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This book is an extension of an article I recently wrote for http://www.lc2.ca .

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Introduction

As the internet continues to become more prevalent in our daily functions, we need to make choices that extend beyond the boundaries of a classroom and decide which instructional strategies and teaching methods will most appropriately help our students master the skills and knowledge required to be successful 21st century learners. A blend of face-to-face instruction and online learning is a trend that is increasingly gaining recognition and merit among those who work in the field of education, but finding the right balance remains a challenge when we consider the diversity within our student demographics, instructors who are early adopters and those who are resistant.

21ST CENTURY TEACHING AND LEARNING

As those of us working in the field of education, whether it be teachers, instructional designers, researchers or curriculum developers, pursue a solid framework for teaching and learning in the 21st century, we tend to apply all kinds of labels in our attempts to define today's students. Digital citizens, web 2. 0 generation, digital learners and net generation are a few that come to mind. Notice how all of these descriptors incorporate technology or the Internet in some form or another, but at which point did that become the main focus of teaching and learning? What ever happened to pedagogy?

It is true that our students have grown up with computers and smartphones and access to the Internet but are they really being taught 21st century proficiencies?

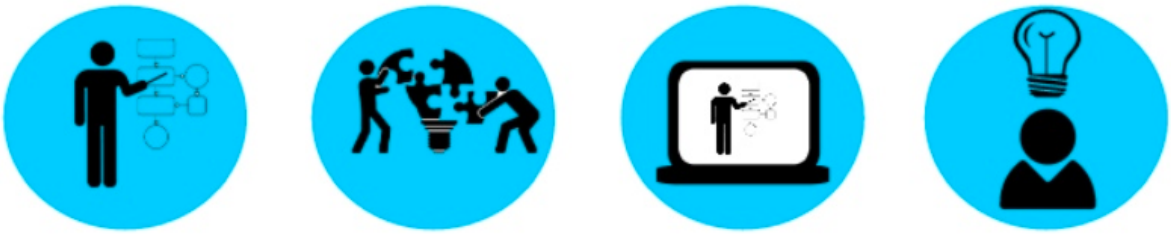
A 21st century student needs to have the opportunity to inquire, evaluate and apply the information through the right mix of independent learning and guided practice or facilitation from their instructor and peers. Though this concept is really not unique to this era of learning, our approach to helping our students learn these skills is changing. The Internet allows for increased flexibility in how we deliver and receive course content, assess knowledge and teach skills. Students can now choose an educational platform that best suits their learning style and life situation. They can learn synchronously (same time) with their peers and under the guidance of an instructor on campus or can choose to learn independently in an online course and interact with their peers and instructor asynchronously at their own pace and at a time that best suits their needs.

A third option, blended or hybrid delivery, offers an amalgamation of the two by taking the best of both environments. Though the concept sounds simple, we need to consider the best approach that will fully prepare our students to succeed in this type of environment. Though the technology might be familiar to them, they often do not have the skills to effectively use it in a learning context. One way to leverage the potential of online learning in our teaching practices is by scaffolding the students experience with online integration from a program level rather than addressing it on a course-by course basis (Bates, Cohere, October 2012). For example, students might be introduced to a minimal amount of online learning in their first year and progressively increase their experience with it as they work their way through the

program. A gradual integration will allow them to build on skills necessary to not only succeed in their subject matter area but also as contributors and beneficiaries of the overall 21st century society.

THE PERFECT BLEND

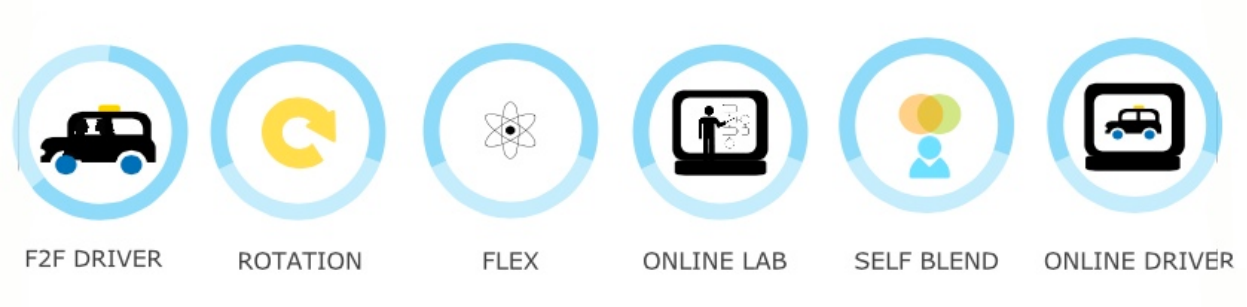
There are no set guidelines or criteria for a blended course. However, simply adding a blog component to a course or posting a video online for students to view is not enough, especially when that video is more often than not just another talking head. However, if implemented properly, these can be great tools. They can promote interactivity, allow classroom time to be used more effectively and can foster independent problem solving skills. Best of all, learning can be more self-directed allowing students to take ownership in their education.



