Remote, blended or hybrid: Good Teaching is Good Teaching

Anne L. Law, PhD
Department of Psychology
Rider University

Thanks for inviting me

This talk emerged out of conversations Dina & I shared in early March as the looming pandemic began to reveal itself and as we both came to increasing awareness of what we faced. Although I teach at a traditional University in a College of Liberal Arts and Sciences, Rider University is larger and more diverse in its offerings and I have extensive experience teaching fully online. I kept reassuring Dina that one can "go remote" and still have authentic learning experiences. Dina was working hard to understand what I meant, but still struggling to imagine what teaching would look like for her and her students. As the semester ended its probably fair to say that I was far too sanguine and I faced more challenges than I anticipated, and Dina found a way to maintain her seminar in its remote format, and was generally satisfied with the outcome. I found some things I need to improve and Dina found some things that worked that she might not have ever encountered.

Spring 2020 The Great Experiment

If you had known what was coming, what would you have done to prepare?

I'd like to pause for a minute to reflect on Spring 2020. Use the chat box to share your thoughts – If you had known what was coming, what would you have done to prepare.

What do I bring to the conversation?

I was surprised to learn that my online teaching Improved my face-to-face classes



What do I bring to the conversation?

I have a long history of examining the teaching/learning process. Both Dina & I attended a graduate program (UNH) where there was an explicit focus on college teaching – very unusual in its time. My first academic publication was in the journal *Teaching of Psychology* which reported a project completed with 2 other graduate students. Later a name for this sort of endeavor emerged: The scholarship of teaching and learning. I've been an early adopter of many variations in pedagogy – flipped classroom, inquiry learning, hybrid and online instruction. I mentored faculty for years in their own projects using classroom inquiry, and I directed our Teaching and Learning Center for 3 years.

The title I have given for this talk reflects my deeply held belief that there are core elements of good teaching. And in applying my knowledge of pedagogy and adolescent development to the task of developing online courses I learned something important.



I was surprised to learn that my online teaching improved my face-to-face classes

My goal today is to identify some of the core elements of good teaching that can make a difference to all of us and to illustrate how those elements might look different in a virtual classroom. I hope I can convince you that some strategic changes can help you be better prepared for the fall semester.

I cannot tell you all of the "hows" of making these changes (you are a Moodle campus while I use Canvas), BUT you have terrific support from your Instructional Technologists. Coming in July you have the opportunity to participate in a four-week series of Design Studios led by an experienced teacher and expert in online pedagogies — Flower Darby author of the very recent

Small Teaching Online. I will emphasize the "why" – provide some rationale for selected changes, and the "what" sorts of changes I would recommend and the impact they might have.

Overview: Good teaching is good teaching





Lots of roads lead to your destination



Overview: Good teaching is good teaching

The central goal of teaching is to create the conditions for transformations of the student. Learning is a transformation. As explained in the influential book *How Learning Works*

- learning is a process which we infer from products or performances provided by the student,
- learning involves a change in knowledge, beliefs, behaviors or attitudes,
- real learning is lasting, and
- learning is a direct result of how students interact with and respond to their experiences.

Good teaching is a mysterious alchemy of deep knowledge and the ability to see through the complexity to the core of what a less knowledgeable learner might need to enter into the conversation. It must include attention to motivation, interests and prior knowledge.

There is no definition of learning that speaks to WHERE it happens, instead we know much about HOW it happens and WHAT can be done to facilitate it



Detour sign

For sure we have taken a massive detour in our teaching. And to be honest we do not know what will come next. We will make some provisional assumptions, we will balance our need to protect our own health or the health of those we care about against our desire to return to the familiar rhythms of our teaching and student learning. And we have the time to get ready.



Map and text

My goal today is to help you lean into the upcoming challenges of 2020. I'd like you to feel empowered and encouraged. To believe that there are things you can do to feel more satisfied with the outcomes.

More than half of Trinity faculty identified student attendance, participation and the completion of work as problems in Spring. Slightly fewer than half felt that their course did not translate well into the remote format. The vast majority of you are concerned about how to maintain student engagement and diminished learning. While students felt disconnected and struggled with lengthy zoom lectures. Nearly 80% of Trinity students report feeling anxious and stressed – and aren't we all a bit stressed and anxious?

There are solutions for all of these concerns. No even the most accomplished teacher is successful all the time. There are no magic tricks, however you can be more prepared.

Thinking just about how you use (or could use) your classroom time – What are some differences between a virtual space and physical space?

