student Disability Center (SDC), if they have not already, to seek official accommodations.
- Instructors should feel empowered to make changes or accommodate in their course if they can see a barrier they feel they can address on their own. They don't have to wait for an accommodation letter to make changes or provide support for a student.
- Instructors should be aware that SDC staff are allies who are happy to collaborate by exploring ideas and/or providing support on how to accommodate students' disabilities.
- Even if the SDC has a wait list, instructors should encourage students to make an appointment. SDC staff will always strategize and figure out ways to get students into the SDC more quickly. SDC staff emphasize fairness in scheduling students. Students who are already on the SDC calendar get first priority when a new appointment time opens.

TCRT recommends identifying appropriate groups to consider each SDC recommendation above.

Preparing Pedagogies, Professional Development, Instructional Design for Traditional and Non-traditional Learners
Leveraging the pandemic's lessons can position CSU to equip graduates with both deep disciplinary training and the skills and values associated with a broad liberal arts/general education. This distinctive combination will make our programs compelling to prospective traditional-age students and enable us to develop certificate programs attractive to adult learners.

Prior research has shown that the three types of learning associated with such education (robust, integrative, and self-regulated) are fostered by experiential and active learning pedagogies. For example, a widely cited meta-analysis used an analogy to clinical trials of new pharmaceuticals to illustrate how to approach this work. When a new treatment reaches a threshold of effectiveness, the clinical trial is stopped, and the treatment is administered to controls in the study because withholding it is deemed unethical due to its efficacy (Freeman et al., 2014).

Active learning more than meets this threshold (Freeman et al., 2014). Experiential learning – undergraduate research, community-engaged learning, internships, etc. – have been shown by prior research to produce similarly strong learning gains (Rodenbusch SE et al., 2016; Rodrigo-Peiris et al., 2016; Indorf et al., 2019; Bandera & Brownell, 2017; Kalas & Raisinghani, 2019; Candela, 2017; CSU Chico Town Hall Meeting, nd; , Salvador, 2017; Mungo, 2017; Lockeman & Pelco, 2013; Beard, Mott, Burk, & Richard, nd.)

Research universities that combine a residential experience with strategic use of digital technologies are uniquely positioned to provide this distinctive form of higher education. To offer it, CSU will need to emphasize two aspects of the Courageous Strategic Transformation plan. First, the University should, as the CST advocates, grow opportunities for students to participate in undergraduate research and artistry, community-engaged (or service) learning, and other experiential learning endeavors. Next, CSU will need to prepare instructors to integrate experiential and active learning pedagogies systematically and intentionally throughout curricula and co-curricular experiences.

Such preparation will require providing all instructors with meaningful opportunities to learn, apply, and reflect on the outcomes of research-based approaches relevant to their particular disciplines and course types. While the logistics of implementation differ across course delivery modes (fully in-person, hybrid/blended, and fully online), the principles and larger approaches promoted by research on learning are consistent across delivery modes. Therefore, professional development in teaching should emphasize these shared principles and approaches while providing opportunities for instructors to learn, apply, and reflect on the logistical techniques associated with their courses' delivery mode(s).

TILT offers this type of professional development, most prominently via the Best Practices in Teaching Curriculum. This curriculum comprises 15 courses; 11 have been built and piloted. Participation was strong during the pandemic, and a proportion of faculty continue to complete courses. However, achieving widespread instructor participation will require incentivizing instructors to take part and ensuring that key reward systems, particularly annual and promotion and tenure reviews, appropriately recognize instructors for investing in such professional growth.

TCRT recommends *that the high-level campus committee recommended at the end of the Place section of this document consider the following questions/issues:*

- Whether/how to target instructional design support strategically to aid instructors in integrating experiential and active learning opportunities, particularly in foundational large-enrollment courses and other courses with high impact on student success.
- Whether to integrate undergraduate peer learning assistants in such courses to make adding active learning more feasible and effective.
- Whether/how to further encourage departments to use TILT's Teaching Effectiveness Framework resources for developing teaching effectiveness and/or comparable frameworks in both annual review and promotion and tenure review. Doing so would support faculty to take a research-based, evidence-informed, reflective approach to gradually improving teaching effectiveness by establishing and pursuing a meaningful, but manageable, teaching effectiveness goal each year.
- Whether/how to promote the Teaching Effectiveness Initiative and/or a comparable program. This initiative recognizes instructors who apply approaches gleaned in any substantive professional development in teaching offered in or outside CSU.

