Abstract
This Report details Pamplin’s Online Task Force Findings and Recommendations for Online Learning.

I would like to thank task force members for their hard work and dedication to enhancing student learning and faculty success this fall.

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Executive Summary
The spread of COVID-19 required the conversion of courses from face-to-face to online delivery during the spring semester of 2020. With uncertainty about whether face-to-face classes will be possible this fall, or to what extent, Dean Sumichrast authorized the creation of an online learning task force to examine the challenges and opportunities facing the college and to develop recommendations to help expand and enhance the effectiveness of the college’s online learning efforts. The task force was composed of 18 faculty and student volunteers with experience in online education or instructional design from individuals recommended by the college’s deans and department heads. The task force also included Pamplin’s Director of IT, the Director of the Center for Excellence in Teaching and Learning (CETL) and the Executive Director of Technology-enhanced Learning and Online Strategies (TLOS). The task force was formed April 15th and completed its sprint and offered recommendations in Town Hall meeting on Wednesday, May 6th.

Guided by the “80/20 rule”, the task force sought to identify a limited number of recommendations that could substantively improve the quality of online education offered in Pamplin for this summer and fall. Discussions built on the expertise of task force members, supplemented by reviews of the online learning literature and surveys of Pamplin faculty and students. These discussions produced the following insights about online learning and its current deployment in Pamplin:

- **Student reactions to the rapid conversion of Spring 2020 classes from face-to-face to online instruction produced mixed results which faculty can use to guide course modifications for the fall**
- **It is unlikely that the uncertainty about face-to-face classes this fall will be resolved soon**
- **Faculty are at different points in their journey to develop expertise in creating and delivering online learning, suggesting solutions customized to individual faculty will be most useful**
- **Everyone is learning how to adjust. Students as well as faculty are learning how to function in online classes**
- **The university has excellent resources to support developing and delivering online learning education (e.g., CETL, TLOS)—we do not need to duplicate these efforts**

Strategic Recommendations
These insights and task force discussions led to the development of a series of strategic recommendations offered to faculty as they prepare their courses for the summer and fall of 2020. The first type of recommendations offer conceptual guidance for how to approach course design. These include:

- **Build your courses to be taught online**
  - Given the uncertainty about social distancing for the fall, we advise all faculty to build their courses so they can deliver them online. Courses designed for online delivery can be flexed to incorporate face-to-face elements more effectively than flexing face-to-face elements to online delivery
  - Build all courses in Canvas. Doing so provides a common navigation structure for students, provides common communication and access tools, and aids continuity of instruction if a faculty member is ill.

- **Show your students you “care” about them:**
  - Complete and publish Canvas sites at least two days before the course begins
  - Demonstrate competence in the tools you choose to use in your courses
  - Limit changes to graded assignments and due dates during the course

- **Create engagement to enhance positive student experience:**
  - Create logically organized and easily navigable Canvas Sites
  - Provide ongoing communication with students before and during the course
• Build in opportunities for faculty-student and peer-to-peer student engagement

- **Good pedagogical practice is the same for online and face-to-face education**
  - Many of the recommendations for creating good online instruction are the same recommendations used to guide the development of effective face-to-face instruction (e.g., start with the learning objectives).

- **Assess for success while fostering academic integrity**
  - Respondus with Monitor is available to lock down web browsers during online exams, but its use increases student anxiety and may signal we do not trust them.
  - Replace big high-stakes exams (>25% of course grade) with several smaller low-stakes authentic assessments that build knowledge and skills progressively.
  - Peer-to-peer learning is a powerful pedagogical tool. Encourage students to work with and help each other on activities, but provide clear instructions when it is appropriate to do so in your course.
  - Focus assessments on “doing” learning objectives using activities (e.g., papers, projects, posters, case analyses, worked problems) graded with rubrics.

• **Focus**
  - Focus on the course learning objectives—the student outcomes—instead of specific activities. You may not need to convert everything currently in your course to online. Think about how best to help student learn by combining face-to-face and online tools.
  - Do not try to do too much. Focus on applying a few new approaches well. Online learning offers several new and potentially useful tools, but trying too much and executing is poorly can backfire.

• **Ask for Help**
  - There are many faculty in the college who are thoughtful instructional designers with experience online. They are great resources if you want to “kick around” new ideas about how to take courses online.
  - CETL and TLOS have people with expertise in instructional design for online course delivery and the supporting technologies. They are here to help you. Use them.

**Tactical Recommendations and Resources**

The second set of recommendations reflect specific tactical recommendations to faculty. These recommendations are available in Canvas site called “Pamplin Online Learning” ([https://canvas.vt.edu/courses/112922](https://canvas.vt.edu/courses/112922)). All faculty are participants in course. The Canvas site organizes task force recommendations according to: (1) The course design feature it influences and (2) the specific student challenge a faculty member may wish to try to overcome. For each recommendation the task force provides: (a) A brief description of the recommendation, (b) an example of its use, (c) a discussion of when this recommendation may be useful and why, (d) guidance on how to implement the recommendation, and (e) the name of someone in the college to contact who can talk about that recommendation. If you do not have access, please contact Jean Lacoste lacoste@vt.edu. The Canvas site also includes:

- An archive of online learning resources identified by task force members
- Links to templates that can be used to create additional tactical recommendations
- Templates for Canvas course sites that offer useful examples of good organization and course navigation
- Links to the web pages for CETL and TLOS

In addition to course design recommendations, three structural recommendations to support online learning are offered to college administrators. These include:

- Create a college-level adhoc committee to continue the work of the task force to promote excellence in online learning and student learning generally.
- Create positions for one or more instructional designers in the college to support faculty and to coordinate with CETL and TLOS. These could be full or part-time faculty experts given course releases to provide this support.
- Look for ways to use upper-level undergraduate students to provide support for enhanced collaborative and experiential activities and student communication for undergraduate classes offered during 20-21.
Online Learning Task Force Report

Task Force Charge
COVID-19 required the conversion of face-to-face to online classes during the spring semester of 2020. With uncertainty about whether face-to-face classes will be possible this fall, or to what extent, Dean Sumichrast authorized the creation of an online learning task force to examine the challenges and opportunities facing the college and to develop recommendations. Associate Dean Kevin Carlson volunteered to lead the task force.

Formation of the Task Force
The first step in creating the online learning task force was to make requests of each department head for the name of a faculty member who was experienced in online learning or instructional design. In addition, a request for nominations for student members was sent to the Associate Deans for Undergraduate and Graduate programs. Nine faculty names were received and seven student names (five undergraduate and two graduate students). Upon receiving these nominations, each individual received an email inviting them to join the task force. Of the initial 17 individuals invited, 15 accepted the invitation. In addition, invitations to join the task force were made to Jim Dickhans, Pamplin IT Director, Kim Filer, Director of the Center for Excellence in Teaching and Learning (CETL) and Associate Vice Provost for Teaching and Learning and Dale Pike, Director of Technology-Enhanced Learning and Online Strategies (TLOS), who each agreed to participate on the task force. In addition, Associate Deans Lara Khansa and Kevin Carlson participated. Bryanna Meredith provided administrative support. While the task force was operating, an additional faculty member volunteered. We provide a list of the full membership of the Task Force here:

- Nicholas Brown, PhD Student, Business Information Technology
- Kevin Carlson, Associate Dean for Research and Faculty Affairs
- Brian Collins, Department of Marketing
- Joshua Del Rosario, UG Student, Department of Accounting and Information Systems
- Jim Dickhans, Director of IT, Pamplin College of Business
- John Easterwood, Department of Finance, Insurance and Business Law
- Jonathan Everett, Center for Excellence in Real Estate
- Kim Filer, Director of CETL and Associate Vice Provost for Teaching and Learning
- Howard Haines, APEX Center for Entrepreneurs
- Barbara Hoopes, Department of Business Information Technology
- Lara Khansa, Associate Dean for Undergraduate Programs
- Jean Lacoste, Department of Accounting and Information Systems
- Kristin Lamoureaux, Department of Hospitality and Tourism Management
- Bryanna Meredith, Administrative Assistant, Office of the Dean
- Quinton Nottingham, Department of Business Information Technology
- Dale Pike, Director of Technology-Enhanced Learning and Online Strategies
- Sarah Shelton, UG Student, Department of Marketing
- Jacob Shortt, Department of Accounting and Information Systems
- Paul Speshock, MBA Student
- Rachitha Tholasi, UG Student, Department of Business Information Technology
- David Townsend, Department of Management
- Luke Voivoda, UG Student, Department of Management

Operation of the Task Force
The task force organized its work as a “sprint”—an attempt to create as much value as possible over a short period of concentrated effort. The task force was formed on April 15th and conducted its first meeting on Thursday April 16th. The task force met twice each week for the next two weeks (Tuesdays and Thursdays). Two additional meetings were
scheduled on Friday, May 1st and Monday, May 4th. The task force ended with the presentation of an online Town Hall meeting presentation to faculty on Wednesday, May 6th from 9:00-10:00 am.

Prior to each meeting, task force members completed a common data-generating task. Each task force member had access to this information prior to each meeting, creating a foundation for discussion. The agenda, task, and minutes of each task force meeting are included in the appendix.

Insights into Online Learning Heading into Summer and Fall 2020
Guided by the “80/20 rule”, the task force sought to understand the current state of online learning in Pamplin and to identify a limited number of recommendations the task agreed could substantively improve the quality of online education. Discussions built on the expertise of task force members, supplemented by reviews of the literature, and surveys of Pamplin faculty and students conducted within several of the departments. These discussions produced the following insights about online learning and its current deployment in Pamplin:

Student Reactions to the Spring Course Conversions were Mixed
Student comments suggest that the conversion of courses from face-to-face during the spring semester produced mixed results. In some cases, anecdotally around 40% of students’ courses, the results of the conversions were very good. Faculty communicated effectively with students, helping them transition to a new delivery model and were sympathetic to the challenges the conversions created. In other instances, the experiences appeared to be less successful. An archetype of a less effective conversion building across comments would include the following. While the course was in Canvas, the course site was hard to navigate, students found it hard to know when assignment were due, or the due dates and perhaps the assignments themselves might change without changing the related gradebook features. Full-length lectures made available online, but students found it difficult to process the information in the long recordings and students had difficulties connecting with faculty to gain clarifications. Anecdotal data suggests students missed the student-to-student and faculty-student interactions that had been common in their courses. Finally, the most negative student reactions were generated in situations where they perceived that faculty did not care. The university has agreed that no SPOT data from the Spring 2020 semester will be used in any administrative evaluation of faculty members. However, individual faculty may find the information in Spring 2020 SPOT Evaluations of their courses useful when considering any course modifications for the summer or fall semesters.

It is Unlikely that the Uncertainty about Face-to-Face Classes this Fall will be Resolved Soon
A critical decision point for the university will be whether, to what extent and how to conduct face-to-face classes at any or all of its campuses this fall. Not bringing student back on campus fundamentally changes the dynamics of education that may impact enrollment and the university’s auxiliary operations. It is assumed that the university will try to bring students back on campus if it is feasible to do so safely. The development of operational plans to attempt to bring students back on campus are underway, but the details of these plans have not yet been released. Critical components of these plans will include the availability of personal protective equipment, acceptable levels of student density (in classrooms and living areas), and personal handwashing and facility disinfecting strategies.

While the university can develop its plans, a number of significant factors influencing the capacity of the university to bring students back on campus will be outside of the university’s control. This includes the rate of spread of the virus in the Commonwealth and other locations from which students originate and virus spread in the New River Valley between now and August.

Even if circumstances permit students to return to campus safely, it is not clear that those conditions will continue throughout the fall semester. The potential exists for a fall surge of COVID-19 cases and any virus outbreak on campus would likely lead to calls to end face-to-face classes. Further, even if students can return, it is not clear that all students will feel comfortable returning to Blacksburg, or if they do, whether they will be, and will remain, comfortable in attending face-to-face classes. This also applies to faculty and staff. Anecdotal information from two departments
suggests that upwards of 50% of department faculty indicate, as of now, they would feel uncomfortable teaching face-to-face classes this fall.

As a result, the likelihood of the university being able to deliver courses this fall in a traditional face-to-face format for all students seems highly unlikely, though some amount of face-to-face instruction may be possible. Consequently, in order to plan effectively for uncertain course delivery this fall, the task force recommends that all faculty develop their courses so that they instruction can be delivered fully online. We believe this to be the best approach for faculty, because, courses designed to be taught online, due to the greater attention to course structure required in online development, can be modified to move any synchronous component to face-to-face delivery, while traditional face-to-face instruction may not be easily transitioned to online under short notice. Preparing courses to be delivered online offers faculty the greatest flexibility to adjust to whatever course delivery context we encounter this fall.

Faculty Are At Different Points In Their Journey To Develop Expertise In Creating And Delivering Online Learning, Suggesting Solutions Customized To Individual Faculty Will Be Most Useful.

Several Pamplin faculty had not delivered an online course, in full or in part, prior to this spring. However, the college delivers a number of programs, like the MIT and BXBR, fully online or with hybrid delivery and have done so for a number of years. As a result, several faculty have extensive online experience, including completion of faculty development programs to improve online course design and deliver skills. Still other faculty have had some experiences with online teaching or the use of some online tools. This results in Pamplin faculty having widely varying expertise and comfort in the development, delivery and execution of online learning.

However, while we believe CETL and TLOS offer significant insight into the mechanics of development, they may not have deep insight into the context of business education or some of the pedagogical approaches currently used. So while they can help faculty implement specific curriculum development actions, they may, at this time, be less well-positioned to offer strategies for moving some aspects of business courses to online delivery. We believe it is possible they will gain this insight after working with a sufficient number of business school faculty.

Everyone Is Learning How To Adjust.

While we are likely more aware of the challenges facing faculty in converting to and delivering their courses online, student input suggests students are also facing challenges as they move to online courses. Data from around the university summarized by CETL suggests students are feeling overwhelmed, perceive online courses as increasing their work load, are struggling to stay engaged, are finding time management difficult, particularly for those who returned home who are dealing with increased distractions and inconsistent internet access, and they are worried about the future. Students dealing with any of these feelings are likely to find it more difficult to learn when they are isolated and/or facing an unstructured learning environment.

While it is important to make sure we are providing the support necessary to help faculty make effective transitions to online learning, we must also consider what else we might do to provide support for students. The task force believed a town hall format would be a good option for helping provide support for faculty. Student members of the task force suggested that a town hall focused on student challenges heading into the fall, might also be well received.

The University Has Excellent Resources To Support Developing And Delivering Online Learning Education (E.G., CETL, TLOS)—We Do Not Need To Duplicate These Efforts.