There are two aspects of the virtual environment that will play a role in your hybrid teaching -

You will substitute classroom time for zoom time and you will shift some of your instructional activities to Moodle.

Both of these shifts remove some of the routines that are a familiar part of our teaching. The routines that not only structure our time, but influence the teaching/learning process.

The virtual environment lacks the rich nonverbal information that is available in the classroom – we cannot scan the room for misunderstanding or boredom, we cannot easily discern the student who may be on the verge of asking a question, our conversations before and after class are missing, we often convey unplanned but important information.

In our traditional teaching we spend considerable time constructing learning for students outside of the classroom – readings, assignments, discussions, projects, presentations and more may all be developed outside of the classroom. So, the task for us is to identify the core differences in the virtual and face to face classroom and then reimagine our courses in the remote format.

Why college faculty are uniquely prepared to meet the challenges of Fall 2020



Use your superpowers



Why college faculty are uniquely prepared to meet the challenges of Fall 2020.

As teachers at a Liberal Arts college the faculty are first and foremost disciplinary experts. This is a strength and perhaps sometimes a challenge. We are responsible for making decisions about the content that belongs in a given course, our disciplinary curricula and related curricular decisions. We design our own courses, we often don't want pre-digested textbook supplements, we have our own judgements about what belongs, and what doesn't belong as well as the relative importance of each inclusion.

When I teach my first semester psychology majors, in our first meeting when I introduce myself I also introduce the other faculty in our department. And I stress to these brand-new college students that one of the most significant differences between these faculty and the teachers they are familiar with — is that their professors are engaged in the realm of **knowledge creation**. I share examples of the interesting work done by these faculty, and explain they may come to participate in that or similar work. I want them to understand that the experiences they will have as psychology majors involve becoming disciplinary practitioners. This disciplinary lens is key to who we are as teachers, and as teachers we are mentoring apprentices to use the discourse and methods of inquiry of our respective disciplines.



But as much as our disciplinary expertise is our super-power it sometimes will interfere with our success as teachers. Our fields of inquiry are broad and generally our expertise is narrower. We have built, over time, deep knowledge, and yet we must provide entry points for those who do not possess such knowledge. There are aspects of our disciplinary training that may run counter to how technology is used to facilitate learning. Some reflection on our position as experts may help us. Can we remember our own learning path? Or perhaps we need to

recognize that our decision to become a disciplinary expert may itself make us different from most novice learners? Can we acknowledge the complexity that so fascinates most of us, may seem impenetrable to a student? Perhaps even be boring? Do we remember that our path of learning – before beginning our teaching journey – may have been 8-10 years long?

A central question I ask myself – Do I bring humility to my teaching?



Use your superpowers

I have some suggestions for how our superpowers as scholars can be effectively translated to the realm of teaching

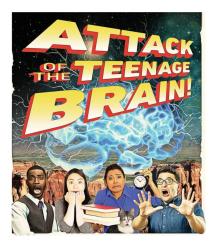
- We are well suited to discern essential, valuable, and not-so-important content we
 will need these distinctions if we apply Backward Design a design process that I will
 say more about later.
- We are practitioners of the tools of scholarship in the humanities, sciences and social sciences,
- We understand the evolutions of theory, knowledge, scholarship (and therefore can provide needed context, history and background).
- We can discern the recent fad from the enduring idea (we can help students understand the standards by which our discipline judges the merit of its products).

While these approaches are predicated on disciplinary expertise it will take **intention** to apply them.

- Further, we can treat the teaching/learning process as serious intellectual work which requires exploration and creation. I would like to encourage you to embrace the intellectual and scholarly nature of engaging with questions of how students can best learn in your classes.
- Choices about content, assignments, feedback, assessment of student learning are the
 choices you will make. Applying knowledge of how people learn, some principles of
 pedagogical practice and growing your use of Moodle will prepare you for the fall, but
 also require your serious engagement and you are already prepared as scholars to do
 this.

The work of the Teaching Professor is serious and can be intellectually engaging. And we may be rewarded with a more satisfying and successful academic year.