Spaces, Classrooms, Technology: Teaching and Learning

Promoting learning through improved classroom technology while developing instructors' ability to use that technology effectively proved to be a successful strategy throughout the evolving demands of the pandemic. CSU creatively and innovatively fostered a cadre of remote and hybrid learning environments. The numerous partnerships formed early in the pandemic among the Office of the Registrar, CSU Libraries, Division of IT, TILT, and CSU Online (now CSU Extended Campus) drove that success.

These partnerships brought together areas that had expertise with technology, pedagogy, classroom management, and other facets to develop new approaches for assisting in the institutions transition to remote and hybrid learning. Building on existing strengths and new capacities in both educational technologies and faculty development, CSU advanced many areas including classroom attendance applications, laptop loan programs, lecture capture expansion, faculty development in teaching across course delivery modes, creation of new online communication hubs (e.g., "Keep Teaching," "Keep Learning," and "Keep Working"), video streaming infrastructure, collaboration technologies, file sharing, and many others.

This section of the report provides an overview of activities in several key units and divisions, including:

- Facilities Management
- The Office of the Registrar
- Division of Information Technology
- The Institute for Learning and Teaching (TILT)
- Review of Assets Developed

This section ends with three areas for continued work and recommendation for the creation of a campus committee to address a list of challenges and opportunities.

Facilities Management Overview
Pride of place belongs to the dedicated personnel from Facilities Management who were the bedrock for the success of all academic programs during the pandemic. Using advice from Larimer County Public Health, Facilities developed protocols and practices to promote safe uses of campus spaces, from administrative offices and classrooms to public spaces. Especially during the early days of the pandemic when buildings were closed and largely empty, Facilities teams faced additional concerns for the protection of the physical plant (e.g., heating, water) and the safety of those few working in those spaces. Adjusting ventilation systems to facilitate more frequent air exchanges and to incorporate additional outside air was a key component of this work.

As the campus moved toward limited occupancy in Fall 2020, Facilities personnel faced challenges in measuring and adapting classroom and academic office spaces for social distancing as well as procuring and delivering adequate personal protective equipment. A list of their many activities is included as an Appendix to this section; it is clear to say that their long hours and steady professionalism allowed the rest of us build out plans in each of the other areas described below.

The personal protective equipment program was a partnership between Procurement and Central Receiving. Staff from Central Receiving and Emergency Management identified locations of all the PPE stations as well "enter only" and "exit only" on classroom with more than two doors. Central Receiving and Emergency Management delivered 180+ sanitization stations to all buildings with University faculty, staff, and students. Those two departments maintained and restocked the stations.

Emergency Management worked with Facilities to make sure buildings did not exceed the 50% occupancy required by public health guidelines. Staff discovered that, in fixed-seating lecture halls, using a six-foot diagonal measurement for social distancing provided additional seating. Swing-arm desks were straightforward with six-foot distancing from left to right and front and back.

Studio and laboratory spaces where students need to work in close proximity to each other were a challenge. An agreement was made with Larimer County Public Health to allow students to use both a face covering and a face shield for a short amount of time of time and then back to their six-foot distance.

The Office of the Registrar Overview
The Office of the Registrar (RO) closely collaborated with Facilities Management, academic departments/colleges and the Division of IT, to enable teaching continuity efforts. The RO supported campus through the pandemic in part by rewriting the class schedule for Fall 2020, Spring 2021 and Fall 2021. This work began in April 2020 as the University explored options for bringing students back to campus with social distancing in place. RO staff collaborated with colleagues across campus to explore large spaces that could accommodate six-foot social distancing. This resulted in moving classes to the Lory Student Center, Ammons Hall, and Morgan Library. Large enrollment sections with more than 85 students were moved online.