CETL and TLOS both have offered support for curriculum developing, improvement in teaching delivery skills and support for using new technologies in the classroom. They have strong foundational curriculum in the tools and techniques of higher education. The task force recognizes those strengths and believes the college should not duplicate services that are already available elsewhere on campus. Rather, a college’s role should be to help faculty find the resources that would be most useful to them.
Task force members believe most faculty will unlikely to take the time to engage in multi-day courses to learn new online skills. However, they believe such courses would be useful for faculty members who are just beginning to develop their skillsets and may not be comfortable in their pedagogical foundations (i.e., may not have had specific instruction in how to develop courses). For faculty who self-identify, the task force would suggest attending the four-day instructional design course offered jointly by CETL and TLOS. It is great introduction for faculty who want a better understanding of the basics of course development and the basic tools for online delivery.

Most faculty on the task force perceive faculty need targeted support in the development of specific capabilities or help solving specific challenges in their courses, whether it be around increasing student engagement, designing materials to fulfill learning objectives, or addressing the challenges of online assessments. The task force encouraged CETL and TLOS to develop a series of 1-2 hour modules designed to address these specific challenges.

Finally, the task force sees an opportunity to add value by helping faculty think strategically about what they could or should do to build better online courses. Some faculty may not have the necessary foundations to be ask the right questions to get the resources they need. In these cases, the task force believes that faculty mentors in the college could help faculty think through course options. Once they have a sense of what they may want to pursue, then these mentors could also help them find the right CETL or TLOS resources. The task force was clear that development support and actual modification of courses is beyond PCOB faculty mentor responsibilities. CETL and TLOS resources are prepared to provide that support.

**Strategic Recommendations for Improving Online Education**

These insights and task force discussions led to the development of a series of strategic recommendations for faculty as they prepare their courses for the summer and fall of 2020. The first type of recommendations offer conceptual guidance for how to approach course design. These include:

**Build your courses to be taught online using Canvas**

Given the uncertainty about social distancing for the fall, we advise all faculty to build their courses so they can deliver them online. It is much easier to “flex” courses designed for online delivery to incorporate face-to-face elements effectively than it is to flex face-to-face elements to online delivery.

Faculty should build and deliver all courses using Canvas. Having all faculty use Canvas provides three important benefits. First, delivering all courses through Canvas requires that students only need to learn how to navigate one course support system. Second, Canvas provides a common tool set for faculty and students to learn. Third, having all courses in Canvas aids continuity of instruction should an instructor become ill and not be able to teach a course for an extended period of time.

**Show your students you “care” about them:**

There are a number of means of directly and indirectly showing student that you care about them and the courses you teach. Some of the direct ways we show we care is in the language and tone of the communications we have with students, whether in video messages, announcements or in one-on-one communications with students. Student feedback provides insight into other ways that students infer whether faculty care about them. For example, completing and publishing the Canvas site for the course at least two days before the course begins sends the message that you are taking the course seriously and are doing the necessary preparation for the course ahead of time. Further, once you publish the course, try to limit the number of changes you make to assignments and due dates. These actions signal that you may not be prepared, even if you are.

Demonstrate competence in the tools you choose to use in your courses. One of the surest ways to signal to your students that you are not ready to teach your course is to try to use tools in your class that you struggle to use effectively. For example, if you are going to use Canvas, develop at least minimum proficiency in creating a course
structure, creating assignments and setting up the gradebook. If you are going to use Zoom for group work, make sure you know how to use the necessary Zoom functionality. A bit of practice can create confidence in your students that you cared enough to figure out how these tools worked before you tried to use them in class.

**Create engagement to enhance positive student experience**

Building student engagement in the classroom can start with their initial reaction to the course site. If you create a logically organized and easily navigable Canvas site, you make it easy for students to understand what you expect of them during the semester and they can ask meaningful questions to you about those expectations. Then conversations can move more quickly to the substance of the course, rather than the mechanics of course activities and grades.

Provide ongoing communication with students before and during the course. A common feature of courses in which students had good experiences was that the faculty in these courses communicated early and often with their students. Often, those communications acknowledge the challenges for faculty and students in moving courses online and help send the message that we will all try to work through this together. Communicating before the class begins can help reduce anxieties and help set expectations. This is important as students are attempting to navigate several courses including yours.

Build in opportunities for faculty-student and peer-to-peer student engagement. Many students, although not all, felt the loss of community and connection with others caused by the move to online classes this spring. Faculty instructions to move as much learning as possible to asynchronous instruction, due to the compressed time line for conversation (10 days) likely contributed to those perceptions. To the extent that faculty can use the tools in Canvas and Zoom to provide opportunities to team or group interactions, or to interact live with faculty before and after classes or during office hours, those steps are likely to be perceived positively by at least some students.

**Good pedagogical practice is the same for online and face-to-face education**

Task force members, particularly those with strong backgrounds in course design and instructional pedagogy, note that many of the recommendations offered to help faculty improve the quality of online education are the same recommendations offered to improve the quality of face-to-face education. For instance, one of the tactical recommendations for faculty rethinking their courses for online delivery is to start with the learning objectives. Or for faculty looking to avoid large, high stakes exams to replace them will several smaller low stakes assessments. These are simply sound recommendations for improving the effectiveness of education generally. The process of developing good courses is the same, but online delivery offers some additional tools that are not available or are less frequently used in face-to-face instruction. Be willing to identify the best tools in the traditional face-to-face instruction and online instruction can create very strong learning designs.

**Assess for Success while fostering academic integrity**

Respondus with Monitor is software that is available within Canvas that faculty can use to lock down the student’s web browser (Respondus) and video record a student using their camera while taking the exam to be viewed by faculty later (Monitor). These tools are available for faculty who need them. However, student feedback suggests that Respondus with Monitor increases student anxiety. It also signals to students that we do not trust them. In a world where most students do not cheat and students who want to cheat can develop means to defeat most technological solutions, there is an incentive to redesign courses to avoid high stakes online testing.

One of the ways to reduce big high-stakes exams (those that count for >25% of course grade), is to replace big high stakes exams with several smaller low-stakes authentic assessments. These increase the frequency of assessment, but because they are shorter can reduce the time required by faculty to provide feedback. Because each assessed activity represents a smaller part of the course grade, students may have less incentive to cheat on lower stakes assessments. Further, the use of more authentic assessments (described in the tactical recommendations) makes it more difficult for students to copy, or quickly look up, answers from other sources.
Peer-to-peer learning is also powerful pedagogical tool. When students teach each other how to complete exercises or learn concepts, both the provider and receiver learn from engaging with course content. This increases opportunities to recall important content, aiding long-term retention. For this reason, faculty should encourage students to work with and help each other on activities. But in some classes, students are prohibited from engaging in these activities, hence faculty should provide clear instructions when peer-to-peer learning is appropriate in your course (e.g., it is OK to work together on assignments, but each person must do their own work on exams).

In general, course designs attempt to achieve two broad categories of learning objectives. “Knowing” learning objectives focus on the body of knowledge that students should develop and be able to call upon to solve problems. “Doing” learning address capabilities or competencies that students are required to develop. In many settings, “knowing” is necessary to develop the capacity to “do”. In many instances, courses that cover large bodies of “knowing” content often use large multiple-choice exams to assess learning. These are the types of high stakes exams that are most susceptible to student efforts to share correct answers. An alternative may be to focus assessments on “doing” learning objectives using activities (e.g., papers, projects, posters, case analyses, worked problems) graded with rubrics. Such production assessments make cheating harder, particularly when students must show their work. They are also more efficient, as demonstration of the capacity to make correct decisions as part of doing demonstrations also can infer knowing. Further, sharing grading rubrics with students before the assignments are due can also reduce grading time because students are more likely to produce materials that demonstrate the required capabilities. The most difficult assignments to grade are those where the student completely misunderstands the assignment. The use of rubrics to assess “doing” learning objectives can also provide course-embedded measures that can be easily incorporated into future college and department assessment of learning efforts.

Focus
One of the challenges of efforts to improve instruction is that these activities can appear overwhelming in the face of other faculty obligations. For that reason, the task force also attempts to account for the impact of these recommendations on faculty time. The task force does not recommend that any faculty member attempt to incorporate all of the recommendations offered in this document. Rather, we hope that the variety of strategic and tactical recommendations will offer each faculty member at least a few recommendations that they see as potentially useful.

A basic recommendation in all course design is to focus on the course learning objectives. Focusing on what you want the student to “know” and be able to “do” can help guide design choices. The alternative, which most faculty faced this spring, is to convert your existing activities to a different modality (from face-to-face to online). However, some of these activities may not be effective in an online course—if so converting them is not a good use of time. Also, think about how best to help student learn the learning objectives. Think about your current activities and if you cannot tie an activity to a learning objective, think about whether it needs to be in the course.

Do not try to do too much. Moving to new modalities offer lots of interesting course delivery tools. Focus on applying a few new approaches well. Trying too much and executing poorly can backfire and make the course more difficult for you and your students.

Ask for Help
There are many faculty in the college who are thoughtful instructional designers with experience online, especially faculty members of the task force. They are great resources if you want to “kick around” new ideas about how to take courses online. Use them as mentors.

CETL and TLOS have people with expertise in instructional design for online course delivery and the supporting technologies. They are here to help you. Use them.
Tactical Recommendations

The second set of recommendations reflect specific tactical recommendations to faculty. These recommendations are available in Canvas in a course called “Pamplin Online Learning” (https://canvas.vt.edu/courses/112922). All faculty are encouraged to be participants in this course and have access to the materials included there. If you do not have access, please contact Jean Lacoste lacoste@vt.edu.

The Canvas site includes a set of course design tactical recommendations created by task force members. The site offers two frameworks for finding useful recommendations. They are organized by: (1) The course design feature the recommendation addresses or (2) the specific student challenge a faculty member may wish to try to overcome. Many of the recommendations are relevant to both frameworks. Several paths may lead to the same recommendation.

For each recommendation the task force provides: (a) A brief description of the recommendation, (b) an example of its use, (c) a discussion of when this recommendation may be useful and why, (d) guidance on how to implement the recommendation, and (e) the name of someone in the college to contact who can talk about that recommendation. We list the tactical recommendations titles alphabetically below, with the full details for each recommendation provided in the Appendix:

- Asynchronous Proctoring with Respondus
- Authentic Assessment
- Authentic Assessment Exam Example
- Begin with the Course’s Learning Outcomes
- Encourage Collaboration
- Engagement Announcement Example
- Engagement/Humanization - Visual Communication
- Engagement/Humanization - Written Communication
- Experiential Learning Sample Assignment
- First Day Rules for Zoom
- Formative Assessment
- Integrate “To Do Lists” that aggregate required resources
- Learning Categories
- Lecture Videos for LO 1.1
- Course Templates
  - MGT Course Template Homepage
  - Module 1
  - Module 1 - The Perfect PBJ
  - Module 1: Course Overview and Introduction
- Multiple Uses for Canvas Discussions
- Online Experiential Learning Framework
- Parallel Structure
- Replace High Stakes Exams with Several Low Stakes Exams
- Structure Organization with Modules
- Synchronous Proctoring with Zoom
- Transcripts vs. Captions
- Use Rubrics to Assess Competency Development
- Using Lockdown Browser and Respondus Monitor
- Working Sample Problems Before Instruction
Each recommendation offers insight to a tool or technique that faculty might consider. The student challenges listed below draw from CETL discussions in departments from across the university. A substantial number of students in the university report struggling with each of these challenges. On the Canvas site, each of these links leads to a discussion of the challenge, what faculty might do to help alleviate the challenge and a list of tactical recommendations that can provide concrete guidance for potential mitigation strategies.

- **Addressing Student Challenges**
  - Disengaged
  - Increased Distractions
  - Increased Workload
  - Overwhelmed
  - Time Management
  - Worried About Future

- **Smart Study with a Buddy** (guidance for students)

**Resources**

Task force members were encouraged to identify learning resources to share with task force members. Any resource was included that might offer useful new insights into challenges to moving to more in depth online learning, support additional strategic or tactical recommendations, offer mitigation strategies to overcome implementation challenges, or highlight strategies that could be useful to support these efforts at a department, college or university level.

A number of resources were shared with the committee, which are now archived on the Canvas site. These include:

- Templates for Canvas course sites that offer useful examples of good organization and course navigation
- A checklist created by the College of Engineering to assure Canvas courses have the fundamental requirements for a good online student experience
- An archive of online learning resources identified by task force members, including
  - Online learning research resources from Hanover Research
  - Key articles produced by the Chronicle of Higher Education
  - Research articles examining aspects of online learning
- A recommendation template faculty can use to create and submit additional tactical recommendations
- Links to the web pages for CETL and TLOS

In addition, there are several books that one or more task force members found useful. These include:

Administrative Recommendations
In addition to course design recommendations, the task force offers three structural recommendations to college administrators to support online learning. These include:

Create a college-level adhoc committee on pedagogy and learning excellence
The task force generated significant momentum for improving online learning in the college. With the end of the task force sprint, task force members voiced concern that momentum would dissipate and expressed interest in continuing this work. There is still much potential for improving the effectiveness of online learning in the college. The task force recommends the college create an adhoc committee on pedagogy and learning excellence. This committee, containing faculty and student members, should continue to work to enhance online learning and overall learning excellence and to evaluate what tasks and responsibilities a committee of this type would have in the college governance structure.

Create positions for one or more instructional designers in the college
An important insight from the task force’s review of online instructional design and pedagogical improvement was recognizing that effective course designs in any format requires sound pedagogical approaches, irrespective of modality. Therefore, there is an opportunity for the college to enhance learning effectiveness by providing systematic support for improved learning pedagogy. While critically important human resources in CETL and TLOS are available to support these efforts, it is not clear that these professionals have a strong contextual understanding of business education. Therefore, we could increase the college’s efforts to leverage CETL and TLOS resources by having dedicated liaison to these departments. This would add value as we build the college’s learning infrastructure as indicated in our strategic plan. These could be full or part-time or faculty experts given course release time to provide this type of support.

Leverage upper-level undergraduate students to support engagement and communication in undergraduate classes
Two common differentiators among courses in the spring were levels of engagement and quality and consistency of communications. These activities require additional faculty effort to create and administer. Further, faculty differ in their understanding of useful types of engagement, how best to foster peer-to-peer collaboration and how best to communicate effectively to students. Undergraduate students who have completed these courses can be extremely useful partners for faculty as they design and deliver instruction this fall. The Depart of Biology has a long history of using undergraduate students in these (non-grading) roles. The BIT Department also has experience using students in these roles. Hiring undergraduate students in these roles may help accelerate and “tune” the implementation of these activities in undergraduate classes this fall. The task force encourages the college to examine how we might deploy undergraduate students to support effective engagement and communications in fall undergraduate courses.

