Blended Learning Framework

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Course Design – Assessment – Activities – Technology and Tools – Professional Development

Blended Learning Course Design

Guidelines for creating a Blended Learning course

Course Creation Guidelines

New Courses

Design One Complete Lesson at a Time.

- Don’t over-engineer the lesson
- Develop working versions of each lesson
- Use **iterative development**. Immediately evaluate the lesson and adjust design for future lessons
- Focus on **one lesson at a time.** This allows you to quickly develop working versions of each lesson that can reflect what worked in the previous lesson.
- Build it from the ground up through collaboration and transparency.

Start small and allow for imperfection.

- Develop small short lessons and learn from the imperfections.
- Take your time, analyze, start small, ask for feedback and incorporate your findings into the next project.
- Use lessons created by others and modify to your needs but don’t use over complicated
- Starting small helps teachers with little experience in creating blended learning to ease into the process.

Learn to blend as you go.

- Continuously educated yourself on blended learning approaches
- Some subjects benefit from blended learning better than others.
- Blended learning creates many possibilities, and the best method may not be obvious at first.

Focus on Learning Outcomes

- Create activities that lead to your learning outcomes based on strengths and weaknesses of each.
- Start with goals and outcomes then match the right activities to the best fitting modes for learning.

Mental Health Guidelines

- Consider how your course impacts student wellbeing
- Use diagnostics to help students self-assess to help the learner understand their level of preparedness.
- Provide clear expectations for your students. Give clear deadlines and expectations for assessment.
- Consider the tone of your syllabus and course. Stay away from phrases like “all students must” and “failure to follow these instructions” they come across as unwelcoming.
- Instructor should not take on the role of a counsellor or try to diagnose the student. Refer your learner to the appropriate school resource.

Course Creation Guidelines

Recreating existing onsite activities in an online environment should not be done

- Evaluate whether an activity would be best to be done online or onsite
- Do not create extra work for students just because you can put additional content online

Lesson content should be available online for online and onsite learning

- Blended course lessons will be constructed online, even though some activities will take place onsite
- Create a module or folder to organize and sequence the activities
- Lesson should contain an introductory page explaining the lesson, indicate outcomes, and provide resources for learner.
- A lesson should contain an area for online discussion forums, quizzes, assignments, or other online activities. These can be typically provided through an LMS system

Constantly evaluate the learning outcomes

- Evaluate the experience of your current students and their learning outcomes
- Change one or two aspects of the course to see the effect

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Course Design - Things to Avoid

Creating “a class and a half”.

- Don’t create too much work for students by simply adding online or onsite activities to an existing course design.
- A blended redesign should replace, not expand.

Selecting The Wrong Technology

- Avoid the use of unfocused or ill-fitting technology
- You risk constraining the design by being locked into a certain technology even if it is not best suited for your goal.
- Do not use technology simply for technology’s sake.
- Focus on learning outcomes every step of the way.
- Take your time —design first and choose the appropriate technology later. The right tool to meet your learning objective is out there.

Going Too Fast

- Converting blended learning into your learning strategy takes time.
- Cutting corners doesn’t benefit your learners.
- Take your time, analyze, start small, ask for feedback and incorporate your findings into the next project.

Trying To Fit Existing Courses Into A Blended Delivery

- Avoid recreating onsite activities that do not fit online
- If the shoe doesn’t fit don’t force it. Some courses are are not effective online. Any blended learning course should be designed from scratch.
- What might have been an excellent face-to-face lecture will not always translate to effective online training.
- Rethink the entire instructional approach. Identify the desired outcomes, take a look at your audience, review the content, and determine the best approach to accomplish your goals.

Missing The Assessments And Measurements

- Critical Step, creating an amazing blended learning program does not mean its right for everyone
- Know your Key Performance Indicators from the outset
- Continuous improvement will make your program more solid

Planning your Course – Lesson Template

Lesson Title:	
Lesson Goals:	The following questions should be answered before starting your course
	What do you want your students to know when they have completed your blended learning course?
	What type of learning activities will you design that integrates face-to-face and online components?
	What means will you use to assess these integrated learning activities
	How will information and communication technologies be used to support blended learning?