The RO prioritized on campus courses for graduating seniors; gateway and other courses that heavily affect progress to degree; courses for which specialized equipment, learning spaces, and in-person pedagogy was critical (e.g., labs and studios); and high DFW courses where student success depended on in-person instruction. RO also recommended using student rotations in a hybrid format by subdividing existing sections to accommodate six-foot social distancing requirements. This information was updated in the University class schedule so students were informed of how their classes would be taught (face-to-face, online, or hybrid). In addition to rewriting the class schedule, staff explored the impacts of changing registration dates and adjusting spring break to respond to public health guidelines. The RO also implemented policy changes including extended course withdrawal and S/U grading.

Facilitating student-elected S/U grading after final grades were posted was a significant challenge. To our knowledge, no other institution in the state allowed students to first see their grades then select S/U grading, all before financial aid Satisfactory Academic Progress process deadlines. The RO built a web-based tool that allowed students, after reviewing their final grades in RAMweb, to select S/U grading. Another functionality of the tool allowed the RO staff to mass process the grade changes to the student information system Banner, rather than changing one at a time. This innovative process helped students

to make well-informed decisions while still supporting critical financial aid timelines to keep enrollment operations moving forward. This was complete and in place by May 2020.

A major lesson learned was that CSU did not have software solutions in place to allow us to easily pivot and take a different direction in how we offered courses in response to the pandemic. All the class schedule rewrites were entirely manual efforts with person-driven data analysis. CSU is in the process of acquiring a software solution (CourseLeaf CLSS) that will allow us to be more nimble in response to future emergencies without relying so heavily upon a few select team members.

The Office of the Registrar also engaged in web development efforts to support the changes in how we used spaces to support teaching and learning at CSU. One significant effort was to redevelop students' weekly class schedules in RAMweb. Students' classes were separated into face-to-face, hybrid and online groupings. There were both text and visual cues to help students understand the instructional formats of their classes, and therefore when and where to attend in person.

Another significant development effort was the creation of the online seating chart tool. Early in the pandemic, it was critical to identify close classroom contacts for testing and quarantining purposes. We leveraged section enrollment and instructor data in Banner paired with PDF seating charts created by Facilities. The online solution delivered in ARIESweb allowed instructors to assign students to seats in the classroom. Contact tracers then used the tool to identify students sitting in close proximity to a student who had tested positive for COVID. This tool was developed in Fall 2020 (when CSU's initial attempt at handwritten seating charts failed) and used during Spring 2021.

Division of Information Technology Overview
Throughout 2020-2022, the Division of IT acted as a hub to bring people together and collaborate with many campus stakeholders to create new classroom applications, upgrade and expand classroom technologies to over 140 new classrooms, provide infrastructure to supply technology to areas in need, and provide robust collaboration tools (Microsoft Teams and Zoom). To date, the University has spent nearly $700,000 on these faculty technology support offerings including 1.5 FTE for the ongoing environment.

The Institute for Learning and Teaching (TILT) Overview
TILT supported faculty by providing extensive professional development trainings in teaching hybrid or 100% online modalities. Demonstrating a deep commitment to student success, some 420 instructors completed at least one full TILT course; 980 completed a webinar or workshop; and more than 100 faculty attended trainings for Canvas (the University's learning management system with tools to enhance learning and teaching) and Echo360 (platform for video- based learning in higher education).

Overall, our faculty logged 14,773 professional development hours directly devoted to improving their teaching to meet student needs during the pandemic. Faculty development emphasized key principles that cut across all course delivery modes, as well as tactical approaches associated with each mode (fully online, hybrid, and face-to-face). As a result, CSU faculty have strengthened teaching effectiveness in all delivery modes.

Assets Developed During the Pandemic
The activities of the units described above resulted in the creation or extension of several academic tools and assets. These have the potential to advance our mission of excellence and we provide this list to promote their use.