Summary and Conclusions
The results of spring 2020 course conversions from face-to-face to predominantly asynchronous online delivery are mixed. Data collected by the task force offers suggestions on the practices that help make these transitions effective and what to do to improve the effectiveness of course taught online during the summer and, if necessary, fall semesters. The task force recommends faculty design their courses to deliver them online as this provides the greatest opportunity to flex to whatever delivery modes are available this fall. To that end, the task force offers a series of strategic and tactical suggestions for faculty to consider as they prepare for their fall classes. Task force members created a Canvas site titled “Pamplin Online Learning” to model useful Canvas templates, store detailed recommendations with action steps and additional useful resource materials. These are available to all Pamplin faculty as are the members of the task force, if faculty want to engage task force faculty or students in strategic discussions about how to approach fall classes. Further, the task force recognizes the value that CETL and TLOS can provide faculty through who choose to participate in their multi-day workshops, focused seminars or one-on-one mentoring and coaching sessions. Finally, the task force offered three structural recommendations to support college online learning enhancement efforts.
Appendices

I. Tactical Recommendations for Improving Online Education
II. ACIS Task #2 Survey Responses
III. Agendas and Minutes of Task Force Meetings
IV. Tasks given to Task force members
Asynchronous Proctoring with Respondus

Ideally, we incorporate a variety of summative assessments into our courses. Asynchronous proctoring tools are best used with low-stakes testing. Virginia Tech has licensed two software applications to support asynchronous proctoring, both are provided by the vendor Respondus and both are fully integrated with Canvas quizzes.

Brief Description:

1. **Lockdown Browser (LDB)** is an internet browser that limits the students to the quiz at hand. When LDB is opened, it closes all other applications except the operating system. LDB will prevent students from opening other web pages or applications. LDB disables printing and screen capture. LDB does not permit a second display to be used. Essentially, LDB gives you some confidence that the student is accessing only the quiz on that computer.

2. **Monitor** activates the webcam on the student’s computer to record the student’s face and immediate surroundings. At the completion of the quiz, these recordings are analyzed by facial recognition software to identify anomalies such as two faces in the frame, different faces in the frame, etc. The video, analysis and thumbnails at intervals throughout the recording are made available in Canvas. To provide a higher level of assurance, there is a start-up process prior to accessing the quiz in which the student uses their webcam to scan their testing environment. This environment scan is recorded as well.

Benefits:

- LDB & Monitor are quick and easy to setup. The longest, and most important, part of the setup is to clearly communicate expectations about an acceptable examination environment.
- Asynchronous proctoring eliminates the need to coordinate student and faculty schedules to complete exams.
- Some students appreciate the convenience of completing assessments at the location of their choice while others are resistant to the invasion of privacy.

Drawbacks:

- Some students experience anxiety about being recorded. They fear that a technical problem or an unexpected event (such as a visitor entering the room) will result in a poor grade or suspicion of academic dishonesty. Assure students that algorithms are being utilized, but the faculty member will make all determinations.
- For Respondus to be effective, faculty must take the time to review the analysis, thumbnails and video. This no small task and can only be done after the quiz is complete.
- Occasionally, you will need to make accommodations for a student who may have technical difficulties such as a broken webcam. Consider proctoring these students separately, perhaps with Zoom.

Implementation Resources:

Respondus Quick Start Guide

Step-by-step Video Instruction is available containing suggestions for:

- Documenting exam procedures for students
- Creating a Canvas quiz using quiz banks
- Setting up Lockdown Browser
- Setting up Monitor
- Example of student completing the exam
- Reviewing results
Authentic Assessment

- **Concern:** Assessing students in an online environment can pose many issues including comfort with academic integrity and breadth of understanding of student comprehension. One approach to overcome these issues is using authentic assessment. This recommendation is focused around the use of take-home exams as a form of authentic assessment in an online environment.

- **Recommendation:** In an online learning environment, the use of a take-home exam that acts as an authentic assessment may provide a greater comprehension check than that of other assessment approaches depending on the overall course material. Take home exams that act as an authentic assessment typically are free response (essay based) and could be driven by both qualitative and quantitative material.

When, Where and Why Should I Use This:

Authentic assessment should be used in cases where practical application and critical thinking are the typical drivers of comprehension check for the course.

These assessments should be used for these types of courses:

- **Discussion based courses:** These assessments are for classes that are theory and discussion based where open ended questions drive thought and allow for response through research and true theory comprehension. Authentic assessment provides strong value when exam questions do not have “one right answer” and diagnostic analysis of outcomes are the true desired response from the student.

- **Technology driven courses:** Courses that are driven to impart theory for technological application can benefit from authentic assessment. Use of real-world data that require application of technology concepts for analysis drive critical thinking for students and a way to evaluate their use of technology but more importantly their ability to interpret results.

- **Complex quantitative courses:** Courses that are complex in theory and application lend themselves to authentic assessment as having notes or a textbook as aids would not suffice as the questions are not answerable through regurgitation of definitional material. In general, courses that are open note, open book, and or allow for a “cheat sheet” are good candidates for take-home authentic assessment.

Considerations for take-home authentic assessment:

- **Time:** Creating a take-home authentic exam can take a great deal of time, however, the true concern comes in the time and effort to grade the exams. If the exams are research or essay based there is a significant grading burden compared to a quantitative or multiple choice-based exam.

- **Academic Integrity:** While students will have more difficulty cheating, there is concern that they may still work together on a take home exam (even if instructed not to). Even with open ended questions, one student could essentially do other students work if they were so inclined modifying their answer significantly enough to be different. There are also concerns about plagiarism as students may find online resources to provide their responses. Grading also is largely subjective for an authentic assessment.

- **Class size:** This corresponds with both Time and Academic integrity, as if a class size is too large, the amount of manual review and plagiarism checks could be overwhelming and drive feedback that is not timely.

- **Class maturity:** Undergraduate Seniors and Graduate students may do better with an authentic assessment as their maturity and understanding will lend to more of a critical and analytical response to the questions asked in an authentic assessment.

Example

Linked below is an example of an authentic assessment assigned in an online learning environment:

[Authentic Assessment Exam Example](#)
How Do I Implement

There are several approaches to giving an authentic assessment:

- Upload a Word document (or an Excel document with data or combination of the two) that contains the questions and prompts, then allow the students to fill out the exam over a given amount of time (1-3 days depending on scope of the exam and research required and if other flexibility concerns exist)
  - This allows students to clearly list any research sources, or input screenshots from their use of technology
- Provide a Canvas quiz that is not in a lock down browser that allows the students to enter their responses online, for ease of instructor grading

Available Resources:


Authentic Assessment Exam Example

To complete Exam 2, please follow the directions in the Word Document below, this is the file in which you will enter your answers:

ACIS 4654-5654 Exam 2 - SP20.docx

You will also need the below Excel file to complete Exam 2:

Exam 2 - Data File.xls

For the short answer questions, you should write as much as you deem necessary to answer the questions. The final research questions is the only one that is prescriptive on the length of your response.

Deliverables: By 11:59 pm on Wednesday 4/8 you should upload your completed Word File and the Excel File if you utilized Excel to do your analysis.
Begin with the Courses’ Learning Outcomes

Clearly establishing learning outcomes is essential to the success of any course, online or face-to-face. In the online environment however, failure to identify measurable learning outcomes at the course and module level can reduce the effectiveness of the course and greatly increase the time to develop and maintain the course.

Brief Description:

Maintaining your online learning resources requires more work than the face-to-face equivalent. When we revise these resources, we do so to improve them. You want to minimize the time you spend revising resources simply because you did not think it through fully the first time.

1. Spend time in thoughtful reflection about the learning outcomes for your course and each module within the course.
2. Write down all learning outcomes.
3. Consider organization including grouping and order.
4. Check the verbs you have selected to make sure they are actionable.
5. Brainstorm learning activities to help your students master these outcomes.
6. Consider how you can accurately assess these outcomes.
7. Finally, think about how you can do this at a distance.
   o Take it one learning activity at a time.
   o Start with the learning activity that is easiest to implement online and save the hardest for last.
   o If you cannot generate workable ideas on your own, consult with CETL, TLOS, Pamplin IT or colleagues who have taught online.

Example Learning Module:

When you look at the example module, please note:

- Learning outcomes are listed first.
- All learning resources and assessments are organized by learning outcome.
- Everything needed to complete this module is linked from this module page. Each item in red would be a link to a learning resource. It might be another page containing video lectures, an external website, a Canvas quiz, or a document uploaded to Canvas Files. Students should not have to hunt through your directory structure of files or a giant list of quizzes to find the activities associated with a specific learning outcome. You can disable Files, Quizzes, etc. in the Courses main menu so students are not distracted by these options.

Implementation:

I would like to point out a distinction between Learning Modules and Canvas Modules.

**Learning Modules** are a logical organization to course content. I have implemented the example learning module above with a Page in Canvas. Each module has its own landing page. Every component of a module is accessed from and explained on that module's landing page.

**Canvas Modules** are a tool for organizing components of a Canvas course. Canvas Modules also allow you to group related pages, files, assignments etc. Canvas Modules work well if all students must move through the learning resources in one specific order. If, however, you offer choice in which resources students may use or the order in which they use these resources, it may be helpful to provide guidance along with links to these
resources. Implementing Learning Modules with Pages (similar to above example) provides the mechanism to include this guidance.

Even if you choose to implement your Learning Modules with Canvas Pages rather than Canvas Modules, you can still utilize Canvas Modules to help organize your course by grouping these learning module landing pages into logical categories. In the image below, all modules tested on each exam are grouped together.

Notice Assignments, Quizzes, Files, etc have been disabled. Each time the student accesses the course, they select the module they want to study and are directed to the landing page that has all relevant resources, instructions, deadlines, etc. The student never has a need to sift through files, quizzes or assignments.
Disengaged

What are students saying?

- Staying motivated for schoolwork being the same, while everything else in my life is changed.
- Some professors aren't staying in contact with students. I had one professor that took a month after spring break to upload anything to canvas and now he isn't responding to emails.
- Some of my professors don't interact with us enough (but I'm in two different colleges at VT, not just Pamplin). I've heard other students (again, not just in Pamplin), complain about this happening too. Professors who don't record lectures or do Zoom meetings are often the ones I've had issues getting feedback from.
- It's also been tough keeping up with all of the emails as every professor is using email/announcements for all of their communication.
- Getting help with material that I do not understand. It is difficult to get some questions answered over email or on zoom. The lectures also do not always lend themselves to being easy to follow or pay attention to based on the way the information is portrayed.
- Also, if I take a multiple choice test and I am waiting a week or more for my test results I think the professor does not give a **** about the class.
- In regards to office hours, I think some teachers fail to realize that we are college students. Having office hours at 8am is absurd when we don't have schedules that require us to wake up to go to class, and if you think a college student is waking up at 7:45am to ask a question you're crazy.
- The biggest struggle I've had is with keeping up with the material, because if there are no quizzes or in-class assignments I have trouble keeping up.
- Another struggle is just not getting the interaction with fellow students. Getting to be in a classroom and ask the person next to you if they understand what just happened and if they can explain it to you is a big deal. Because sometimes you don't want to ask the teacher a question and you learn better from your peers and their questions. However, on zoom people hate to ask questions because it is awkward to voice over everyone.
- Professors not abiding by the deadlines they tell us, taking longer to post information or lectures that are needed for the assignments. also, email communication is tough because some people don't like responding to emails.

What can faculty do to help?

- Engage directly with students:
  o Engagement/Humanization - Written Communication (Jacob Shortt)
  o Engagement/Humanization - Visual Communication (Jacob Shortt)
  o Formative Feedback (Jean Lacoste)
  o Best Practices - Virtual Student Engagement (Hanover Research)
  o Best Practices - Engaging Next Gens (Hanover Research)
- Incorporate more active/collaborative learning activities:
  o Utilize an Online Experiential Learning Framework (Howard Haines)
  o Working Sample Problems Before Instruction (Kevin Carlson)
  o Encourage Collaboration (Kevin Carlson)
  o Online Case Discussion Assignment (France Belanger)
  o Multiple Uses for Canvas Discussions (Barbara Hoopes)
  o Panel Discussions with Zoom (Cornell University)
  o Case Method with Zoom (Harvard University)
  o Smart Study with a Buddy (Kevin Carlson)
  o Wiki Creation - Group Assignment (Kristin Lamoureux)
  o Use of Existing Virtual Reality on the Web Assignment (Kristin Lamoureux)
  o Best Practices in online Seat Time (Hanover Research)
- Clearly explain communication guidelines:
  o First Day Rules for Zoom - (Brian Collins)
  o Zoom Etiquette and Controls (Kevin Carlson)
Encourage Collaboration

Encourage collaboration but be clear upfront in where collaboration is allowed; create study groups:
Collaborative learning allows students to work together to learn course material, solve problems, complete assignments, or develop a project. Students who work together have an easier time problem solving, completing a task, and finding a solution. Additionally, collaboration encourages students to work with their peers which shifts focus from student-faculty to student-student interaction. Study groups allow students to have a predetermined peer group with which they can collaborate and ask questions. These groups make it easier for collaboration to be implemented in the classroom because each student already has peers with whom they can work with.

When, Where and Why Should I Use This:
This technique is useful in any course. Collaboration works because it allows students to work together to problem-solve while combining their own skills, knowledge, and resources. Without collaboration, students are limited to their own knowledge and understanding of the material or task at hand. This limitation often causes students to rely on faculty for assistance. In addition, students who do not collaborate are unable to bounce ideas off of their peers, which can hinder them from finding the best solution. This technique works well in both face-to-face environments, blended or synchronous online meetings, and asynchronous classroom setups. Remember, collaboration and study groups enhance the quality of student work and help them learn from each other.

Example:
If students had to complete an in-class participation exercise. At the beginning of the course, students are split into small groups and will remain in these groups throughout the semester. Students should write down the contact information for each member of the group in order to collaborate with them outside of class. After new material is presented, students split up into their small groups to complete a short, formative assessment. Students then work together to complete questions on the material that was just covered in class. This collaboration allows students to fill the gaps in their knowledge and understanding of the material with that of their peers, all while learning the material. Additionally, this allows students to complete an assignment on new material without having to constantly ask faculty members for help. This assessment is then turned in, for a grade, at the end of class.