About our Students – a detour into adolescent development







Attack of the teenage brain

Decades of research have led to the recognition that cognitive and emotional development continues into the decade of the 20's. Brain imaging and behavioral evidence indicate that the following cognitive skills have not reached their full adult potential:

Executive function Impulse control Self-regulation Attention Processing speed

Additionally, nearly 80% of Trinity students report experiencing stress and anxiety – emotional responses that are known to interfere with the ability to filter irrelevant information and capacities provided by executive function. *To be honest how many of us have experienced some diminished attention and productivity?*



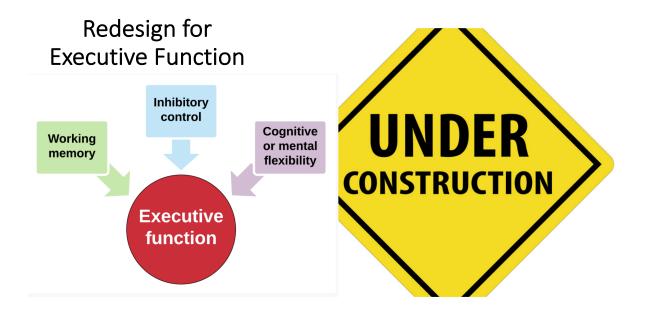
Blah, Blah, Blah

Remote teaching puts additional burdens on the cognitive system. Students lack all of the external, implicit, structures that help manage time and activity. *Again, how many of us have when awakening in the morning have to think twice about what day it is? Or what you will do on a given day? Or have that shocked recognition – oh yes, the pandemic?* The pandemic and remote instruction have increased the demand on our ability to manage attention, keep track of time, stay on task – so maintaining focus, following instructions, resisting distractions are more difficult while these capacities for adolescents are still developing.

We have the opportunity to redesign our courses (not change our expectations) and to apply the features of Moodle to minimize these concerns. We need to consider the **cognitive load** imposed by the appearance, structure and organization of our courses. Cognitive load refers to the demands placed on working memory – keep in mind the amount of information we can manage at one time is limited. For example if students are working on an assignment with multiple stages and concepts and they need to use relevant information, clarify terms, be prepared to discuss and conclude with a written product – we don't want to impose additional cognitive demands with organization of our courses that makes it difficult to find materials, or uses confusing instructions, or provides materials in formats that are hard to read, or includes links that are no longer active or where filenames are inconsistent and on and on. Minimizing these demands allows us to focus on the academic growth we seek for our students.

Effective use of design features in Moodle can provide a clear roadmap for students and frees them to focus on the essential learning activities you have provided. Attention to cognitive load allows us to expect more, not less from our students. Some simple changes can reduce cognitive load. Be consistent and provide some built-in redundancy. One recommendation I discussed with your IT team was to provide a boilerplate for courses that can provide a pattern for navigation through the course – every faculty member could adapt this to their content, and it is not a rigid format – but can provide for students a common look and feel to courses. The familiarity and predictable organization will decrease the cognitive load for students both within your courses and across courses. You will learn more about this later.

Up until now, for some, Moodle may have functioned as an electronic storage space. I would suggest that we move to consider our learning management system as a learning tool that is especially effective at reducing **cognitive load**. After years of developing and teaching fully online courses I now provide all of my students with the following in the LMS – syllabus, course and college policies, all assignments (all are submitted electronically), required reading and other content, additional links or resources, and an up-to-date gradebook. How we use these tools can reduce **cognitive load** for our students – and also for us.



There are many ways that redesign can reduce cognitive load and therefore accommodate and support executive function development.

Let's look first at academic skills that are impacted by executive function:

- Cognitive or mental flexibility impacts how well we deal with contradictions or ability to evaluate claims based on evidence
- Inhibitory control impacts the ability to resist temptation or maintain attention in the presence of distractions
- Capacity of working memory impacts how well we manage competing goals or the ability to simultaneously manage instructions and organization
- Processing speed reduces automatic processes such as attention and limits the ability to effectively process and comprehend sources of information

There are teaching responses that can support the development and effective use of executive function:

- Attract and manage attention for example make activities worthwhile, relevant, related to desired outcomes or personally meaningful
- Engage prior knowledge for example pre-reading assignments, class discussion, peer discussion
- Reduce the need to simultaneously process multiple sources of information for example lecturing with PowerPoint slides that contain lots of content requiring students to listen, read and take notes simultaneously

Support executive function with teaching practices that can be used in the classroom or remotely

• Provide a one page overview

• Use a graphic organizer

• Use video and make it short

Universal Design

All can be created within Moodle

There are solutions in the design of your course that can help reduce cognitive load and improve uses of executive function. I'm going to share some examples so you can begin thinking about your courses, but over the next few weeks during the Design Studios you will get the opportunity to learn more ways to think about design.