- Lecture capture (Echo360) is now in upwards of 180 classrooms across campus and each semester the campus continues to increase faculty trainings on the equipment and process. Usage of lecture capture by students continues to increase as it improves accessibility, enhances studying, etc.
- The Canvas learning management system can now provide additional analytics about how many faculty/students are using the platform. Coordinating with stakeholders across the institution, we are able to see usage patterns and relay those to Academic Success Coordinators to be coupled with early intervention strategies. .A foundational reporting structure was created and can now be deployed at various points throughout the semester in a quick and easy-to-use manner.
- New video, collaboration, and communications tools became important to the delivery of synchronous and asynchronous learning efforts. Microsoft Teams, Zoom, Canvas plug-ins, and Microsoft O365 environments allowed faculty the choice in platform delivery to reach students, teach courses, and encourage collaboration in new ways.
- Coordinated by TILT, faculty shared strategies via webinars and short videos for using these platforms to engage students in active learning
- Communication through Canvas (pre- and post-login) showcased a new way to directly reach students and faculty through a heavily used online hub. This platform can be used for highlighting announcements to students, and others, during key times throughout the semester.
- To support new technology-enhanced environments, TILT and others have developed several training resources, including:
  - Instructional Technology for Teaching Modalities: https://canvas.colostate.edu/keepteaching/instructional-technology-for-teaching-modalities/
  - Semester Ramp-Up Video Resources: https://tilt.colostat.edu/ProDev/RampUpVideos
  - Faculty: Get Started with Echo 360: https://wsnet2.colostate.edu/cwis24/echo/echohelp/Get-Started.aspx
  - Comprehensive Echo 360 Help: https://wsnet2.colostate.edu/cwis24/echo/echohelp/
  - Teaching Resources for All Delivery Modes: https://tilt.colostate.edu/wp/teaching-resources-for-all-delivery-modes/
- Laptop loans through the Libraries were expanded to 270 and for up to one year following the move to online courses. During the 2019-2020 academic year, prior to the pandemic, the Libraries loaned 22,296 laptops to students for up to seven days; between April 1, 2020, and Sept. 1, 2021, 5,961 long-term laptop loans were made to students. Information on laptop and other technology resources across the University was also collated with support from the Division of IT, College IT directors, and Office of Financial Aid: https://lib.colostate.edu/services/borrow-renew/borrowing-laptops/
- The Seating Chart Tool, developed in Fall 2020 for implementation in Spring 2021, though promising for classroom management, was discontinued.
- The S/U Grade Change Tool, developed and implemented for Spring 2020, Fall 2020, Spring 2021 and Summer 2021 served its purpose and has been decommissioned.
- The changes to students' Weekly Class Schedule in RAMweb, identifying instructional format, remain in production.

TCRT recommends *that the Provost charge a cross-functional subcommittee composed of IT, academic administrators, faculty, and TILT staff to examine the following three areas related to space:*

1. **Define and promote specific strategies, resources and training related to teaching with technology and or lecture capture ecosystem.**
   a) Our campus lecture capture strategy will need to be revisited within the next 12 months. During the pandemic, CSU Expanded Campus expanded the use of Kaltura while the rest of campus moved forward with an extension of the Echo360 contract. The Echo360 contract will expire in 2023 creating the opportunity for re-evaluation and standardization. The University can take this opportunity to make a more seamless environment for faculty and students. It is important to note that there are at least three issues to consider: licensing, classroom infrastructure, and the pedagogical tools provided, particularly tools supporting interaction with video content, e.g., the capacity to embed questions that students must answer before watching the rest of a video.
   b) Given the expansion of the lecture capture environment, and the investment made in classrooms, thought will need to be given to sustaining the cyclical replacement of this equipment.
   c) How can CSU continue to emphasize training and encouragement of faculty members to leverage educational technology and lecture capture in their courses? This can be a competitive advantage for the University.
   d) Enhance the student user experience and focus students' attention on learning course content rather than mastering a range of technology platforms. How can IT work with faculty to standardize technology platforms, applications, etc. to ensure that students have a common experience across courses and colleges?
2. **Define and refine the role learning technology plays in the institutional mission going forward.**
   a) How does the University help people understand what it means to be a residential instruction institution that also enables learning opportunities through hybrid and distance learning (CSU Extended Campus)?
   b) How can faculty effectively engage students and promote cognitive development in each delivery mode? How can CSU achieve the best mix of delivery modes to maintain a robust student presence on campus?
      1. Many students desire to have lectures recorded, and that can be a good review tool.
      2. It also troubles faculty if students see it as a way to not attend class.
      3. How does hybrid delivery impact attendance and how does it help students review and prepare? For instance, could reviewing a recorded lecture count for attendance? Might the use of engaged learning activities or other interactive components during class time determine whether viewing a recorded lecture would fulfill an attendance requirement? If viewing a recorded lecture is deemed to fulfill an attendance requirement, how will viewing be verified, given that currently the technology can show whether a video was played but not whether it was viewed?
3. **Classroom usage, physical support spaces, need for renovations and new construction**
   a) What is the future of learning spaces and classrooms? Do we need as many large lecture classrooms, for example? Could we leverage technology such that in-class time is focused on active learning? If so, can we increase the number of large-enrollment classrooms suited to active learning? (Currently, Johnson Hall 222 is the best/only