How Do I Implement
At the beginning of the semester, split students into groups. In a face-to-face environment, this can be done based on where students are seated. In blended, synchronous, or asynchronous online learning environments, groups can be created on Canvas and shared with students. Ensure that all students are able to easily contact their group members. Outline in the syllabus, and in announcements to the class, the assignments that allow collaboration between students. It is important to be clear and straightforward when allowing for collaboration in order to reduce the risk for honor code violations. Throughout the semester, allow collaboration on various assignments, which could include in-class participation assignments, various formative assessments, group projects, or case studies. If conducting a class through Zoom, allow for collaboration in groups through the use of breakout rooms.
Hello all,

I hope you all are doing well and are staying safe. We are getting down to the last few weeks of class, and I am proud of the progress you all are making. I was very happy with your work on the take home exam and applaud your continued hard work in these times.

Below I will outline what you should be working on this week and what assignments will be due:

Material to review the week of 4/20:

- Tuesday 4/21 – Chapter 7
  - 3 Video Lectures
  - 3 Training Guides
- Thursday 4/23 – Chapter 5
  - 3 Video Lectures
  - 3 Short YouTube Videos
  - 1 Training Guide

Assignments due the week of 4/20:

- 4/21 (at 11:59pm) – Data Analytics Project (Hopefully you are wrapping this up now)
- 4/22 (at 11:59pm) – Data Analytics Project Peer Review
- 4/23 (at 11:59pm) – Chapter 7 Connect HW

Thanks!

Mr. Shortt
Engagement/ Humanization- Visual Communication

**Recommendation:** Student Engagement – Written

- **Concern:** In an online learning environment, students often have issues with time management and motivation, both of which are inextricably linked to their engagement with their learning experience. Student engagement is multi-faceted for the student as it refers to the students’ engagement to the university, their professors, the class material, and to each other.

- **Recommendation:** Professors can tackle student engagement (concerning the engagement between professor and student and the engagement between student and material) through direct video communication. This can include casual but helpful conversation at the end of group or individual Zoom conversations, providing time at the end of a synchronous video lecture for feedback and sounding board, or by providing virtual office hours that are appointment based to allow for individualized conversations.

**When, Where and Why Should I Use This:**

Video engagement can allow for a greater personal experience between faculty and students. While asynchronous lectures provide for both faculty and student flexibility, taking time to provide real time video interaction and drive personalized student engagement and allow students to feel more comfortable with asking questions, better understand a complex topic, and or reduce anxiety.

**Video student engagement can take many forms including the following with a note on potential issues that can arise:**

- **Individual/group Zoom calls beyond the classroom (appointments beyond Zoom office hours):** When students are working on group project or larger assignments, asking the students their preference to discuss concerns (via e-mail or via video call) allows the students to feel comfortable letting you know what their engagement preference is. For group projects, having a group Zoom discussion with a group of 2-5 students allows them to interact with you, their peers and the material. Whether it be a group video call or a one on one call, always provide time at the end of the discussion for casual conversation or more of a high level check in to ask them how they are doing or how their other classes are going. These should not be probing questions, rather prompts to allow the students to know that you care about what is going on with them, which will give them comfort to be candid and you as a faculty member can learn how to better serve your students. Zoom office hours at regular times can provide value as they lend themselves to a sense of normalcy and the students know they are not “disrupting” your schedule; however, students may feel more comfortable in a one on one environment.
  - **Drawbacks:** The key drawback for this approach is the amount of time it takes for the professor and students to engage via video as opposed to e-mail. While video discussions are more personal, they do tend to take more time. Engagement in this method should be offered by the professor but not typically required (unless it’s a synchronous classroom) as the students may not feel comfortable in a video environment.

- **Provide time at the end of a synchronous class to engage with students:** If you are lecturing in a synchronous environment, providing time at the end of class to gauge student engagement and ask for feedback can make the students feel heard. Ask students what material that you covered that they need additional information about, or gauge which assignments or online approaches they have enjoyed in yours or other classes to gauge how things are going across their academic lives. Encourage candid feedback and even if certain modifications cannot be made, ensure the students feel validated that their concerns are taken into consideration. Allowing for this time at the end of a class can really give a sense of community, as you are stepping a bit out of academic mode and into more of an advisor role.
  - **Drawbacks:** Students may choose not to engage. They may feel that once the material for the class is covered that they can leave the virtual classroom, and therefore not participate in any additional beyond class discussions. The discussions may get dominated by one or a few students, leaving the remainder of the students to feel alienated or unheard. The conversations may become more of a commiserating session which may lead to negativity if not controlled or directed appropriately.
Experiential Learning Sample Assignment

Opportunities are everywhere
Entrepreneurs are thought to possess a unique ability called alertness that allows them to notice opportunities that others miss. Throughout this set of assignments you'll practice seeing things like expert entrepreneurs.

Assignment 1: Listen to this podcast of how an expert entrepreneur notices opportunities and comes up with possible ideas.

Assignment 2: Now it is your turn to develop those same skills. Tomorrow by the end of the day you'll use this flipgrid video discussion board to pitch an idea (90 seconds or less) that you came up with based on a problem or opportunity you noticed during the day. You can talk to people or just make observations.

Assignment 3: The day after go back to the flipgrid video discussion board and vote for the top 3 videos by clicking on the green heart. Choose the ideas that you feel are the best and turn in a 1 page reflection about:

1. What was unique about your top 3 choices?
2. Were there any patterns of what good ideas had in common?
3. What does that tell you about what needs to change how you notice opportunities?

Assignment 4: Practice, Practice, Practice
EVERY DAY for the next 3 weeks you'll turn in an assignment in which you'll be practicing your noticing and business ideation skills. By the end of each day you'll upload a document to Canvas. The document will contain a list 5 problems or needs you noticed during the course of your day. Describe what you observed and what evidence there was that a problem or opportunity existed (e.g. your feelings, someone else's physical reaction-facial expression or body language, complaints, etc.).

You'll continue the same thing for 1 week, then you'll identify different problems or needs AND come up with a solution. It doesn't need to be too technical but describe how you could create that solution (good ideas are both impactful and actionable). You'll do this for the next 7 days then you'll identify 3 more problems/solutions per day AND 2-3 customer segments for each problem/solution AND a different revenue stream for each customer segment during the 3rd week. Remember you are re-training your brain to pay attention to things others might not. You can go through the motions and complete these assignments without actually changing much or you can use this chance to improve your alertness skill.

Assignment 5: Weekly Learning Reflections
Each Sunday you will turn in a description of what is hard, easy, or surprising about this process. This also where you'll receive feedback from your instructor on your progress.

Assignment 6: You'll create a how to notice opportunities manual, video tutorial, or presentation to demonstrate your skill progression.
**Formative Assessment**

Formative Assessment is practice with feedback. In an online class, students often feel disengaged and have difficulty staying on track. Some students do not realize they have fallen behind or are not getting everything they need from course learning activities. Frequent, personalized feedback is particularly important in online learning.

**Brief Description:**
Formative assessments should not only let students know how they are doing, but also what they need to do if they are not performing well. Formative assessments should be provided frequently throughout the semester. Formative assessments may be ungraded or low-stakes. You might provide multiple or unlimited attempts at completing formative assessments. Remember, this is a learning opportunity, not a summative assessment. The more flexible you can make these assignments the more useful they will be to a broader variety of your students.

**Example:**
Formative assessments do not have to be fancy. A simple Canvas quiz could serve as an effective formative assessment if customized, detailed feedback is included. For example, you might ask a multiple choice question: What is the first step in creating the perfect peanut butter and jelly sandwich?

Include the correct answer and common wrong answers:
A. Apply the peanut butter to the bread.
B. Apply the jelly to the bread.
C. Apply the mustard to the bread.

For each answer choice, think about how you would respond to a student that provided each answer. Be as thorough as possible. Remember, this is a learning opportunity:

A. Peanut Butter - Correct! Peanut Butter is applied first because it would be hard to spread peanut butter after other ingredients have been applied.
B. Jelly - If you apply the jelly first, the bread gets soggy and it makes spreading other ingredients more challenging.
C. Mustard - Mustard is not an ingredient of a PBJ because it would not taste good with the peanut butter or the jelly.

If you are not spending more time developing the feedback than you spent developing the questions and answers, your formative assessment is probably not as useful as you want it to be. Students learn best when they are ready to learn. Think of formative assessment as bottling your input so the student can uncork it when they need it.
Increased Distractions

What are students saying?

- Trying to focus and stay motivated with work. It’s very difficult at home to focus with so many distractions.
- Staying motivated and having a space to do work without distractions has been hard (this is also b/c we can’t leave our houses right now). Taking exams/quizzes with the Lockdown Webcam--taking a test while being recorded is really distracting, it’s worse than taking exams normally with hundreds of students in a classroom.
- It is hard to take online timed exams when you have roommates who will not respect that and be quiet even if you ask them to.
- I struggle a lot with learning at home and being able to concentrate around my family. Of course, now I have more obligations as I’ve been expected to become more family oriented.
- It’s very difficult to do schoolwork once removed from the environment you've designated for schoolwork.
- The biggest issues with an online environment primarily comes from the fact that my house in which I live and sleep is not suited for a studious environment. Yes, we've all heard that, 'Oh, well, set a specific spot and time in the house away so you can focus', but that simply is not possible for some people.
- Relying on internet connection 24/7 now that all of my classes require it, while I'm in a home with 5 other people who are working from home, there's expected connectivity issues.
- I think learning from home has been my biggest struggle. When I am home, I am used to relaxing and spending time with my family and friends so it is hard to flip the switch and have no separation between home and school.
- Many times to take an exam, I have to go sit in my bedroom. Your room is supposed to be a place to relax, not a place to take exams.

What can faculty do to help?

- Consider adopting one of the following proven templates to logically organize your online course content:
  - Parallel Structure (Barbara Hoopes)
  - Begin with the Course’s Learning Outcomes (Jean Lacoste)
  - Management’s Template (David Townsend)
  - TLOS Consultations for Customized Template
  - Structure Organization with Modules (Jeffrey Robert uploaded by Jonathan Everett)
- Design flexibility into your course:
  - Provide transcripts as well as captions (Jean Lacoste)
Increased Workload

What are students saying?

- I feel that professors are assigning us more work, and it is hard to balance this new workload for all of my classes.
- The amount or work and videos time that professors assigned. It seemed to increase, which made my time harder to manage.
- I have noticed that the workloads for some of my classes has actually increased since moving to digital learning, which does not help when I am already falling behind due to lack of motivation.
- Some professors are giving much more work than they were in class which has been hard to manage.

What can faculty do to help?

- Provide feedback so students can target their studies:
  - Formative Feedback (Jean Lacoste)
  - Smart Study with a Buddy (Kevin Carlson)
- Provide flexibility:
  - Remote Testing and Assessment Guidelines (CEI)
  - Promoting Academic Integrity (TLOS)
  - Authentic Assessment (Jacob Shortt)
  - Asynchronous Proctoring with Respondus LDB & Monitor (Jean Lacoste)
  - Synchronous Proctoring with Zoom (Jean Lacoste)
  - Smaller, more frequent assessments support material retention (taken from UofN. Kristin Lamoureux to provide business course example)
  - Replace High Stakes Exams with Several Low Stakes Exams (Kevin Carlson)
  - Use Rubrics to Assess Competency Development (Kevin Carlson)
  - Transcripts & Captions (Jean Lacoste)
Integrate “To Do Lists” that Aggregate Required Resources

When, Where and Why Should I Use This:

**When:** Course requires students to watch asynchronous lecture videos and engage with multiple resources.

**Where:** Utilizing the “Page” function and “Links” function in Canvas

**Why:** Students can quickly assess the required workload for each lecture, allowing them to allocate their time accordingly. Additionally, by aggregating resources, a single platform is created where students can quickly access required materials, allowing them to focus their time on engaging with the material, not locating resources.

Example:

```
How Do I Implement
https://umich.instructure.com/courses/85440/pages/linking-to-course-content-and-files
```
Learning Categories

General Online Strategies
▪ First Day Rules for Zoom - (Brian Collins)
▪ Screen Share and Zoom Bombing - (Brian Collins)
▪ Best Practices in Online Learning - Arts & Design (Hanover Research)

Course Structure
Organization of Learning Modules
▪ Parallel Structure (Barbara Hoopes)
▪ Begin with the Course's Learning Outcomes (Jean Lacoste)
▪ Management's Template (David Townsend)
▪ TLOS Consultations for Customized Template

Communication & Engagement
▪ Engagement/Humanization - Written Communication (Jacob Shortt)
▪ Engagement/Humanization - Visual Communication (Jacob Shortt)
▪ Formative Feedback (Jean Lacoste)
▪ Best Practices - Virtual Student Engagement (Hanover Research)
▪ Best Practices - Engaging Next Gens (Hanover Research)

Assessment
▪ Remote Testing and Assessment Guidelines (CETL)
▪ Promoting Academic Integrity (TLOS)
▪ Authentic Assessment (Jacob Shortt)
▪ Asynchronous Proctoring with Respondus LDB & Monitor (Jean Lacoste)
▪ Synchronous Proctoring with Zoom (Jean Lacoste)
▪ Smaller, more frequent assessments support material retention (taken from UofN.)
▪ Replace High Stakes Exams with Several Low Stakes Exams (Kevin Carlson)
▪ Use Rubrics to Assess Competency Development (Kevin Carlson)

Pedagogical Preferences
Learning Strategies
▪ Online Experiential Learning Framework (Howard Haines)
▪ Working Sample Problems Before Instruction (Kevin Carlson)

Sharing Content with Students
▪ Reading Assignments
  ▪ Integrate "To Do Lists" that aggregate required resources (Jonathan Everett)
▪ Video
  ▪ Using Zoom for Synchronous Video (TLOS)
  ▪ Zoom Etiquette and Controls (Kevin Carlson)
  ▪ Using Kaltura for Asynchronous Video (TLOS)
  ▪ Transcripts & Captions (Jean Lacoste)
  ▪ Animated Lecture (Example from GMU Accounting Professor Taranto)

Discussion/Collaboration
▪ Encourage Collaboration (Kevin Carlson)
▪ Online Case Discussion Assignment (France Belanger)
▪ Multiple Uses for Canvas Discussions (Barbara Hoopes)
▪ Panel Discussions with Zoom (Cornell University)
▪ Case Method with Zoom (Harvard University)
▪ Smart Study with a Buddy (Kevin Carlson)
Assignments

- Wiki Creation - Group Assignment (Kristin Lamoureux)
- Use of Existing Virtual Reality on the Web Assignment (Kristin Lamoureux)
- Best Practices in online Seat Time (Hanover Research)

Selected Research

- Trends in Higher Education 2020
- Benchmarking Online Programs
- Expert Interviews - Developing Online Programming
- Student Services Distance and Online
- A meta-analysis of blended learning and technology use in higher education: from the general to the applied
- Blended course design: a synthesis of best practices
- Productive failure in learning math
- Technology-enhanced learning and teaching in higher education: what is 'enhanced' and how do we know? A critical literature review
- Why Minimal Guidance During Instruction Does Not Work: An Analysis of the Failure of Constructivist, Discovery, Problem-Based, Experiential, and Inquiry-Based Teaching
<Course Title Here>

This is going to be your course home page. I would suggest that you write a personal message to your students here.