Blending a course addresses the need for those who still want to anchor their learning in a traditional face-to-face setting while benefiting from the flexibility of learning online, but the ratio of online and face-to-face instruction varies from one educational context to another. The following video from *Education Elements* (2011) outlines different models of blended learning that can be used depending on the nature of the subject, student needs and available resources:

BLENDED MODELS

There is not a standard model for blended learning though there are several emerging prototypes that be merged and adapted to fit the diverse needs of instructors, students and learning environments. The Innosite Institute (2011) has identified these as: *Face to Face Driver*, *Rotation*, *Flex*, *Online lab*, *Self-Blend* and *Online Driver*.



The common trait among all of models is that at least one component of the students learning takes place on-line and another component takes place in a classroom under the direct facilitation of an instructor. The Blended-learning matrix (Innosight Institute, 2011) shown in figure 1 illustrates a two-dimensional spectrum that constitutes what blended learning is and what it isn't:

Figure 1

*Point **A** is not blended. Students learn in a traditional classroom setting.*
*Point **B** is not blended. Students learn at home without on-line delivery.*
*Point **C** could be blended if students combine a 'self blend' model with a traditional classroom delivery.*
*Point **D** is blended. There is a definite mix of online and f2f delivery.*

A mix of online/f2f and classroom/remote delivery

BLENDED MODELS CURRENTLY IN USE

	**Face to Face Driver:** Instructors deliver most of the content in the same physical space as the learners. Online learning is implemented in a computer lab or computers are added to the regular classroom for supplemental use.
	**Rotation:** Learners rotate on a fixed schedule between self-paces online learning and in-class Instructor facilitated learning.
	**Flex:** Most of the curriculum is delivered online. Instructor support is available as need on-site through F2F tutoring or small group sessions.
	**Online Lab:** Course is delivered in a regular classroom location but content is hosted online.
	**Self-Blend:** Learners supplement their institution's traditional curriculum with online courses.
	**Online Driver:** Content is delivered completely online. Students work remotely but are required to attend f2f check-ins.

(Adapted from http://knewton.marketing.s3.amazonaws.com/images/infographics/blended-learning.jpg)

Digital Tools for Online Delivery in a Blended Course

Most academic institutions use some type of Learning Management System (LMS) such as Moodle, Blackboard or Canvas for administrative purposes but they are also used for hosting online content and conducting synchronous and asynchronous interactions among learning communities and giving the instructor or facilitator the opportunity to have more presence in the online environment. LMS' often have built in applications such as discussion boards, chatrooms, wikis and email, which can be staple ingredients for a successful online learning experience but by extending past the boundaries of an LMS there are many more tools and applications that can be used to promote collaboration, interactivity, critical thinking skills, peer to peer learning, support and best of all student engagement. The following applications are only a sample of what is available. Read through each of the teaching ideas and try to think of ways they could be applied to your learning environment.

Tool	Teaching Ideas
Socrative	Instructor engages students through a series of educational exercises and games via smartphones, laptops and tablets
Blogger	Students practice writing for different audiences and evaluate each-other's writing. Instructor can share information on certain topics, assign writing topics and review student's blogs as a formative assessment strategy. Instructor can model digital citizenship.
Discussion Boards	Students discuss topics, collaborate on ideas, facilitate and participate in online conversations with learning community. Instructors can facilitate by lurking and guiding conversations when needed.
Google Docs	Students collaborate on writing assignments, brainstorm ideas and edit each-others work. Instructors can edit student work and monitor progress.