- Provide an Overview including objectives, required reading or other, submitted assignments. (example from PSY 110)
- Use of a graphic organizer to display and link all course content. Here students can find assignments and resources in one place. It's a clear and easy way to display the information in your syllabus. (example from PSY 110)
- Incorporate video of you (you can either narrate content or use a face shot). This will increase engagement, especially if you are unable to meet in the classroom. Limit video to 5-7 minutes length. The analysis of hundreds of thousands of YouTube videos indicate that attention diminishes greatly after this time.
- Universal Design Are the principles used to create equal access for students with learning or sensory disabilities. You may have been asked to make specific adjustments for students with disabilities. In addition, Universal Design reduces cognitive load for everyone and its application has a clear benefit for all students. Some examples of universal design include, and two I would recommend you consider 1. the uses of pdf files for articles or text as those can be read by text readers and 2. making sure there are closed captions for videos.

Pedagogical strategies that apply to all teaching

Hint: It's really all about assignment design

Be assignment design I am referring broadly to every activity you expect students to engage in. How you structure and deploy work for students is where learning will happen.

The novice to expert trajectory

When given a problem experts don't just know more they think differently



We all understand that our students are closer to novice than expert in their mastery of disciplinary content and practices. I want to consider briefly what research on the differences between novices and experts can teach us about the teaching/learning process. First, experts think differently about discipline-based problems – experts immediately see deeper patterns, have automatic access to vast prior knowledge, and experts do not focus on memorizing information (they already know it). Experts, with little effort, apply knowledge-based schemas that make tasks meaningful. Novices, on the other hand, will often try to memorize information sometimes with little ability to categorize it or relate it to prior knowledge – hence forgetting is common. Novices will not immediately recognize the meaningfulness of their learning experiences, and may apply schemas or prior knowledge that are inappropriate. Experts may not be good judges of what will be difficult or why – unless they take the time to examine the learning process from the novice point of view.

Conclusion: The learning experiences that work for an expert will not work for a beginner.

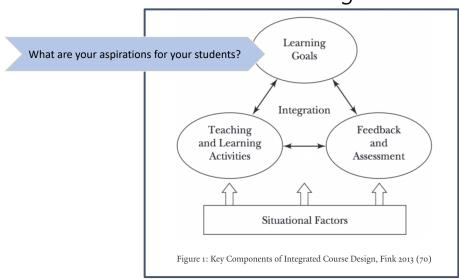
What will help:

- Be explicit about the meaningfulness of assignments provide examples that are memorable, create context, use applications, think about relevance
- Break tasks down into their components and provide practice to build greater expertise
 for example in working on a research paper faculty might help students construct an
 annotated bibliography, summarize relevant pieces, develop an outline or thesis, and
 complete a draft
- **Help students uncover their thinking** for example students might annotate their own work, or use peer-review, or write a short reflection

Use student errors as evidence of the learning process and then building practice of that
component, for example basic concepts in statistics are consistently confused by
students (types of variables, or features of design) and even after students have
completed an introductory statistics course it might be wise to provide refresher
practice before diving into more complex topics.

You probably already considered this distinction and make helpful adjustments, but the addition of remote instruction may require greater adjustment. As described earlier the virtual environment may lack some of the information that we typically rely on to guide us. There are some features of your LMS that can help with this adjustment. As noted earlier we have many assumptions about learning that will take place out of class – we can use that time to provide structured practice with key skills, to make sure you provide clear and unambiguous instructions, to build some overlap (redundancy), to help students match their activities to learning goals. Use videos or podcasts that students can view/listen to outside of class that illustrate or illuminate key ideas and then add assignments where students identify the application or meaningfulness – helping them make these connections. You can actually build more out-of-class work into your LMS that provides the cognitive structures, schemas, knowledge base that will increase student expertise. These basic techniques are not spoon feeding but rather build a foundation that allows students to build skills that can increase their use of expert practices.

Backward Design work toward alignment



Backward Design was first articulated by Wiggins and McTighe in over twenty years ago. Since that time this principle of design has had a dramatic impact on assessment and accreditation, it is a central tenet in instructional design, but perhaps less influential for individual faculty. I believe, however, that this is a core pedagogical principle that can provide guidance for the overall design of a course and its activities. I would like to briefly describe what the principle is and how I think it can help you – without treating it as overly prescriptive or dogmatic.

Often described as "begin at the end" Backward Design asserts that the starting point should be a clear articulation of what students will be able to know, understand or do at the end of a course. I suspect for many this starting point may also be the endpoint — many of us do not think in terms of what students can "do" — we may think more about the transformations of thinking that might result from education.



What are your aspirations?