Other key topics to address:

- How to communicate with you (see below)
- How to navigate the Canvas site
- Any major changes to the class schedule, assignments, etc.

Course Modules

Please click on the following course modules to have quick access to your weekly modules:

(Week of March 23-29)  (Week of Mar 30 - Apr 5)  (Week of April 6 - 12)

(Week of April 13 - 19)  (Week of April 20 - 26)  (Week of April 27 - May 3)

(Week of May 4 - 6)

Quick Links

Please click on the following quick links to get more information about the course:

- Course Syllabus
- Technology Needed
- Direct Link to VT Tech Support
- Student Support (Comprehensive Links to VT’s Support for Students)
- Mobile Access Disclaimer
Contacting me

Please feel free to reach out to me for any questions or concerns. You can also post your questions in the Q & A session.

- Course Instructor: Dr. David Townsend
- Email: dtown@vt.edu
- Office: Room 2100, Pamplin Hall
- Phone: 540-231-4553
- Details of Contact: I check email constantly, M-F and will respond as soon as I can. On weekends, I check email once per day and will respond as quickly as I can. I will also respond to Q&A posts all week long. For general questions about class material, please consider posting your question on the class Q&A board so others can see both the question and responses.
Module 1: The Perfect PBJ

Learning Outcomes (LO)
LO 1.1 Plan a sandwich.
LO 1.2 Build a sandwich.
LO 1.3 Evaluate a sandwich.

Instructions

Complete one learning outcome before advancing to the next. To complete a learning outcome:

1. Read the textbook and/or view lecture videos.
2. Complete the Lecture Quiz to make sure you really understand the concepts presented.
3. Download the Homework document and work problems with pencil and paper.
4. Check your work by completing the Homework Quizzes.
5. If you need help with the homework, seek help from your instructor or a tutor.

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>LO Topic</th>
<th>Textbook Pages</th>
<th>E-book Section</th>
<th>Lecture PPT Slides</th>
<th>Lecture Quiz*</th>
<th>Homework HW1 doc</th>
<th>Homework Quiz*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Plan</td>
<td>21-25</td>
<td>LO 1-1</td>
<td>1.1 A-F</td>
<td>1.1</td>
<td>#1-3</td>
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<tr>
<td>1.2</td>
<td>Build</td>
<td>25-28</td>
<td>LO 1-2</td>
<td>1.2 A-C</td>
<td>1.2</td>
<td>#4 &amp; 5</td>
<td>1.4 1.5</td>
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<tr>
<td>1.3</td>
<td>Evaluate</td>
<td>28-29</td>
<td>LO 1-3</td>
<td>1.3 A&amp;B</td>
<td>1.3</td>
<td>#6 &amp; 7</td>
<td>1.6 1.7</td>
</tr>
</tbody>
</table>

Additional Practice
Practice Sets are not graded. They are provided for those students who would like additional practice. Practice Set A is exactly like the homework questions with different numbers. Practice Set B omits the graphic organizers that accompany many homework problems.

- Practice Set 1A - questions, answers
- Practice Set 1B - questions, answers

Answers are provided for practice set questions. If you need help figuring out how to arrive at the correct answer, please attend a tutoring session.

Exam
Module 1 will be tested on Exam 1* Friday, February 14 in Derring 3083 at your assigned time. See Exam Procedures for more details.

Key:
* Assignment contributes to final course grade.
Module 1: Course Overview and Introduction

Jean Lacoste to Upload Information
Multiple Uses for Canvas Discussions

**General Description:** The Discussion feature in Canvas can be used for several important purposes in an online course.

- Discussions can be used for student introductions at the beginning of a course.
- Discussions can be used to capture student questions on assignments or general questions for the course.
- Discussions can be used to generate interactive conversations on course topics, incorporating both teacher-student and student-student interaction.

**Student Introductions:** At the beginning of a course, students can be given a prompt to introduce themselves, providing the class with a sense of community.

**Example:** Here is a prompt used to invite graduate students in the MBA program to introduce themselves:

One of the strengths of the VT MBA program is networking. Consequently, I’d like to help you get to know your classmates better! Please post an introduction in this discussion forum. You may include how you prefer to be addressed (e.g., Mike instead of Michael), what you do for work, what you do outside of work, what general area you live and work in (this may help project teams be able to meet outside of class), and something people might be surprised to know about you - an experience, a talent, a hobby, etc. - something unique that sets you apart. Feel free to include tidbits about where you were born, a favorite book, movie, or type of music, etc. - anything to help us get to know you better!

Please include a picture of yourself with your introduction.

**Benefits:** Both students and faculty can look back at student introductions throughout the course in order to get to know each other better. This is especially useful in large courses. The professor and TAs can set an example and introduce themselves as well.

**Student Questions:** Rather than handling student questions through emails, a General Q&A discussion provides a place for students to ask questions. In addition, discussions associated with each homework assignment can capture questions and answers for the students to refer to. These discussions should be monitored closely by a professor or TA, though other students may also answer these questions.

**Example:** Here is a sample prompt for a General Q&A discussion:

Please use this space to ask general questions about the course or the course site. The professor, distance learning instructors (DLIs) and students may answer questions here. In fact, students are encouraged to answer each others' questions!

**Example:** Here is a sample prompt for a Homework Q&A discussion:

Post any questions you have specific to Homework Assignment #1. The professor, distance learning instructors (DLIs) and students are all welcome to answer questions here. Information on this discussion board should be limited to clarification and guidance, not solutions.

**Benefits:** Use of a discussion board for common questions reduces the number of individual emails to the professor or TAs. This can be especially useful in a large online course.

**Interactive Conversations:** One of the most difficult things in an online course can be generating interactive conversations. When structured well, discussion boards can encourage this kind of interaction. It is important that
students know how they will be evaluated if discussions are to be graded. Also, it is highly recommended that professors and TAs be visible in the discussions as well, offering opinions and external resources, commenting on student posts, etc. This can establish expectations for civil discourse and conversation in the forums. It is important to establish the "culture" of discussion boards early in a course. Each discussion should be accompanied by a prompt.

**Tip:** In order to encourage interaction, students can be given different (rotating) roles each week, such as posting, commenting, providing outside resources, summarizing, etc.

**Example:** Here is a discussion prompt to accompany a weekly module:

| Reflect on the readings from this week's module. In particular, share how graphics and visuals are used in your world, and what you have learned this week that will make you a better creator or consumer of data visualizations. Feel free to comment on areas where you agree or disagree with the article authors. |
|---|---|
| Students are encouraged to "like" or respond to others' posts. |

**Benefits:** If appropriate expectations are set, students will move beyond simply "posting for points" and will engage with each other in the discussion forums.

**Additional Tip:** I have established discussions for Current Events and Career Information in my classes. The students have responded well to these areas to post and read supplemental information related to class concepts.
Online Experiential Learning Framework

What do we mean by experiential learning?

It’s a change in behavior or conceptualization due to reflection of participation in activities. The activities tend to be problem-centered and situated in a relevant societal or task-specific context that introduce authentic cues associated with specific knowledge or skills needed to achieve a desired outcome.

In terms of creating an online environment that promotes experiential learning there are some first principles that can be followed:

- Learning is promoted when learners are engaged in solving real-world problems
  - Learning is promoted when learners are shown the task they will be able to do or the problem they will be able to solve as a result of completing a module or course.
  - Learning is promoted when learners are engaged at the problem or task level, not just the operation or action level
  - Learning is promoted when learners solve a progression of problems that are explicitly compared to one another.
- Learning is promoted when existing knowledge [and skill] is activated as a foundation for new knowledge [and skill]
  - Activate prior knowledge by giving students a chance to demonstrate what they know/can do
  - In the event of no prior knowledge provide relevant experiences
  - Instruction should provide structure for schema organization
- Learning is promoted when new knowledge is demonstrated to the learner
  - Requires consistent demonstration to allow the student to compare their current state often occurs via examples, steps, process maps, or modeling of the behavior/task
  - Best if multiple representations are seen and compared
  - Provide direction on where to find additional guidance
- Learning is promoted when new knowledge is applied by the learner
  - Repeated and spaced practice that matches learning objectives
  - Frequent feedback and coaching needed initially but should diminish over time
  - Varied activities or situations for practicing
- Learning is promoted when new knowledge is integrated into the learner’s world
  - When progress is observable to the student motivation increases
  - Provide opportunities for reflection of how the skill or task can be utilized in their every day or professional life
  - Provide opportunities to create, invent, and explore

However, because many of the skills we teach in business are how to think and analyze it requires the use of the cognitive apprenticeship learning model in order for students to learn more quickly.


Combining the two models provides a learning spiral that can be used across an activity, course, or set of courses to help the students develop needed skills.
Here's an example of a set of assignments focused on developing an entrepreneurial skill of alertness or noticing opportunities that:

1. Demonstrates a complete skill in context
2. Gives the student a chance to try it
3. Provides feedback using peers which also provides reflective comparison
4. Articulation of the reasoning associated with skill performance
5. Additional practice/feedback application and exploration
Overwhelmed

What are students saying?

• Now that classes are online, I feel like a load of videos are posted every week to cover multiple portions of material in multiple classes and it feels overwhelming at times.
• Its also been tough keeping up with all of the emails as every professor is using email/announcements for all of their communication.
• I have a group project in every class. It is extremely difficult to conduct a group project from home. I know it is really challenging to transfer these assignments to the online environment, but all of my projects are inducing quite a bit of stress.
• Every course has its own format and every class has a different place that the videos are stored and the assignments are due. Additionally, all the assignment dates have been shifted and there has been many conflicting dates and conflicting information on the assignments. Many weighting of the courses have been changed but the syllabus and documents have not been updated to reflect it, just mentioned during a video or lecture.
• I am not a fan of it at all. Many professors have been very disorganized, and I have little to no work in two courses that I actually enjoy learning about.
• ... not to mention having to constantly worry about COVID.
• It is depressing doing distance learning, and just makes you un-motivated in general

What can faculty do to help?

• Consider adopting one of the following proven templates to logically organize your online course content:
  o Parallel Structure (Barbara Hoopes)
  o Begin with the Course’s Learning Outcomes (Jean Lacoste)
  o Management’s Template (David Townsend)
  o TLOS Consultations for Customized Template
  o Structure Organization with Modules (Jeffrey Robert uploaded by Jonathan Everett)
• Design flexibility into your course:
  o Provide transcripts as well as captions (Jean Lacoste)
• Assessment format flexibility:
  o Authentic Assessment (Jacob Shortt)
  o Asynchronous Proctoring with Respondus LDB & Monitor (Jean Lacoste)
  o Synchronous Proctoring with Zoom (Jean Lacoste)
  o Smaller, more frequent assessments support material retention (taken from UofN. Kristin Lamoureux to provide business course example)
  o Replace High Stakes Exams with Several Low Stakes Exams (Kevin Carlson)
  o Use Rubrics to Assess Competency Development (Kevin Carlson)
Pamplin Online Learning Canvas Course

The Pamplin Online Learning Task Force has created this Canvas course to act as a repository for Pamplin faculty to share online learning strategies and tips. Members of the task force have begun populating this site, but we envision this as a living document and encourage everyone to contribute online learning strategies that have worked in your classes. Please contact a Task Force member if you have ideas to share.

This site acts as a Business-specific supplement to the services offered by:

- The [Center for Excellence in Teaching and Learning (CETL)](#) who will partner with you to support the design, development, and implementation of learner-centered instruction.
- [Technology-enhanced Learning and Online Strategies (TLOS)](#) who can help you develop the skills necessary to leverage technology tools and techniques to enhance your course's learning environment.

Recommendations

Task Force recommendations are organized around two themes:

- **Learning Categories** - This page includes all recommendations. If you are interested in new ideas for various aspects of your course, you might start here.
- **Student Challenges** - If you would like to start with the students' perspective, you can read about the greatest challenges voiced by students and find links to recommendations that address these challenges.
  - Overwhelmed
  - Disengaged
  - Time Management
  - Increased Workload
  - Increased Distractions
  - Worried About Future
Parallel Structure

**Brief Description:** Online learners need structure. Parallel structure in weekly modules helps provide some of that structure. Every week, the students should know what to expect in terms of activities and deliverables, though weekly details will differ, of course.

**Example:** Here is a page from BIT 5524 - Introduction to Business Intelligence & Analytics: [Module 1: Course Overview and Introduction](#)

The template from TLOS gives the page its basic structure, while the activities are tailored to each week's lesson. Each week concludes with a checklist and time estimate for the students to know exactly what they need to do, and how much time they should allocate.

**Benefits:** The students become used to completing the same set of items each week (e.g., Lecture, Quiz, Activities, Discussion, Checklist, etc.).

**Drawbacks:** Some activities may be optional, and this has to be made clear on each page.
Replace High Stakes Exams with Several Low Stakes

Many business classes include 2-3 high stakes exams (i.e., midterms, finals). However, replacing these with a larger number (perhaps 6-7) low stakes exams can offer several benefits. High stakes exams are exams that typically address a large body of content and represent a significant amount of a student’s course grade. Replacing a high stakes exam with several low stakes exams: 1) Provides more opportunities for students to retrieve content in different contexts, producing superior long-term retention, 2) helps students identify misunderstood content sooner so they can course correct before exams or when new learning builds on previous learning, 3) enhances student engagement in the course. It also, 4) provides faculty insight into when and where students are collectively not developing understanding, and 5) reduces students’ anxiety when taking high stakes tests.

When, Where and Why Should I Use This:
Replacing high stakes examines with several low stakes exams can be useful in many classes, especially classes where material builds on previous learning (scaffolding). This testing approach can be beneficial in high-level in-major classes, so students have better retention of their major specific information after they graduate. Further, many students use the first exam in a class as a “dry run”. They prepare themselves as best they can, however, one objective in that first exam is to assess the exam’s structure, types of questions, and level of difficulty so that they can be better prepared and do better on the next exams. Sometimes this is hard to rely on when there are only 2-3 exams in the class, because it doesn’t give students too many opportunities to improve and get used to test taking in that specific class.