example.) How can we leverage technology to enhance classrooms in ways that increase learning?

b) How do hybrid, asynchronous, and remote instruction impact number of physical classrooms needed and hours of peak demand? Should course offerings be spread over a larger number of hours during the day, offering more sections in the evening? Or might hybrid delivery be used to serve twice the number of class sections with the same physical classroom space? What role do different instructional formats play in those decisions?

c) What technologies are needed in classrooms to support hybrid and virtual spaces, for example, lecture capture, classroom response systems, video capabilities, etc.

d) What technologies are needed in administrative offices (e.g., Office of the Registrar) to analyze, assess and schedule physical classroom spaces?

e) How does redefinition of classroom engagement impact faculty workspaces, offices, residence halls?

Useful Sources Related to Classroom/Academic Spaces

Gorzelsky, G. (n.p. 2022) "HyFlex / BlendFlex Abbreviated Literature Review." https://tilt.colostate.edu/ProDev/PDFs/HyFlexImpactLitReview.pdf

Brame, C. (2013). Flipping the classroom. Vanderbilt University Center for Teaching. Retrieved December 9, 2021 from http://cft.vanderbilt.edu/guides-sub-pages/flipping-the-classroom/

Curtin, R. "Reimagining Higher Education: The Post-Covid Classroom." Educause (April 6, 2021). Retrieved December 9, 2021 https://er.educause.edu/articles/2021/4/reimagining-higher-education-the-post-covid-classroom

Stanford Classrooms Reimagined. https://lts.stanford.edu/classrooms/stanford-classrooms-reimagined

Appendix: Catalog of Guidelines, Protocols, Practices Develop by Facilities Management

Cleaning Protocols

- All custodial cleaning practices followed CDC guidelines and protocols, including using EPA-approved disinfectants against COVID-19 and personal protective equipment.
- All custodial staff have been trained in CDC-approved protocols and provided appropriate equipment.
- Custodial staff practiced social distancing, wearing facial coverings, and following proper prevention hygiene, such as washing hands frequently and using alcohol-based (at least 60% alcohol) hand sanitizer when soap and water were not available.
- Staff will be cleaning and disinfecting all high-touch surfaces in public areas daily, including tables, chairs, doors, handrails, light switches, countertops, toilets/sinks, etc. Facilities Management will not clean keyboards, touchscreens or any electronic equipment; users and instructors are responsible for cleaning before and after use.
- Custodial staff are cleaning all horizontal and vertical surfaces daily in elevators, classrooms, conference rooms, entrances/lobbies, restrooms and lounges. Facilities Management staff will only clean exterior surfaces of appliances, including microwaves, refrigerators, toaster ovens, etc. Departments are responsible for interior appliance cleaning.
- Per CDC guidelines, staff will not spray disinfectant on sidewalks or other outdoor areas as it is not an efficient use of disinfectant supplies and has not been proven to reduce the risk of COVID-19 to the public.
- If a room has been determined to have been exposed to someone with COVID-19, the room will not be accessed by custodial staff for 24 hours, after which the room will be thoroughly cleaned and disinfected per CDC and public health guidelines.

Air Quality

- Facilities Management will be following American Society of Heating, Refrigerating and Air-Conditioning Engineers guidance and meeting building code requirements for healthy indoor air.
- Ventilation systems are operated to flush all the air in a building a minimum period of two hours prior to the start of each day, and for two hours at the completion of each day.
- Filtration efficiency in existing ventilation systems was increased on a temporary basis during the pandemic. This involves applying the highest Minimum Efficiency Reporting Value air filters applicable for the building ventilation system, and in specific situations, using High Efficiency Particulate Air units in the classroom.