TOOL	TEACHING IDEAS
Slide Rocket	Students create online presentations that can be built, stored and shared online for both private or public viewing and collaboration. Students create e-portfolios that track growth and demonstrate competencies for future employers Instructors share interactive presentations that include videos and audio. Students can view and process information at their own pace.
Twitter	Student provide feedback to instructor and ask meaningful questions. Student create collaborative study-notes Students and instructor demonstrate digital citizenship skills, Students create a collaborative story (140 characters each) Students research and evaluating information Students follow experts in a certain field and research and participate in dialogue with experts in the field Instructor responds to student feedback and questions Instructor follows other experts in discipline and stays current on certain topics Instructor shares resources and collaborates with other's educators
Twtpoll	Students contribute, analyze and discuss data results using Twitter poll Instructor can ask questions and gage understanding
Wordpress	Students practice writing for different audiences and evaluate each-other's writing. Instructor can share information on certain topics, assign writing topics and review student's blogs as a formative assessment strategy. Instructor can model digital citizenship.

TOOL	TEACHING IDEAS
Skype	Students and instructor can meet synchronously from remote locations. Students can conduct interviews.
Elluminate	Students and Instructor can meet synchronously as a group, present information and participate in discussions
Adobe Connect	Students and Instructor can meet synchronously as a group, present information and participate in discussions
Evernote	Students can take notes and capture audio and take pictures. This application can be synced between mobile devices and computer.
Google Hangouts	Students and instructor and meet via video and chat synchronously from any device (computer, smartphone or tablet.)
Diigo	Students and instructor can share, bookmark, tag and annotate webpages and online documents.
Wikispaces	Students and instructors can share work, pictures, links, videoa other media.
Screenr	Students Instructors can share screencasts of processes and tutorials. Instructors can take screencasts while marking assignments to provide both audio and visual feedback.
Pinterest	Students and Instructors can share resources and links to information by creating online pin-boards of different topics.
Learnist	Students and Instructors can share resources and links to information by creating online pin-boards of different learning topics such as politics, society, technology and music.
Articulate	Instructors can create interactive learning objects that can be used to illustrate concepts for students to view online
Poll everywhere	Students contribute, analyze and discuss data results Instructor can ask questions and gage understanding

TOOL	TEACHING IDEAS
Youtube	Instructors can create videos that demonstrate skills, tasks and processes online so that students can review at their own past. Students can demonstrate knowledge and skills through video.
Vimeo	Instructors can create videos that demonstrate skills, tasks and processes online so that students can review at their own past. Students can demonstrate knowledge and skills through video.

In Class Teaching Strategies

When planning a blended course, re-evaluating what classroom time is going to be used for is important. If done right, one benefit of including an online component is that students can learn from home and apply that knowledge at in the classroom under the guidance of their instructor and alongside their peers. The following strategies are 'student centered' instructional strategies that can be used to promote active learning and engagement in the classroom. Each can be adapted according to the context you are teaching in.

Strategy	Details
Think-Pair-Share	1. Students think about what they know 2. They share that knowledge with a partner when they are in class together 3. Share key points with the rest of the class Blending Option: Students can think remotely and post key points in a discussion post or a Twitter feed using a specific hashtag.
JigSaw	1. Each Student is assigned a "home' group. 2. Each student within the home group is assigned one aspect of a topic. 3. Students from home group break off and meet with students from other groups who have been assigned the same aspect. This new group masters the topic they have been assigned. 4. Once material has been mastered, student returns to home group and teaches the material to their group members. Blending Option: Students can post resources on their mastered topic or work with their 'expert group' to facilitate and online discussion.
Role Play	Students consider different perspectives by acting out characters or taking different positions in hypothetical situations. Blending Option: Students research topics and gather information online (remotely) so that they can accurately depict their assigned role during class time.

STRATEGY	DETAILS
Labs	Students demonstrate skills and knowledge by actively "doing" under the facilitation of an instructor and in collaboration with their peer. Blending Option: The instructor posts videos that demonstrate concepts, theories or skills online so that students can review and process the information at their own pace. The instructor is available via Skype (or another application) to answer questions as needed. See the following video from the Flipped Learning Network:http://youtu.be/7_ejZ5OMIDE
Reflective Discussion	Students are encourages to think and talk about what they have observed, heard or read. The instructor or a student initiates the discussions by asking a questions that requires reflection or interpretation. Blending Option: Students can use their mobile devices to participate in polls. The instructor can share the results and initiate a discussion based on the results.