Sometimes the existing structure of a class may not allow a direct conversion to smaller stakes exams. An alternative is to introduce several short formative assessments. Formative assessments can be a small “quiz” given in every class, once a week, or for each unit of instruction. Offering these short quizzes (perhaps 1-3 items) unannounced at the professor’s discretion can keeping students engaged and caught up on the material. Formative assessments may or may not be included in the course grade, or in some cases students only need to have their scores recorded on some minimum number of assessments (a percentage of the total assessments offered during the course) or these assessments can be given as extra credit assignments.

Example:
https://www.oswego.edu/celt/low-stakes-testing

How Do I Implement
Faculty can implement low stakes tests by dividing the course into more parts, creating a structure for the class around sections or modules. A shorter assessment can be designed around each module. This forces students to review information more frequently.

Short formative assessments can be incorporated into classes in a number of ways. For example, iclicker (immediate student responses systems) can be used in face-to-face classes, quick online quizzes could be used in Canvas. These could be 5-10 minute quizzes at the beginning/end of each class. Or, quizzes in Canvas could be included as a part of normal course homework throughout the semester. Formative assessments can help show students whether they are learning key concepts, and building foundation knowledge in scaffolding classes, as well as force them to consistently pay attention, and stay up to date in the class.

Available Resources:
Smart Study with a Buddy (for students)

To learn knowledge content, study with a buddy with whom you can ask and answer questions. By asking questions, you force your mind to use the content to develop a coherent question, and if you are the one answering the question, you need to be able to articulate a response. These activities quickly highlight what information you don’t know (and can then study) making you more efficient, and the more different ways you can interact with the content to be learned, the more recall pathways will be available to you at exam time and in the future.

When, Where and Why Should I Use This:
This technique is useful in any course where you are learning new terms, concepts, models, frameworks or theories. This technique works because it overcomes two major limitations in most students’ study techniques—they do not improve broad recall and are highly inefficient. This occurs because studying alone and reviewing your highlighted text and notes, allow you to get by with limited interaction with the content. You reread something, you mind says “yes I know that” and you move on. Further this is inefficient because you spend more time reviewing what you know rather than identifying what you don’t. When combined with cramming before tests, these techniques enhance near term recall when the questions match what is in your notes, but increase forgetting over time, and may not help you retrieve information when tests require you use that information in a new context. This technique works well face-to-face, but can also be synchronous online meetings or in chat sessions. Remember, the value is in forcing the active recall (so saving and studying chat transcripts would not offer the same benefit).

Example:
If we had to learn about Maslow’s Hierarch of Needs. You and at least one buddy can take turns asking each other questions. Often you can start with simple recall or comprehension questions, asking different kinds of questions that require you to approach the content in different ways, then moving to more complex questions that combine content in different ways. For instance,

- “What are physiological needs?”
- “What is an example of a physiological need?”
- “Where do physiological needs fit in Maslow’s Hierarchy?”
- “What are the six levels of Maslow’s Hierarchy?”
- “Why are the six needs in Maslow’s Hierarchy ordered in this way”? 
- “What does Maslow’s Hierarchy suggest about how a person would behave if a need is unmet?”
- “Assume a person who is otherwise self-actualized, suddenly loses their source of income? What would we expect that person to do”
- “How does Maslow’s Hierarchy of Needs differ from McGregor’s Two factor Theory”?

How Do I Implement
Find one or more people with whom you would like to study. This works in pairs or can be done in larger groups, but have smaller groups allows you to play both the question asker and question answerer roles. With your class materials open, start with one person asking a question about the content to the rest and a person articulating an answer to the question. If you are familiar with Blooms Taxonomy, start with simple recall or comprehension questions and as you get to the point where you and your buddies are answer most questions correctly, you can move to more challenging questions like those that ask you to compare and contrast related content. If you don’t know the answer to a question, see if you and your buddy and confirm what the answer should be. If you find that you cannot answer questions about a section of content, that highlights you need to place more study time on that content. The great part of this technique is that you can ask questions related to the content that you may not know the answer to, but your buddy might. Asking questions that force you to think about the content in different ways increase the number of recall pathways you have to that content and increase the likelihood that your understanding of this content is accurate, that you will be able to recall it at test time, and that you will remember it in the future.
Structure Organization with Modules

Recommendation: Canvas Structure & Organization to Reduce Feeling Overwhelmed

- Provide consistent structure and a clear organization to all digital content by using the Modules section of Canvas.
- Simplify the presentation of Canvas resources and create an explicit naming convention.

Why, Where and When Should I Use This:

- Students who cannot easily find Canvas resources may begin to feel overwhelmed. They may overlook posted materials and even miss assignment due dates. A more structured Canvas helps students and the class remain organized. In a student survey before mandatory online instruction (March 2020), 41% of students responded to “always” using the modules section of canvas when asked about its frequency of use (Always 41%, Sometimes 50%, Never 9%; N=44).
- Use this structure and organization in the Modules section of Canvas.
- Use this for all classes at the beginning of the semester and students will have clearer expectations and feel less overwhelmed.

Example:

In the image below, the models provide explicit titles for students to access Canvas resources.

![Canvas Modules Example](image-url)

Students can expand each module and easily see the items needed for each class. The first item within each module is a page for class reading. The second item is a resource for the student to better access the day’s class material. The last item, if required, is an assignment for the student to complete. The number of items that may be placed in a module is unlimited.

![Expanded Module Example](image-url)

For more information from the online canvas community, please see this link. [https://community.canvaslms.com/docs/DOC-10735-what-are-modules](https://community.canvaslms.com/docs/DOC-10735-what-are-modules)
How Do I Implement

In the left ribbon of the Canvas page, there is a hyperlink titled “Modules”. Navigate to that page and left click the button called “+Module” in the top right of the page. The following dialogue box appears.

Enter the name of the module and left click, “add module”.

Left click the plus sign in the new module and a new dialogue box will appear to add content. You can add assignments, files, link quizzes, URLs, or video content. “Add Item” to add that resource to the canvas module.

By left clicking and holding the six vertical dots, you can reorder items in the module list.

The green checkmark shows that the module is visible for student to view.

In the image below, the green check allows students to see Class 1, but there is no green check for the Class 2 module. Left clicking will make the Class 2 module visible to students.
Available Resources:
The canvas help page for modules can assist with many module-related questions. 
https://community.canvaslms.com/search.jspa?q=modules

Ask an Expert:
While far from an expert in Canvas, you can ask me for help or guidance on creating modules in Canvas.

Jeffrey Robert, jeffreyrobert@vt.edu
Synchronous Proctoring with Zoom

Ideally we incorporate a variety of summative assessments into our courses. If authentic assessment is not possible and faculty are seeking an alternative to asynchronous proctoring for exception situations or a different approach to academic integrity, synchronous proctoring may be desirable. Synchronous proctoring requires a greater time commitment to administer each assessment and is therefore best used with less frequent assessment. It may be prohibitive to apply to a course with large enrollment. Virginia Tech has not yet licensed a proctoring service but Zoom could be employed to complete this task.

Brief Description:

1. Students are asked to join a Zoom meeting with their smartphone (or a secondary computer with webcam).
2. Students use smartphone to allow faculty to inspect exam environment.
3. Student positions phone so faculty can view student's face (and hands).
4. Faculty makes exam available.
5. Student uses primary computer with Lockdown Browser to complete exam.
6. Faculty observes students throughout examination period.
7. Student completes and submits exam then leaves Zoom meeting.

The video below explains one way to use Zoom to proctor students online in real time. 
Completed diagram created in video above.

Benefits:

- Synchronous proctoring allows the faculty member to be present throughout the student's exam experience. This alleviates some of the student's anxiety about experiencing technical or procedural difficulty during the exam.
- Synchronous proctoring can be performed without recording the student's exam experience, so it tends to receive less resistance in terms of privacy issues while still providing location convenience.
- Synchronous proctoring allows faculty to mitigate questionable situations prior to and during the exam, before they rise to the level of a potential academic integrity issue.

Drawbacks:

- Synchronous proctoring requires coordination of student and faculty schedules to complete exams.
- The procedure outlined here works well with relatively small batches of students.
- Faculty must be comfortable navigating in multiple virtual rooms simultaneously.
- Faculty must be comfortable dealing with technical issues since this method employs more technology than other assessment methods.
- The method described here requires three minutes to check-in each student, limiting the number of students who can be tested in a single time period.

Implementation Resources:

Respondus Quick Start Guide

Step-by-step Video Instruction is available containing suggestions for:

- Documenting exam procedures for students
- Creating a Canvas quiz using quiz banks
- Setting up Lockdown Browser
- Setting up Monitor
- Example of student completing the exam
- Reviewing results
Time Management

What are students saying?

• Knowing how to allocate time for each class throughout the day since my classes post lecture videos rather than having zoom lectures live.
• I have had the most trouble with staying motivated to do my classwork. In Blacksburg, I was accustomed to having a fixed time period in which I attend lectures and then working on assignments in the evening. Now, I do not have a set time to do anything; I only have deadlines.
• With the change to online learning dates of assignments have changed and, in some cases, overlapping with other classes assignments.
• I know we can make our own schedules but trust me that is easier said than done.
• Everything seems optional and it is easy to forget about assignments.

What can faculty do to help?

• Organize the course logically so students can find what they need whenever they need it:
  o Parallel Structure (Barbara Hoopes)
  o Begin with the Course’s Learning Outcomes (Jean Lacoste)
  o Management’s Template (David Townsend)
  o TLOS Consultations for Customized Template
  o Best Practices in online Seat Time (Hanover Research)
• Provide flexibility & feedback:
  o Formative Feedback (Jean Lacoste)
  o Smart Study with a Buddy (Kevin Carlson)
  o Transcripts & Captions (Jean Lacoste)
Transcripts vs. Captions

ADA requirements call for captions and/or transcripts. Transcripts are more difficult to produce but they have a broader applicability. Not only do transcripts help those students who are hearing impaired, but transcripts can be used by all students to support learning.

Brief Description:
Captions display a few words at a time overlaid on the video itself. Transcripts are a separate file containing the entire dialog organized into paragraphs. The reason transcripts are more difficult to produce is that transcripts require capitalization and punctuation where captions do not. You will notice my captions below do include these additions because I created my transcripts first then turned the transcripts into captions.

Example of Captions & Transcripts:
Depreciation Transactions Video [LINK TO BE ADDED (Jean Lacoste)]

Depreciation Transactions Video Transcript

Benefits:
• Transcripts and captions improve the accessibility of course video.
• Transcripts may be used for the SSD Note Taker accommodation.
• Transcripts help students find a point in the video they may want to review.
• Students may prefer to watch video and takes notes from the transcripts.
• If a student is experiencing a technical difficulty, they can sometimes find what they need in the transcript document.

Drawbacks:
• Professional transcription services are expensive.
• Automated transcription services are often too inaccurate to be helpful. A 90% accuracy rate means there is a problem with every 10th word. This is not conducive to learning.
• Producing transcripts yourself is time consuming; perhaps 3 minutes for each 1 minute of finished video.

Implementation Resources:
• Kaltura is the Virginia Tech supported solution.
• Rev.com is a professional service that produces both transcripts and captions. This is a paid service that costs $1 per minute but the accuracy is wonderful. There are many other professional transcription services.
• Camtasia is available from VT Software Distribution for a fee. Camtasia is video editing software that includes speech-to-text captioning. Other speech-to-text applications exist with varying degrees of accuracy. The more effort you put into training these systems, the more accurate the output.
• I have also paid my daughter to type the transcripts, then I pull them into Camtasia and divide into captions. I prefer this option because it provides the highest accuracy, which best serves the intended purpose of improved learning.

Regardless of which service you use, be sure to proof-read the transcripts produced before uploading the transcript document to Canvas Files and linking the file to the web page.
Use Rubrics to Assess Competency Development

A rubric is an assessment framework that identifies the key components of deliverables in complex assignments like presentations or reports. The rubric highlights (1) key competencies or products to demonstrate in the assignment, (2) for each competency or product, it describes what the faculty member wants to see demonstrated in the deliverable and characteristics of when it completed effectively, and (3) indicates how much each competency contributes to the overall score or grade for the assignment.

When, Where and Why Should I Use This:
Rubrics can be useful in any course that includes one or more learning objectives that involve “doing” (e.g., calculate, create, demonstrate, solve) learning objectives. They are scalable, the capacity to use them is embedded in Canvas, and they work equally well in face-to-face, blended or synchronous or asynchronous courses. Rubrics enhance targeted learning by signaling to students exactly what the faculty members expects to be included in a deliverable—improving communication and reducing student anxiety. They also reduce grading time in two ways. First, the assignments that are most difficult and time consuming to grade are ones where students “miss the target,” they don’t include the information on which you want to evaluate them. Effective rubrics increase the likelihood that student products contain the information on which you want to evaluate. Assignments where students get it right are easy (and fun) to grade. Second, rubrics also make it possible to systematize feedback. If you have large numbers of assignments to grade, you often find that students who follow the rubric typically will make the same types of errors. Drafting a set of common feedback comments based on the rubric categories can allow you to generate feedback quicker. You simply edit the common comments for the specific issues in each graded assignment. This can improve the quality of feedback and reduce the overall time required to grade and return assignments.

How Do I Implement
Once you determine the nature of the assignment you plan to use (report, presentation, poster) consider what competencies you are expecting the students to demonstrate in this assignment. If you have used this before, you might also think about what differentiates high scoring assignments from low scoring assignments. List these features in the first column of the rubric table. There is no specific number of rows required (I have seen rubrics with as few as four and as many as 30 deliverables to be evaluated). In a second column, describe what you are expected to see demonstrated for each deliverable. This may be a short phrase or a few sentences. This is important because it is communicating to students what you expect. A third column indication of how much each deliverable contributes to the overall score, this could either be in a number of points, or as a percent of the overall grade. Once you have drafted the rubric, have someone else read it to assure that it communicates to students clearly. Second, for previously used assignments, evaluate two or three submissions from previous classes, one high scoring, one low scoring and an average scoring assignment to evaluate your weighting system. If your system is not giving you the scores you believe are appropriate, adjust the rubric as necessary.
Using Lockdown Browser and Responds Monitor

This discussion will present several ideas for conducting assessment in Pamplin courses. We hope that the ideas will be useful for assessing student comprehension, learning, and performance. However, each instructor will need to determine whether the specific recommendations will work in terms of their course content, their presentation style, and the learning objectives for their course. No one recommendation regarding assessment will work for 100% of assessment in all Pamplin courses. Thus faculty need to approach our recommendations with the attitude that they will explore the options, choose the best for their content and delivery style, and adapt the suggestions to their setting. Fundamentally, assessment activities will differ across the levels of our curriculum – pre-business courses, business core, major required courses, and major electives – class sizes, and whether students are undergraduates, Masters, or PhD’s.