Accessing Disinfecting Supplies

- Approved disinfectant and wipes will be available for use by students and employees in all offices and classrooms.

Water Modifications

- Unoccupied and sparsely occupied buildings across the West, Main, Foothills, and South Campuses resulted in significantly lower water usage. Lower water usage can be directly correlated to lower chlorine levels in the water systems.

- CSU's Certified Water Operators (CSU-CWO) team evaluated the situation, assessed the potential risks, and developed a plan to ensure chlorine levels were adequate to maintain high quality drinking water.
- The team has been conducting intense monitoring of building drinking water quality throughout the pandemic.

Chlorine Testing and Flushing

- CSU Certified Water Operators, Environmental Health Services (EHS) Water Quality Laboratory microbiologists, and trades staff from Housing and Dining Services (HDS) began by spot-checking over 100 buildings in early 2020 to establish baseline chlorine concentrations.
- Chlorine testing occurs regularly at CSU. Pre-pandemic testing levels were around 40 per month. During the pandemic, testing was increased by about 400%. The team has conducted thousands of tests.
- Approximately one dozen CSU buildings were posted with bilingual signage "Drinking Water Temporarily Out of Service" in the early stages of the pandemic. The signage was approved by the CSU Pandemic Preparedness Team (PPT).
- The CSU-CWO team, along with support from Facilities Management custodians and plumbers, consistently flushed water fixtures on a regular basis to maintain high-quality drinking water.
- Facilities staff analyzes water usage in buildings through our metering systems and looks at historical chlorine-level data and the current occupancy in buildings to aid in decision making.

Classroom and Class Lab

- With six-foot distancing, classrooms were decreased in capacity by two-thirds, and conference rooms, ballrooms and other types of meeting rooms were turned into classrooms to meet needs for in-person instruction.
- Six-foot distancing protocols for seating were developed by creating furniture layouts of each room.
- Furniture was removed and tape on the floor marked the location of each seat.
- Auditorium classrooms seats were signed and taped off to create six-foot distances.
- Using the furniture layouts, digital seating charts developed linking a student to a seat for contact tracing.
- Signage indicating direction of flow in and out of classrooms and buildings were added to each door.
- Teaching spaces were outfitted with sanitizing stations (disinfecting wipes and hand sanitizer).
- Each station has a QR code that can be scanned to report the need for refilling.
- Storage containers were leased to store the furniture removed from classrooms.

Public and Study Spaces

- Furniture was rearranged or moved to create six-foot distancing.
- Signage was affixed to furniture to create needed distance on benches, couches, and picnic tables.
- Campus map of study area and study rooms was created and posted to CSU websites.

Place and Sense of Community: Value of the Residential Instruction Campus
What is the value proposition of a residential campus?

Place Matters

Our physical, built environment and campus culture provide students, faculty, and staff with a number of factors that set them up for both short-term and long-term success. Our present buildings and campus grounds represent an enormous investment. We need to reassert the value we see in bringing students, faculty, staff, and the community together physically, both for classroom and co-curricular learning, while raising crucial questions that will help us to define this value, broaden access to it, and support all students' success in achieving it.

Access Matters

As a 21-century land-grant institution, our mission is to provide access to students from diverse backgrounds and geographies. Robust learning happens on campus and also happens when we use technology effectively to reach students who cannot be served through a traditional residential experience. The pandemic accelerated our already significant investments in technology, infrastructure, expertise, and training related to online, distance, and hybrid delivery systems.

Valuing Place and Access

Starting from this understanding, reaffirmation, and expansion of our central mission for residential instruction and informed by the strategic imperatives identified in the Courageous Strategic Transformation ensuring student access, affordability, and a commitment to *all* learners, we can then work outward to consider needs for physical classrooms (size, scheduling), how to equip those spaces, and needs for in-person staffing. Most importantly, this would focus on making intentional, well-informed decisions about when instructors can and ought to reach students through in-person and online modalities, as well as the technology and professional development supports needed for them. Our vision for residential education and any revisions to a teleworking policy should be built on this understanding.