BLENDING YOUR COURSE

Deciding where on the Blended learning spectrum you want your course to fit will first depend on the context of your course. Consider what Dee Fink (2003) refers to as "situational factors". If you are considering whether a blended delivery is right for you, your students and their learning needs, you should ask yourself "What skills and abilities do I already have in order to help me facilitate in a blended learning environment?", "What resources are available to me and what kind of support will I have along the way?" Then consider these same questions from the standpoint of your students.

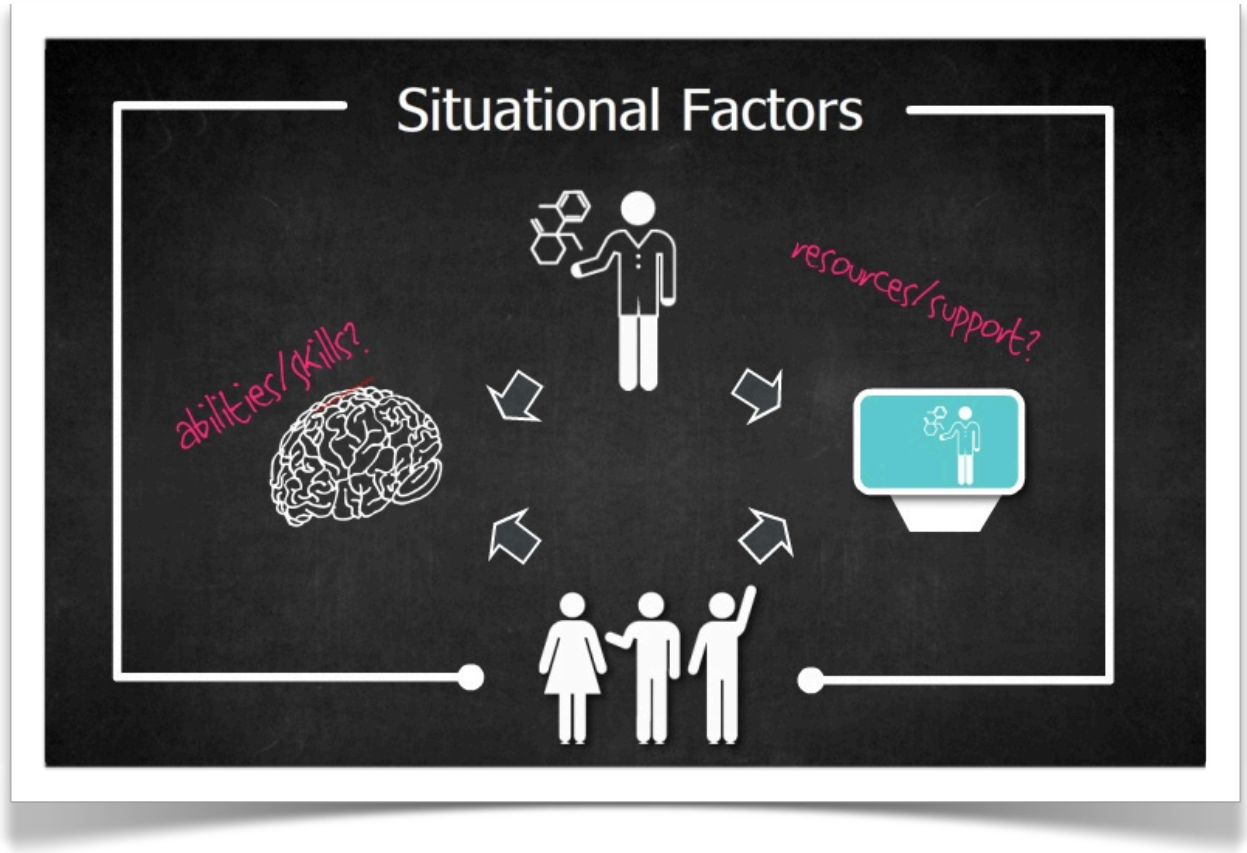
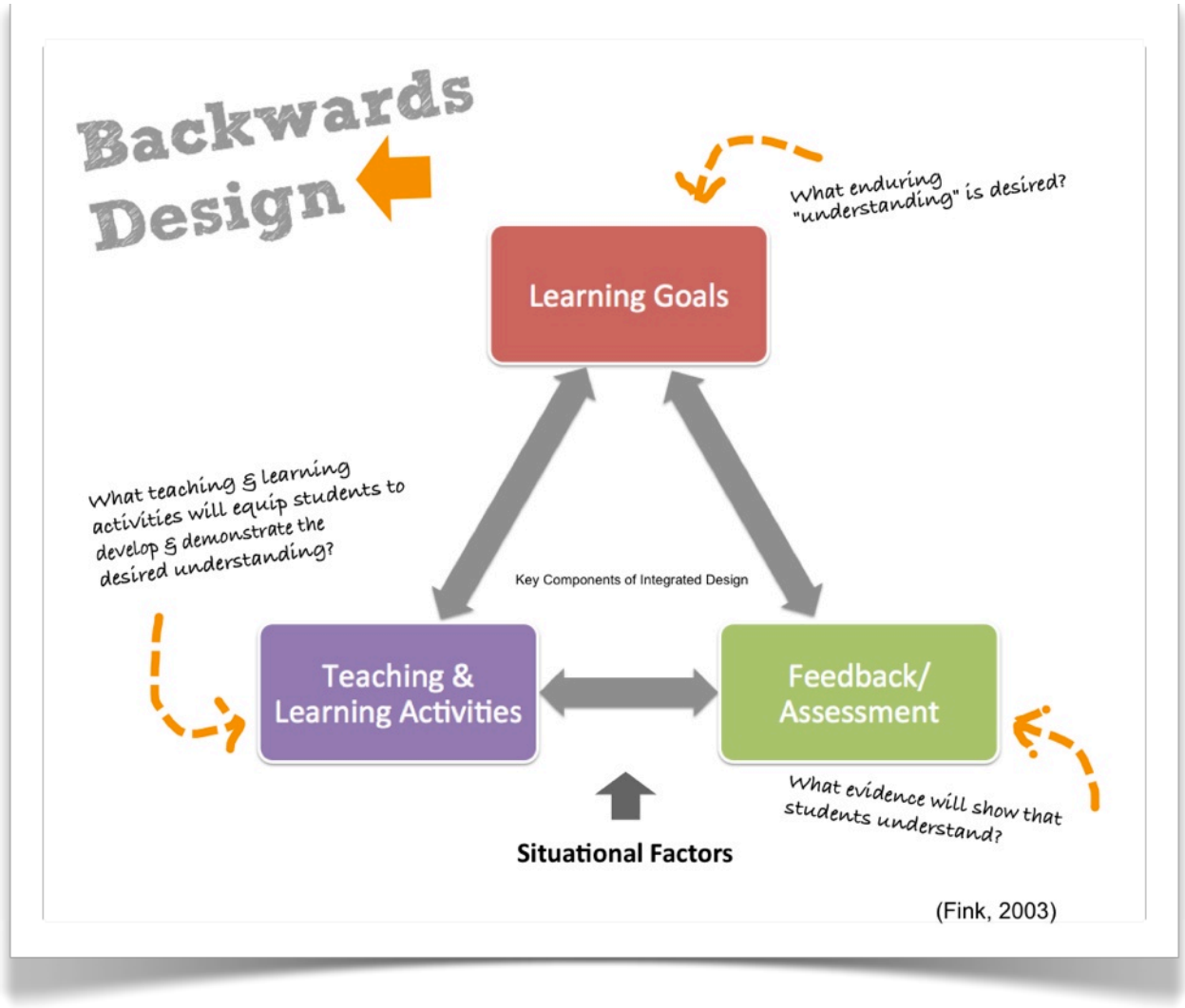