We must articulate and then translate our aspirations for students into language that helps both us and our students to clearly know the purpose of their activities. We need to think in about what ideas are at the heart of what you teach? What is gained by understanding, knowing, engaging with these key ideas? What impact do you hope your course will have? There are multiple tools available to help you then "translate" your aspiration into goals that can be measured. (One that is very accessible and easy to use is Bloom's taxonomy and related lists of verbs that restate aspirations into language we can use to articulate what students know, understand or can do.)

As the figure describes there is synergy among the three elements of your course: learning goals, teaching and learning activities and feedback and assessment, however your overall objective is to strive for alignment in these three domains. You do not want to include activities that are tangential – you want to understand the purpose of each thing you include and be able to explain how it meets learning goals. You want to use assessment and feedback to help students understand their progress toward the course learning goals, as well as to make mid-course adjustments if need be. The process of striving toward this alignment can help you prune away incidental or tangential materials, as well as increase focus on learning goals and related activities that are more central to your purpose.

The articulation of measurable student learning goals at the beginning of your course, and the usage of these goals throughout the course can anchor students in the course's purpose and orient them to the meaningfulness of your course. We can also use these to hold ourselves accountable to maintain focus on what we have determined to be important.

How can Backward Design be useful to faculty who are engaged in **redesign for remote** as we are now? You will be making decisions about how to use your virtual time with students, what to include as content and assignments completed outside of class time, and how to provide feedback as well as when to provide formative vs. summative assessment (to be discussed during the Design Studio). Clear student learning goals will help you to decide what to maintain in its given state, what to transform, and what needs to be added or removed. You will also narrow the universe of possibilities by testing your ideas against the stated learning goals. You will use your disciplinary expertise to discern what is essential vs. what is good to know. Your stated learning goals will act as a constraint which can increase coherence and provide explicit focus on outcomes.

One example of how clear learning goals can influence design is through their use in the LMS. Providing students with an overview makes clear how student learning goals are related to what they will do. The LMS allows us to hyperlink this content so that there is explicit integration of learning goals, activities and measured outcomes.

During your Design Studio Flower Darby will have more to say about Backward Design. In her recent book she recommends early, low stakes assessments that are then connected to later more impactful assessment. For example, in my Introduction to Psychology course I access prior (often wrong) knowledge of psychological concepts with a brief true/false quiz which students then correct themselves using the reading – they provide for me the evidence they find regarding the question. This assignment meets my learning goal that students will know basic concepts in psychology and the research evidence that supports them. This assignment has also evolved from an informal class activity to an assignment submitted for credit. When I meet with students I use these as a foundation or facilitate a discussion about why certain statements are true or false.

Scaffolding Simple ≠ Easy



We have discussed the cognitive load of the virtual space, the executive function development of adolescent learners, the need to accommodate novice learners – and all of these provide strong support for the concept of **scaffolding** course work to build learning throughout your course. In the original formulation of scaffolding from the developmental psychologist Lev Vygotsky this is described as an organic interaction between a more skilled teacher and less skilled learner – where the more skilled teacher provides just enough structure so the learner can achieve success. Think of the parent running alongside and holding the seat of the child on a bike whose training wheels have just been removed. I particularly like the scaffold metaphor borrowed from construction – where the building could never reach its height without the structure of the scaffold – and when built the scaffold is removed.

The teacher only knows where the learner needs to go next through ongoing interaction with the learner. We need to understand the prerequisites for learning complex ideas and to provide practice for students, we need to be able to break tasks into constituents and provide opportunities for those parts to be reconstructed, and we need to make explicit the desired outcomes - that is to illustrate what success looks like.

Your LMS is ideally suited to allow for small, sequenced assignments. Some may even choose to open assignments after certain prerequisites are achieved. You might also provide self-assessment or peer-review as tools for students to build their cognitive structures. The use of topical overviews also provides a scaffold that indicates the what and why of learning activities. At periodic times — in addition to class time — we can provide explicit feedback to the class in the form of a short video or audio you send to the class. Scaffolding is about the interaction between the teacher and learner, so uses of the LMS that increase interaction are important.

This could take the form of audio feedback on an assignment – an approach that students find much more personal, or using some of your designated class time for small group mentoring, or holding individual conferences on a regular basis. Remember that you want to overcome the distancing effect of the virtual classroom and use time together to provide that scaffold that often occurs naturally in your typical interactions with students.

What do you already do that illustrates one of these principles?