We should build a *campus value proposition* that may look like this:

> Colorado State University affirms the value of its residential community of scholars, focused on the in-person teaching, research, and engagement of our students, faculty, and staff. We invest in our physical campus in ways that foster learning through the curricula of our academic programs and in experiences outside the formal classroom. We understand that the built environment offers distinctive and necessary spaces that enable CSU to provide a culture of connection through personal relationships, collaboration through social learning, exchanging

perspectives with peers of diverse identities, and creativity through a respect for diverse talents and ways of learning.

At the same time, as a modern land-grant institution, we also value our access mission and the ability we have to support learning for individuals in communities and circumstances that do not permit residential learning. We also understand that technology affords access through online, distance and hybrid opportunities, and that these too can be harnessed to build community, collaboration, and exchanging of ideas. The vision that we endorse includes a commitment to both, with the proposition that the same care and intention underlies all modes of delivery, and that neither is used as convenience, but rather, as the optimal mode of delivery for the particular circumstance.

We suggest that the lessons learned during 2020-2022 can help us to successfully address key challenges we face in the coming decade: the demographic cliff, competition from for-profit and employer-based programs, and public skepticism regarding the value of higher education.

TCRT recommends *the formation of a high-level campus committee with representation from faculty, administrators (deans, chairs/heads), and Faculty Council members to consider the issues listed below.*

We also suggest the Provost serve as the executive sponsor for the committee, with guidance of the group delegated to one to three deans or members of the Executive Leadership Team, who will be responsible for integrating this group's work with that of CSU's Academic Master Plan process and Student Success efforts. This group should consider the following questions/issues:

- What does it mean to be a residential campus that effectively leverages digital technologies and experiential and active learning pedagogies to optimize learning for all students?
- How can we promote the intentional, systematic, effective use of experiential and active learning pedagogies and digital technologies to achieve this goal?
- How are completely online programs, designed to extend access to the campus, integrated synchronously with residential programs?
- How much remote/online/hybrid/in-person instruction? When? Why – to support what strategic goals?
- How – based on what structural and faculty development support? (See Pedagogies subsection of Practices section of this report.)

We also suggest the Provost convene a group of department chairs, staff, deans, and representation from HR to consider pros and cons of our Teleworking Policy and develop a new, workable, equitable solution:

- How do we clarify teleworking expectations for faculty in a residential campus, wherein we expect in-person student-facing courses, advising, and co-curricular experiences, and we support access through technology?
- When will we transition to a more permanent policy?
- What does this mean for faculty compared to staff? How does it affect office hours, office space, and faculty and staff interactions?
- Can we still keep teleworking temporary at least until next year?
- How can we clarify the roles of teachers as different from other employee/staff roles across campus and make it equitable?

- Who must be on campus, when, how often, etc.?
  - We must have in-person student-facing advising and classes with remote options for advising, counseling, conflict resolution and other meetings.
  - We can have hybrid but need in-person too.

Bibliography for the Residential Campus

Purdy, C. and Johnson, D. "What Can the Retreat From Campus Teach Us About the Value of Place?" SmithGroup (April 28, 2020). https://www.smithgroup.com/perspectives/2020/what-can-the-retreat-from-campus-teach-us-about-the-value-of-place

Barry, K. and Wigert, B. "Going Back to Work in the Office: It Has to Be Worth It." Gallup Workplace (May 17, 2021). https://www.gallup.com/workplace/349772/going-back-work-office-worth.aspx

Nitkin, David. "Radically Remaking the Future of Higher Education Post COVID." EthicScan (Nov. 9, 2020) https://ethicscan.ca/blog/2020/11/09/radically-remaking-the-future-of-higher-education-post-covid/

Summary: TCRT Recommendations

The following is a summary of recommendations by the Teaching Continuity and Recovery Team based on the sections and themes above: *policies, practices, spaces, and places*.

Policies: Expectations as We Approach the Post-Pandemic Era

- TCRT recommends that the Provost ask Institutional Research, Planning and Effectiveness to provide further, regular longitudinal studies of the impact of late withdrawal on credit recovery and time-to-graduation.

- TCRT does not recommend that the University automatically change F grades, although this has been endorsed by the Scholastic Standards Committee. We see potential for liability in changing grades without prior understanding and permission from individual students whose grades will be affected. We recommend that appropriate staff and/or faculty reach out to impacted students.