Figure 2

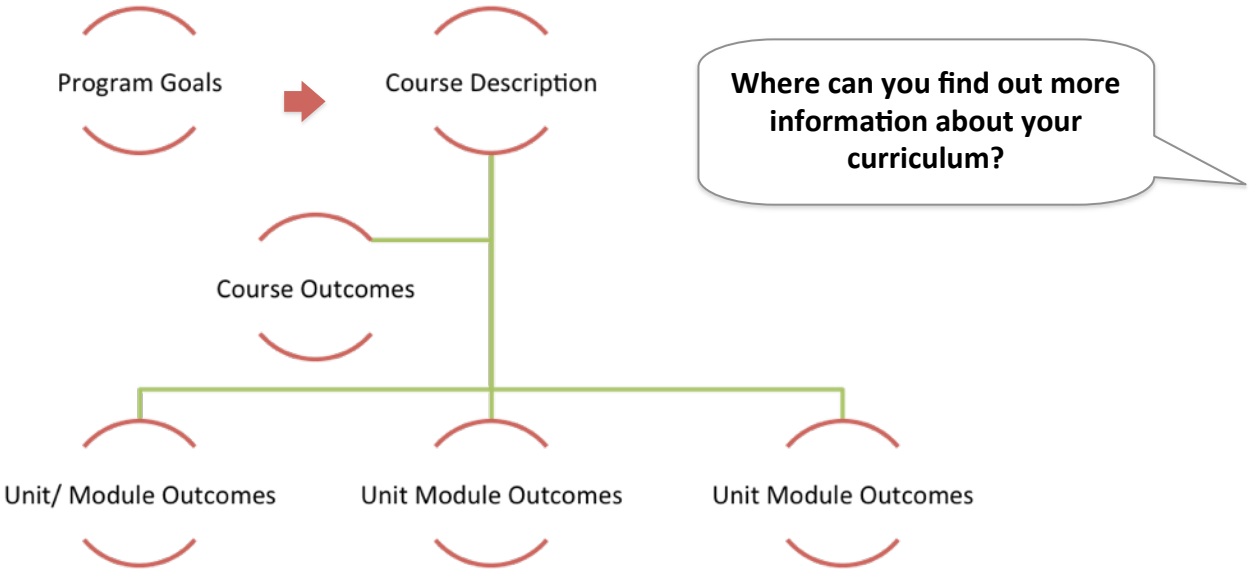
Because there is no set criteria in terms of how many online or face to face components are required to designate a course as “blended” you can build your course according to your students needs and abilities and adapt as you become more competent in your ability to facilitate in both environments. A good starting point may be to choose one of the models identified in this book and adjust accordingly.

Designing a “Blue Print” of your course will also help you define the purpose and give you some direction when designing, building and then delivering your blended course. During the design and development phase, just as you would in a face to face course, first consider the situational factors and then always make sure your course goals align with assessment strategies and instructional strategies. *The Key Components of Integrated Course Design* (Fink, 2003) is illustrated in Figure 3 and provides a good framework for designing a face to face, online or blended course.



COURSE DESIGN WORKSHEET

STEP 1: Curriculum- Get to know your program and its curriculum. Then find out how your course fits into the big picture. Your **course outline** is a good starting point.



STEP 2: Before you begin the design process consider the context in which you will be teaching. These are often referred to as **situational factors** (Fink, 2003).

The following information will help you make important decisions about the course. Answer each questions with the information you know. For the questions you don't have an answer for - find someone who does.

Contextual Framework

What are the characteristics of your students?

Where is your classroom?

Are your students equipped for blended delivery?

What does your learning environment look like?

What kinds of resources are available to you in your learning environment?

What is the nature of the subject?

Sketch out your classroom

STEP 3: Course Outcome
By the end of this course students will be able to (see course outline):

Module/Unit objectives

1.) _____

_____

2.) _____

_____

3.) _____

_____

4.)_____

_____

POSSIBLE PRODUCTS AND PERFORMANCES

Use this section to write down possible assessment tasks for each category and then decide which environment to use for each task while considering your student's needs and abilities.

Written	Oral	Visual	Online/Classroom

INSTRUCTIONAL STRATEGIES

What you do (the instructor)	**What the student does**
Getting Information and Ideas	Receive, take in, respond
i.e. Lecture, create demonstration screencast or video and post online	*Listen, watch, take notes, question*
Experience	Refine Skills, deepen understanding
i.e. Guided practice	*Revise, reflect, refine…*
Reflective Dialogue	Construct, examine, extend meaning
i.e. Discussion (online or face to face)	*Listen, question, consider, explain*

COURSE SCHEDULE

Mapping out your course in a week by week schedule will give you a realistic view of the actual timeframe you have to work with. You may wish to alter this table by adding a column for outcomes or rearranging the headings.

Week #	In Class	Online	In Class	Online
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13				
14.				
15.				
Final Exam/ Project				

CONCLUSION

The quality of a blend depends on making the appropriate choices and finding purpose in the instructional decisions we make.
We need to leverage the advantages of both synchronous and asynchronous instructional strategies by combining both virtual and traditional forms of teaching and learning in a way that best benefits the students and addresses their needs while considering program and institutional goals.

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