Using Lock Down Browser and Respondus Monitor

A common problem in assessment in Pamplin courses is ensuring academic integrity. Lock down browser restricts a student’s ability to use the browser, e-mail, and other applications/programs during an exam. It also prevents printing and screen capture. Respondus Monitor is software built on to Canvas Quizzes which allows faculty to monitor student activities during an exam. Monitor uses the student’s webcam to record his/her movement and activities during the examination period. Respondus Monitor is triggered by facial recognition software. Videos are tagged by a measure of concern. These tags can be grouped as green flags for no problems, yellow flags for moderate concerns, and red flags for high level of concern. Note that the 3 colors are only suggestions for faculty to consider. We recommend reviewing all video yellow and red flagged by Respondus Monitor. Monitor cannot evaluate whether a student is involved in an impermissible activity. Faculty will have to view the student video to make that determination. In reviewing videos of the students, Monitor allows you to review the entire length of the assignment or allows you to view selected passages during which Monitor detected problems.

When, Where and Why Should I Use This:

Locking down a student’s computer and using Monitor are particularly useful for ensuring minimal academic integrity in some courses. Whether these represent useful tools for a specific course will depend heavily on the type of assignments. For courses that focus overwhelmingly on knowledge comprehension and utilize tests and quizzes using multiple choice, fill in the blank, and short answer questions with direct answers of a few sentences, Lock down browser and Respondus Monitor can be useful. In other courses for which assessment focuses on problem-solving, coding, data analysis, extensive calculations, and detailed presentations, these tools will not be effective. In many courses, Monitor may be appropriate for some assessment activities and inappropriate for other activities (like cases or projects). Thus faculty must evaluate the level of their course, the type of material, and the desired level of comprehension first and then pick the appropriate assessment tool(s). The decision to utilize Monitor is the final choice that faculty should make. Faculty will want to avoid tailoring all assessment activities to fit into the framework that Respondus Monitor addresses.

How Do I Implement

Respondus Monitor is available in Canvas. Choose the Quizzes section of Canvas. After creating an exam, choose Respondus Monitor from the menu on the left. You will have to enter Monitor and set up your test in it. Monitor does not generally allow students to open other software or a browser, but you can provide access to a particular website that has data or text for students.
Working Sample Problems Before Instruction

This technique involves providing students with an example of the type of problem you are going to help them learn how to solve before they receive instruction. By giving students the opportunity to challenge themselves on example problems ahead of instruction, they can explore existing tools and approaches they have to solve these problems. They will likely identify the challenges or gaps in understanding they have that make these types of problems difficult. Often, they will not be able to solve the example problems, or if they can, they may find that what they will learn may provide a more elegant path to the solution. It is a method of preparing them to be receptive to information they do not currently possess that can help them answer these types of questions.

When, Where and Why Should I Use This:
This technique is effective in helping students learn specific problem-solving techniques, it encourages engagement with the content, recall of related information, and highlights gaps in knowledge or skills. As a preparatory exercise for students, it is perfectly scalable to any size class or type of problem in asynchronous or synchronous online classes, or in face-to-face instruction. You do not need to grade this activity for it to have an impact, though student could submit attempts that show their work, not just the answer, for review. You can also use this exercise as a discussion starter at the beginning of a unit of instruction.

Example:
“Fermi Questions” are questions for which there likely is not currently a definitive answer, but for which we would like to be able to try to develop a reasonable estimate. The problem-solving technique that is being taught is how to develop an estimate of a quantity that we don’t know but having an estimate would be useful. This comes up in trying to make judgments about making choices among potential problems to solve. The techniques for solving Fermi questions involve trying to develop a method for using what information you know and putting it together with information that you don’t have to try to develop a reasonable estimate (For Fermi this was reportedly an estimate that was likely to be within an order of magnitude of the real number). A problem I have used to open up lessons is to have them estimate “How many miles people in the United States walk each year while making their beds.” None of them know the answer, but if they think about it, they can generally produce an estimate, or they get stuck.

How Do I Implement
1. Clearly identify the type of problem-solving technique or the type of problem to be learned.
2. Identify an exemplar problem of that type that is a very typical type of that problem (I typically try not one that requires adjustments or modification, though that is possible). The problem should be challenging, one you would NOT expect students to be able to answer easily, but not one so complex they do not try to work toward a solution. The best example problems will highlight the benefits of the technique you will be helping them learn.
3. Distribute the problem prior to the lesson where you will teach the technique and encourage students to try to complete the problem.
4. Spend some time at the beginning of the class having some students share their answers and if they are willing some of the challenges, they had trying to solve these types of problems. When framed effectively, the lesson becomes an opportunity for them to learn something they did not have before, a (better) way to solve these types of problems.
Worried about the Future

What are students saying?

- I also feel like I am not prepared on exams and quizzes because I don’t have that same in person instruction. I think that to fix this, professors should assign more projects and homework as opposed to exams. This would give students a chance to actually learn the material and do something more interactive. I feel like now that I am essentially teaching myself, I just learn to pass and not to remember. I might as well be going to a community college or some online university. I feel as if the value of my education has significantly decreased and I don’t feel like I am getting a true Virginia Tech education.
- Watch out because online learning is about to bring about a lot of problems when the material is necessary for future classes. For the sake of having our degrees mean something, I beg that you do not consider moving fall 2020 classes to online format.
- Just hoping it doesn’t extend into the fall semester.
- This has been really hard, and I don’t see it being much easier if we’re online again in the Fall.

What can faculty do to help?

- Don’t let the delivery drive your course. Start with your learning outcomes. Generate ideas regarding learning activities and assessments to support those learning outcomes. Then consult the Center for Excellence in Teaching & Learning, TLOS, or Pamplin IT to see what technologies can be employed to support your course. (Jean Lacoste)
- Try to maintain the rigor of your course:
  - Encourage Collaboration (Kevin Carlson)
  - Online Case Discussion Assignment (France Belanger)
  - Multiple Uses for Canvas Discussions (Barbara Hoopes)
  - Panel Discussions with Zoom (Cornell University)
  - Case Method with Zoom (Harvard University)
  - Smart Study with a Buddy (Kevin Carlson)
  - Wiki Creation - Group Assignment (Kristin Lamoureux)
  - Use of Existing Virtual Reality on the Web Assignment (Kristin Lamoureux)
  - Online Experiential Learning Framework (Howard Haines)
  - Working Sample Problems Before Instruction (Kevin Carlson)
  - Authentic Assessment (Jacob Shortt)
ACIS Online Learning Survey: Students & Faculty

Survey Approach

The ACIS Department Head Dr. Jack Maher sent out an anonymous survey to faculty while Jean and Jacob sent the same anonymous survey to their students with the instructions to respond in a manner that addressed their general online experience with the following submission breakdown:
Survey Approach

The survey was extremely simple and contained only the following three questions:

<table>
<thead>
<tr>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are you a student or a faculty member?*</td>
<td>What have been the biggest struggles in moving to an online environment?*</td>
<td>What about online learning are you still uncertain about or want to learn more about?*</td>
</tr>
</tbody>
</table>

Main Faculty Difficulties

<table>
<thead>
<tr>
<th>Student Engagement (5)</th>
<th>Flexibility Concerns (2)</th>
<th>Transition Preparedness (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment Issues (1)</td>
<td>Effectiveness of Online Learning (1)</td>
<td>Technology Issues (1)</td>
</tr>
<tr>
<td>Class Discussions (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of Effective Implementation (2)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Main Faculty Uncertainties

The majority of Faculty concerns have been covered through Task 1. The two top concerns about the future are “Student Engagement” and “Assessment Concerns” both of which should be fleshed out further in the sprint.

Top Student Difficulties (>4 Records)
Main Student Uncertainties

The top response was that there were not current concerns

Main Student Uncertainties for those with Concerns

The top non-transition concern was around assessments
Student Reported Struggles

Stress from Lifestyle Changes

- Staying motivated for school work being the same while everything else in my life has changed.
- Testing, Using the Lockdown + Webcam makes my test anxiety even worse as I am nervous that any background noise from my roommates that are in a different room or if I look away or go to the bathroom will lead to a honor code violation.
- Also, mental health has been a struggle to deal with on top of trying to learn everything.
- ... not to mention having to constantly worry about COVID.
Lack of Organization

Some professors were absolutely not ready to switch to online classes. None of these complaints are applicable to ACIS professors but they are applicable to Non-ACIS professors/classes in Pamplin. ACIS professors from my experience are doing very well as of now in the transition to online.

I am not a fan of it at all. Many professors have been very disorganized and I have little to no work in two courses that I actually enjoy learning about.

Communication Issues

Some professors aren't staying in contact with students. I had one professor that took a month after spring break to upload anything to canvas and now he isn't responding to emails.

Some of my professors don't interact with us enough (but I'm in two different colleges at VT, not just Pamplin). I've heard other students (again, not just in Pamplin), complain about this happening too. Professors who don't record lectures or do Zoom meetings are often the ones I've had issues getting feedback from.

It's also been tough keeping up with all of the emails as every professor is using email/announcements for all of their communication.

Getting help with material that I do not understand. It is difficult to get some questions answered over email or on zoom. The lectures also do not always lend themselves to being easy to follow or pay attention to based on the way the information is portrayed.
Lack of Timely Feedback

- Also, if I take a multiple choice test and I am waiting a week or more for my test results I think the professor does not give a **** about the class.
- In regards to office hours, I think some teachers fail to realize that we are college students. **Having office hours at 8am is absurd** when we don't have schedules that require us to wake up to go to class, and if you think a college student is waking up at 7:45am to ask a question you're crazy.
- The biggest struggle I've had is with keeping up with the material, because if there are no quizzes or in-class assignments I have trouble keeping up.
- Another struggle is just not getting the interaction with fellow students. **Getting to be in a classroom and ask the person next to you if they understand what just happened and if they can explain it to you is a big deal.** Because sometimes you don't wanna ask the teacher a question and you learn better from your peers and their questions. However on zoom people hate to ask questions because it is awkward to voice over everyone.

Time Management Challenges

- Knowing how to allocate time for each class throughout the day since my classes post lecture videos rather than having zoom lectures live.
- I have had the most trouble with staying motivated to do my classwork. In Blacksburg, I was accustomed to having a fixed time period in which I attend lectures and then working on assignments in the evening. **Now, I do not have a set time to do anything; I only have deadlines.**
- With the change to online learning dates of assignments have changed and in some cases overlapping with other classes assignments.
- I know we can make our own schedules, but trust me that is easier said than done.
Feeling Overwhelmed

- Now that classes are online, I feel like a load of videos are posted every week to cover multiple portions of material in multiple classes and it feels overwhelming at times.
- I have a group project in every class. It is extremely difficult to conduct a group project from home. I know it is really challenging to transfer these assignments to the online environment, but all of my projects are inducing quite a bit of stress.
- Every course has its own format and every class has a different place that the videos are stored and the assignments are due. Additionally, all the assignment dates have been shifted and there has been many conflicting dates and conflicting information on the assignments. Many weighting of the courses have been changed but the syllabus and documents have not been updated to reflect it, just mentioned during a video or lecture.

Increased Distractions

- Trying to focus and stay motivated with work. Its very difficult at home to focus with so many distractions.
- Staying motivated and having a space to do work without distractions has been hard (this is also b/c we can't leave our houses right now). Taking exams/ quizzes with the Lockdown Webcam--taking a test while being recorded is really distracting, it's worse than taking exams normally with hundreds of students in a classroom.
- It is hard to take online timed exams when you have roommates who will not respect that and be quiet even if you ask them to.
- I struggle a lot with learning at home and being able to concentrate around my family. Of course, now I have more obligations as I've been expected to become more family oriented.
Lack of Suitable Space

- It's very difficult to do schoolwork once removed from the environment you've designated for schoolwork.
- The biggest issues with an online environment primarily comes from the fact that my house in which I live and sleep is not suited for a studious environment. Yes, we've all heard that, 'Oh, well, set a specific spot and time in the house away so you can focus,' but that simply is not possible for some people.
- Relying on internet connection 24/7 now that all of my classes require it, while I'm in a home with 5 other people who are working from home, there's expected connectivity issues.
- I think learning from home has been my biggest struggle. When I am home, I am used to relaxing and spending time with my family and friends so it is hard to flip the switch and have no separation between home and school.
- Many times to take an exam, I have to go sit in my bedroom. Your room is supposed to be a place to relax, not a place to take exams.

Increased Workload

- I feel that professors are assigning us more work, and it is hard to balance this new workload for all of my classes.
- The amount or work and videos time that professors assigned. It seemed to increase, which made my time harder to manage.
- I have noticed that the workloads for some of my classes has actually increased since moving to digital learning, which does not help when I am already falling behind due to lack of motivation.
- Some professors are giving much more work than they were in class which has been hard to manage.
Concerns About Future

- I also feel like I am not prepared on exams and quizzes because I don’t have that same in person instruction. I think that to fix this, professors should assign more projects and homework as opposed to exams. This would give students a chance to actually learn the material and do something more interactive. I feel like now that I am essentially teaching myself, I just learn to pass and not to remember. I might as well be going to a community college or some online university. I feel as if the value of my education has significantly decreased and I don’t feel like I am getting a true Virginia Tech education.

- Watch out because online learning is about to bring about a lot of problems when the material is necessary for future classes. For the sake of having our degrees mean something, I beg that you do not consider moving fall 2020 classes to online format.

- Just hoping it doesn’t extend into the fall semester.

- This has been really hard, and I don’t see it being much easier if we’re online again in the Fall.
Online Learning Taskforce Committee
April 16, 2020
2:30PM- 3:30PM
Zoom

Agenda

1. Articulate the objectives for the task force and our timeline
2. Let the members of the task force introduce themselves
3. Let taskforce members ask any questions they have about our work
4. Lay out the schedule for the next couple of weeks (Tuesday and Thursday meetings each week with assignments in between)
5. Task taskforce members with their work for next Tuesday’s meeting
Attendees:
Brown, Nicholas
Carlson, Kevin
Collins, Brian
Del Rosario, Joshua
Easterwood, John
Filer, Kimberly
Haines, Howard
Hoopes, Barbara
Khansa, Lara
Lacoste, Jean
Lamoureux, Kristin
Pike, Dale
Shortt, Jacob
Speshock, Paul
Shelton, Sarah
Tholasi, Rachitha
Townsend, David
Voivoda, Luke

Associate Dean Kevin Carlson introduced the purpose, the expectations, and timeline for forming the Online Learning Taskforce Committee. Everyone introduced themselves and their title and role they will play in this committee. Carlson mentioned he would like this committee to meet Tuesday and Thursday for the next upcoming two weeks with assignments to be completed in between each meeting to provide more feedback faculty and students might have about online learning. Carlson asked the committee members to complete the set of tasks below and submit their feedback in the google drive that Bryanna Meredith will send out to the committee.