- TCRT recommends that further understanding is needed to determine whether online and residential instruction courses are sufficiently different as to require different forms of approval.

Practices: Teaching and Learning

- TCRT recommends continuing to offer professional development opportunities that were established during pandemic.

- TCRT recommends addressing the academic rationale for in-person attendance, develop policies and practices to support this rationale.

- TCRT recommends re-establishing the Social Norming Workgroup to reinforce the current CSU approach and explain why classroom attendance is important for academic success.

- TCRT recommends identifying appropriate groups to consider each recommendation by the Student Disabilities Center described in this report.

- TCRT recommends that the Provost ask Institutional Research, Planning and Effectiveness to provide regular and longitudinal assessments of learning similarities and differences between fully online, hybrid, and fully in-person instruction and disaggregated data for student demographics.

Spaces, Classrooms, Technology: Teaching and Learning

- TCRT recommends that the Provost charge a cross-functional subcommittee composed of IT, academic administrators, faculty, TILT, and Student Affairs staff to examine:

    o How to help people understand what it means to be a residential instruction institution that also enables learning opportunities through hybrid and distance (CSU Expanded Campus)?

    o How do changes in delivery mode impact student engagement, presence on campus, and cognitive approaches to learning?

Place and Sense of Community: Value of the Residential Instruction Campus

- TCRT recommends CSU articulate a campus value proposition and align this with key objectives in the high-level blueprint of Courageous Strategic Transformation: The Colorado State University 2022-2026 Strategic Plan. Those objectives and priorities include: "Cultivating a Thriving and Inclusive Community" where "Everyone Belongs."

- TCRT recommends CSU intentionally address how our recent experience with remote learning and teleworking allow us to add to and strengthen our residential model.

- TCRT recommends CSU form a high-level campus committee with representation from faculty, academic administrators (i.e., deans, chairs/heads), non-academic administrators (e.g., Student Affairs), and Faculty Council members to consider:
    o What does it mean to be a residential campus?
    o How do we synergize our mission as a residential campus with our imperative to provide access to students from diverse backgrounds, circumstances, and geographies?
    o How do we envision staffing and opportunities for teleworking?

Rev. April 20, 2022

Acknowledgments
by Dean Ben Withers,
2022 TCRT Chairperson

Who really knew what we were getting into back in March 2020? For their willingness to take on the unknown, I express my deep gratitude and respect for the members of the Teaching Continuity and Recovery Team for their dedication. Here now in early Spring 2022, they have spent many hours over several weeks assisting to prepare this report for the Provost and Executive Vice President. This report and the work it details would not have been possible without them.

In addition to the incredible contributions of each member of the TCRT, I acknowledge the contributions of Gwen Gorzelsky, Brandon Bernier, Julia Murphey and D. Tobiassen Baitinger, Kristi Buffington and Ken Quintana, Sue Doe, and Jody Donovan for drafting and reviewing key sections. Though not on TCRT, Kathy Sisneros, Justin Dove and Dean Karen Estlund also provided input. My most special thanks go to Deans Jan Nerger, Mary Stromberger, Beth Walker and Lise Youngblade. Meeting every day for nearly six months gives one a good sense of who people really are; their leadership in assessing and advising the best path forward as we navigated many turns, and their dedication to CSU is reflected in the goals and direction of this report.

On behalf of the TCRT, I would like to offer our sincere appreciation to Vice Provost for Undergraduate Affairs Kelly Long. She showed great leadership in setting the course and direction of the TCRT at the onset of the pandemic, and she guided us with calm and wisdom through some of the most difficult challenges we faced as a team, and that the University faced as an institution of higher education.

And, to Provost Mary Pedersen and former Provost Rick Miranda who anchored our work through their leadership and knowledge of the University, thanks for having faith and confidence in us to get the job done.

Finally, I would like to thank Associate Vice Provost Pam Jackson for her ongoing communications support of the TCRT and help in preparing this report, and *CSU Magazine* Executive Editor Kate Jeracki for her time in copy editing it with such care and keen expertise that its presentation rises to the caliber of the contributions the report reflects.