Adapt to novice learners
Backward Design
Scaffolding

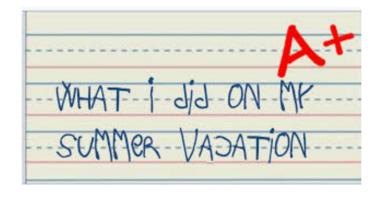
Brief discussion of responses

Summary

In this talk I have made the argument that strategic course re-design can prepare you for the possibility of remote teaching that can also positively impact your face-to-face teaching. Using evidence from how learning happens, and adolescent development, I offered some specific examples of course redesign that I have used and that can be adapted. Coming up in the Design Studio you will have the chance to see more of these examples and most importantly learn more about how to make Moodle work for you.

How might we use our time this summer?

- What am I doing this summer?
- What might you do this summer?



What am I doing this summer?

After considerable mental turmoil about how to balance health and safety against my desire to return to the classroom, I have decided to teach in a modified remote hybrid fashion – I will not meet students on campus. I will use my scheduled class time but on a reduced frequency. I am scheduled to teach three courses each of them with unique needs – two I have taught in an asynchronous online format and the third I have never taught online. So, I have made my list of what I need to do and I'll share that with you along with my rationale.

- I will record 5-7-minute video introductions that will go with my Overview pages
 opening each unit. These will be informal and recorded within my Canvas courses, but I
 can also save these as files. I intend to create these so that can be used again. I'm using
 99 Tips for Creating Videos by Karen Costa.
- I'm going to prepare in advance weekly announcements that will be sent at the beginning of each week what should you be doing? Why are you doing it? This will improve connection and communication. I also hope this will improve students' staying on task and submitting work on time.
- I'm going to create some new teaching materials. I plan to use memoirs to provide real life narratives about families that will illustrate theory and research in my Psychology of Family course. For example, I use the story of a concert pianist who escaped Nazi Germany on the kindertransport to illustrate resilience. These are examples I often use in class that I will narrate and illustrate with photos. Story is a powerful tool to create meaningfulness and make things memorable.

What should you do this summer?

Control what you can control. You won't know whether or not students will come, if they will stay and if they will be healthy. You can only control your preparation and attitude. If you decide to lean into creating a vibrant, virtual presence for your courses you will be ready. You will be able to pivot to a remote status, and if you are on campus you will be able to take advantage of some of these redesign features. Only you can decide if any of these suggestions, or the others that you will learn about from Flower Darby and your Tech team will suit your teaching. So, here's my advice -

- Prepare in advance. Much of the work in the shift to a virtual environment has to be done in advance. The time you will spend during the semester on zoom and maintaining student engagement is draining, so do not leave the organization and preparation to the fall – do it now.
- Create more opportunities for virtual engagement with students informal opportunities that are linked to teaching or advising.
- Make sure your course is transparent and easily navigated. You have lots of help for this and be sure to use the Student View to see what they see.
- Establish your plan now and try to stick to it you don't have to learn every feature of Moodle that you have never used and you shouldn't let technology drive your decisions.
- Create a plan for how you will used scheduled class time recognizing that it might be
 different from how you typically use this time. Long lectures delivered over zoom are
 widely disliked by your students (and students everywhere) and they are unlikely to be
 effective. If you need to provide content begin now to investigate what that could look
 like gather those resources.
- Think about how assignments might need to be revised. Do you need more explicit instruction? (ask someone to review with you) To provide more preparation through staged or sequential assignments? To break a task down into smaller pieces? You may want one-on-one conferences with students to help guide them in larger projects for example your scheduled class time is ideal for 5-8 short conferences or breakout rooms for peer-review? Be sure to guide those by helping students understand their purpose and task.
- Before the design studios Decide what your goals are. Let your campus team know. Discuss with your departmental colleagues. Share ideas. Use peer review.
- Most importantly Be kind to yourself and generous with students

What would you like to be able to do? What help do you need?

Recommended Reading

Susan Ambrose, Michael Bridges, Michele DiPietro, Marsha Lovett & Maria Norman (2010). How learning works: 7 research-based principles for smart teaching. Jossey-Bass.

Karen Costa (2020). 99 tips for creating simple and sustainable educational videos: A guide for online classes and flipped courses.

You can also search for Costa's library of video samples on YouTube

Saundra McGuire (2015. *Teach students how to learn: strategies you can incorporate into any course to improve student metacognition, study skills and motivation.* Stylus Publishing.

Linda Nilson & Ludwinka Goodson (2018). *Online teaching at its best: Merging instructional design with teaching and learning research*. Jossey-Bass.