Action Items:

• Committee members to complete Task #1
Task #1

- List what you believe are some best practices in online learning (your top five).
- List what you believe are online learning practices that faculty might or have used that should be avoided (your “bottom” five).
- What are some of the most important things about online learning that we may not know well enough?
- What are misperceptions that some faculty or students might have about online learning?
- What resources are you aware of that might be useful for faculty or students seeking to maximize the effectiveness of online learning?
Online Learning Taskforce Committee  
April 21, 2020  
1:00PM - 2:30PM  
Zoom

Agenda

1. Check-in and feedback on Task #1 responses
2. Developing Criteria for Evaluating Recommendations (Task #2)  
   a. How do we determine if the recommendations are good?  
   b. What’s missing?  
   c. Finalize Task #2 Framing—due before Thursday’s meeting
3. Preliminary discussion of weekend breakouts (Task #3)  
   a. Refining Recommendations and justifications  
   b. Packaging recommendations for communication to faculty and students  
   c. Recommendations for potential changes in educational support systems  
   d. Evaluating recommendation effectiveness  
   e. What don’t we know that we need to learn
Dean Carlson discussed the responses that were submitted for Task #1 and asked the committee for their feedback on the document that had all the responses consolidated. The committee talked about their perspectives and positions for submitting the answers they did to Task #1.

Carlson asked the committee to evaluate criteria for recommendations for online instruction and discuss them in Task #2.

Each department was asked to put a survey together with faculty feedback and ask their students who have accessibility troubles.

**Action Items:**

- Committee members to complete Task #2
Task #2

1. Department Town Hall/Survey

One activity to complete by Thursday, if possible, is to hold a Townhall of faculty (and potentially students) to understand what faculty need to help them develop effectiveness courses in an online world. Department faculty and students are responsible for reaching out to representatives of their department and gathering data. David Townsend has offered to make his questions available on the Google site.

One way to report out results for this deliverable is to create a bullet point list of types of recommendations that faculty or students indicate they would find useful.

2. What’s Missing?

In our first cut at developing recommendations, we likely missed some things. We need to see if we can identify what might be missing. Dr. Hoopes has offered to complete a thematic review of the content of the first two items in Task #1. Once that is completed, will post the material in the Task #2 folder on the google site (so it stands out). Please review her themes and identify any specific recommendations or categories of recommendations that you think are missing.

3. “Moderators”

There are likely to be features of courses, content, learning objectives, student level, or faculty that might change the nature of the recommendations we might make. I would like to try to identify a set of these moderators that we should consider in developing our recommendations. If you are not certain that a moderator actually requires changes the recommendations, put it down anyway. We can debate this once we have developed the list.
Online Learning Taskforce Committee  
April 23, 2020  
3:00PM- 4:30PM  
Zoom

Attendees:
Brown, Nicholas  
Carlson, Kevin  
Collins, Brian  
Del Rosario, Joshua  
Dickhans, Jim  
Easterwood, John  
Everett, Jonathan  
Filer, Kimberly  
Haines, Howard  
Hoopes, Barbara  
Khansa, Lara  
Lacoste, Jean  
Lamoureux, Kristin  
Nottingham, Quinton  
Pike, Dale  
Shortt, Jacob  
Speshock, Paul  
Shelton, Sarah  
Tholasi, Rachitha  
Townsend, David  
Voivoda, Luke

Associate Dean Carlson announced that the college has made a decision to teach online courses for Summer, but have not made a decision on Fall courses. Carlson mentioned to everyone that the Pamplin Town Hall Meeting for “Teaching during COVID-19” is Thursday May 6th at 9:00AM- 10:00AM and asked everyone to add that to their calendars and to attend if they are available. Carlson mentioned the tasks to be completed and consolidated by Tuesday April 28th in order to have information to present during the Town Hall Meeting.

Carlson discussed the Recommendation Framework Template that he put together based on the conversations and consolidated information that the committee provided with their feedback in the previous meetings and tasks.

Jacob Shortt presented a PowerPoint that he put together based on the feedback that was received from a survey they sent out to students in Accounting and Information Systems. The committee provided their comments based on what Shortt presented from the feedback that they have received from the students within their department.

Carlson requested an additional Online Taskforce Committee Meeting to be scheduled tomorrow Friday April 24, 2020.

Action Items:
Bryanna Meredith to schedule an hour-long meeting tomorrow Friday April 24th at 10:30AM- 11:30AM.
Kevin Carlson to develop Task #3.
Task #3

Using the Excel Spreadsheet and the discussion from today’s session, I would like each of you to suggest a revised category structure of recommendations in two major areas:

1. Categories that account for the primary components of developing most good online courses.

2. Categories of common problems/opportunities that faculty experience and for which we may want to provide specific recommendations.

Please submit these to the Google Site for Task #3 by 9:00 am tomorrow and I will consolidate them and distribute a revised combined list by 10:00 for us to review in tomorrow’s meeting.

Also, please review the contents of worksheets two and three as worksheet two frames what information we may want to develop about each recommendation and worksheet may represent additional potential task assignments for the weekend.

By the end of tomorrow’s meeting, I want to task individuals/groups to develop recommendation sets for each category by next Monday.
Attendees:
Carlson, Kevin
Del Rosario, Joshua
Easterwood, John
Everett, Jonathan
Haines, Howard
Hoopes, Barbara
Khansa, Lara
Lacoste, Jean
Lamoureux, Kristin
Pike, Dale
Shortt, Jacob
Speshock, Paul
Shelton, Sarah
Townsend, David

Associate Dean Carlson said although the university has not made a decision on online courses for Fall Semester, he would like to prepare a framework for a set of recommendations and resources from the faculty and students in the Online Learning Taskforce Committee to present to the college if the decision to teach online during Fall is made.

Different members of the committee shared their recommendations for modules and different methods of online learning on Canvas.

The next Online Learning Taskforce Committee Meeting is on Tuesday April 28th at 3:00PM- 4:30PM.
Associate Dean Carlson asked each member of the committee to state a recommendation that they believe is a critical piece for faculty or students they would suggest entering in an online course environment for Fall. Carlson explained the two documents that were sent out to the committee. He stated one was a list of the consolidated recommendations that were submitted by the committee with a rating section and the other document was a list of possible additional recommendations. He asked the committee to review each of the documents and to add any additional comments or suggestions.

Carlson asked everyone to email their comments and suggestions to him, so he can build a set of recommendations to give out to the faculty in the Pamplin “Teaching during COVID-19” Town Hall Meeting on May 6, 2020 at 9:00AM-10:00AM.

The next Online Taskforce Committee Meeting will be April 30, 2020 at 3:00PM- 4:30PM.

Action Items:

Bryanna Meredith to possibly schedule a meeting on Tuesday May 5th depending on how much progress is made prior to the Pamplin “Teaching during COVID-19” Town Hall Meeting.
Other Possible Recommendations:

- Begin with the Course’s Learning Objectives
- If You Focus on “Doing” Learning Objectives (the “Knowing” Will Follow)
- Scaffold Learning of Complex Skills Across Activities
- Less is More—Help Them Learn a Few Important Things Really Well; Go Deep Versus Broad
- Build in Time to Spend with Your Students (in Any Format)
- Synchronous, Asynchronous or Blended?
- Consider How You Add the Greatest Value to Student Learning—It’s Not Lecturing.
- Avoid Over Design—Keep it Simple
- Alternatives to Live Discussion
- Skip Participation Grading
- It’s Not About Replicating the Activity, It’s About Replicating the Learning
- Fostering Academic Integrity—Make it Easy to Get What you Expect
- Increasing Student Engagement
- The Five Features of Courses that Turn Students Off—and Techniques to Avoid Them
Online Learning Taskforce Committee
April 30, 2020
3:00PM- 4:30PM
Zoom

Agenda

1. Consolidating Key Recommendations
2. Prepare for Pamplin “Teaching during COVID-19” Town Hall Meeting
   a. May 6, 2020 9:00AM- 10:00AM Zoom
3. Student Town Hall Meeting
4. Next Steps
Associate Dean Carlson discussed the agenda and the upcoming Pamplin “Teaching during COVID-19” Town Hall Meeting. He asked the committee how they wanted to frame the discussion for that meeting.

Carlson and the committee worked on the framework for the discussion on the suggested recommendations during the town hall meeting.

**Action Items:**

Bryanna Meredith to schedule an Online Learning Taskforce Committee Meeting on Monday May 4th at 3:00PM-4:30PM.

Pamplin “Teaching during COVID-19” Town Hall Meeting on May 6, 2020 at 9:00AM-10:00AM.
Online Learning Task Force Discussion Themes

We Have an Opportunity to Differentiate Ourselves
This past spring, COVID-19 forced us to conduct emergency conversions of “face-to-face” courses so we could complete the semester online. We did a great job of converting, but we can do better. If we end up online, then we need to be able to provide genuinely effective online learning experiences.

Converting to Online Instruction this Summer Gives us the Greatest Chance for Success
Should the university decide to hold in-person classes, we believe converting from online to face-to-face delivery is demonstrably easier and would retain many of the potential benefits of course revisions for faculty and students.

Moving to Online Instruction is not Simply Converting but Revisiting How We Help Our Students Learn
As we saw this spring, simply shifting courses designed for face-to-face delivery to online delivery creates challenges. Taking advantage of new tools, many of which are enabled by moving online, can mitigate problems, but also when done well can reduce student and faculty effort, increase student learning, and increase student and faculty satisfaction.

Start Early and Keep it Simple
A key to redesign is to start early. Thinking about learning objectives, assessments and key design structures early gives you time to think about the options available to you. It can be easy to feel overwhelmed. A common tendency in redesigns is to try to do too much. Focus on the few things that really matter—if necessary trade some breadth for deep learning of key competencies.

Students Do Not Expect Us to Be Great—They Expect Us to Care
When faculty do not prepare an easily navigable website, put materials for course assignments up at the last minute, or communicate only marginally with students, student interpret that as the faculty member not caring about them.

Use Canvas to Build Communications Discipline into Courses
The less we see students, the more important is be thoughtful in our course development (so our messages do not need to change), and that we offer new avenues to connect with students. Using one of the Canvas templates is one of the easiest ways to increase communications discipline.

Enhance Academic Integrity Through Course Design
Most of our students do not cheat. Rather than technological solutions, consider course redesign to test security issues and supporting academic integrity.

Create Classes that You Would Want to Attend
Rethink how we educate gives us the opportunity to experiment with new ways of engaging students and helping them learn. Take the opportunity to reflect on our best educational experiences and the best learning experiences of your students and build some of the best of these ideas in our own classes.

Be willing to Experiment
All of us are learning through this transition. We recognize faculty are at different points in their online learning journey and differ in their familiarity and comfort with online learning. The task force is trying to provide useful examples, simple instructions and, when needed, in-person support. If faculty have a specific need there is help—they just need to ask.
Suggested Recommendations to Address for the Town Hall

Setting the Stage for Fall

• We have an opportunity to differentiate ourselves
• The best way to prepare for this fall’s uncertainty is to build your classes so that they can be delivered online
• There are tremendous resources on campus—our job is not to recreate the wheel, but help interested faculty make decisions about how they want to address their course and then point them toward resources that can help them do that.

Voice of the Student

• Have all courses use Canvas
• Create common templates to assure straightforward navigation
• Make sure the site is available before class begins, try to minimize last minute changes
• Use the gradebook functionality
• Find ways to connect regularly with your students

Primary Taskforce Recommendations

• Use Canvas
• Redesign Rather than Convert
• Start with Your Learning Objectives
• Parallel Structure
• Scaffold Learning
• Build in Experiential Opportunities
• Encourage collaboration
• Replace high stakes exams with several lower stakes exams
• Use Authentic Assessments
• Use Rubrics to Assess Competency Development
• Less is more—Trade breadth for Depth
• Design in support for academic integrity
Online Learning Taskforce Committee
May 4, 2020
3:00PM- 4:30PM
Zoom

Agenda

1. Town Hall Plan
   o Dean Sumichrast, opening comments
   o Moderator: David Townsend
   o Panelists: Howard Haines, Barbara Hoopes, Jean Lacoste, Kristin Lamoureux, Jacob Shortt, Luke Voivoda

2. Resource Development
   o Canvas Site
   o COE Online Teaching Sheet
   o Student Survey Results

3. Ongoing Support
   o CETL and TLOS support for Summer and Fall
   o PCOB Faculty mentors
   o Adhoc Committee on Pedagogy and Instructional Excellence
   o Other forms of administrative support needed
Attendees:
Carlson, Kevin
Collins, Brian
Dickhans, Jim
Easterwood, John
Everett, Jonathan
Filer, Kimberly
Haines, Howard
Hoopes, Barbara
Khansa, Lara
Lacoste, Jean
Lamoureux, Kristin
Nottingham, Quinton
Pike, Dale
Shortt, Jacob
Speshock, Paul
Shelton, Sarah
Tholasi, Rachitha
Townsend, David
Voivoda, Luke

Associate Dean Carlson went over the template for the Pamplin “Teaching during COVID-19” Town Hall Meeting on May 6, 2020 at 9:00AM-10:00AM.

The committee discussed the tasks for each person to discuss during the meeting.
Response to Call for Proposals: Online Transition Funding

College:

Total amount of funding requested:

Overview
Please provide a concise overview of the proposal including information on the following:

- Needs to be addressed
- Justification of prioritization of these needs (aligned with university and college priorities)
- Expected outcomes should those needs be addressed
- Activities and/or actions to be funded
- Courses involved in the funded activities or actions
- Average enrollment in these courses
- Number of faculty and/or graduate students involved
- Plan to sustain the offering of these courses
- College, department and/or program support to be applied to the activities or actions and to sustaining the outcomes beyond the funding period

Timeline for completion of activities and/or actions
Please provide a high-level timeline showing the dates on which activities and/or actions would start and be completed throughout the period covered by this finding.

Fund Allocation and Budget
Please indicate here the breakdown of how funding will be allocated and budgeted if awarded.

Additional Comments:
Please provide here any additional statements or comments you wish to have considered in the review of this proposal.