Planning your Course – Mental Health Template

The following questions about mental health should be answered for your course
How do your course policies support or impede mental health and wellness?
How can you maintain reasonable expectations for student learning within the constraints of the course?
How can teaching and learning activities be structured to foster mental health and wellness for students?
How might you promote or support student resilience?

Course Creation Resources – Video Content

Resource Links
YouTube *Tools To Create & Organize Video* YouTube is an online video service that allows you to easily upload and edit videos for your students. It allows you to make content publicly available and also privately available. It is a great resource for also finding content for your lessons.
Flipgrid *Tools for Social learning* Flipgrid is a simple, free, and accessible video discussion experience for PreK to PhD educators, learners and families. The tool allows you to create a topic and allow your learners to learn through social learning. It inspires learners to learn, create, experiment and explore together,
Smarter Everyday *Classroom Science Video Resource* YouTube resource for science video content.
YouTube Learning *Video resource* Curated resource from Google of Video content that can be used in blended learning lessons.
Khan Academy *Content Resource for Self Paced Learning* Nonprofit with the mission to provide a free, world-class education for anyone, anywhere. Provides personalized learning, students practice at their own pace, first filling in gaps in their understanding and then accelerating their learning. Tool set that allows teachers to monitor their students learning and identify gaps in their students' understanding, tailor instruction, and meet the needs of every student.

Blended Learning Assessments

Guidelines for the assessment of Blended Learning Lessons

Course Assessment Guidelines

Formative Assessments

- Use check-ins as informal questions that can be posed either at the beginning, middle, or end of the lesson to gauge student understanding of the topic or concept being covered.
- Use exit tickets as a quick written responses that students submit at the end of class to show their understanding of the lesson that was presented. This assists the educator in adjusting instruction if needed.
- Assessments can be done independently at the learner's pace
- Online webtools can be used formative assessment like Socrative, Kahoot, and Nearpod, Google Classroom, Google Forms.

Summative Assessments

- Use performance-based strategies like portfolios or projects to measure learning standards and objectives. They provide the learner the opportunity to apply and showcase what was learned.
- Use oral presentations in order to allow the learner to explain their thinking and understanding of topics or concepts.
- Allow for students to create products to demonstrate learning. It promotes higher level of thinking.

Quizzes

- Monitoring quizzes in-person is possible as students work through questions
- Online blended courses should turn quizzing into a learning activity as opposed to an assessment activity.
- When Quizzes are given online, they should be given so that the educator is aware of what to focus on when the students are in-person.
- Online quizzing tools can be used to provide randomization of test items.

Testing

- Formal testing should be used during in-person lessons only but is not recommended in a blended learning environment.
- Online tests make for easy and quick grading by the instructor or teaching assistant, but security of the test might be diminished depending on the software and implementation methods used by the instructor
- Students should be allowed to use feedback from their teachers or peers to revise their work.
- Allow students to submit three to five test questions each. This gives the teacher the ability to see the content that the students think is important then address areas that students did not cover in their question

Assessment Resources

Resource Links
Socrative *Formative Assessment* Socrative is a cloud-based student response system developed in 2010 by Boston-based graduate school students. It allows teachers to create simple quizzes that students can take quickly on laptops – or, more often, via classroom tablet computers or their own smartphones.
Kahoot *Formative Assessment* Kahoot! is an online game-based system that can be used by teachers in the real or virtual classroom to help educate students using quiz-based learning.
Nearpod *Formative Assessment* Nearpod is an instructional platform that merges formative assessment and dynamic media for collaborative learning experiences.
Screencastify *Summative Assessment - Performance Based* Screencastify is an online tool for creating screen casts to allow students to share work that they have created on their machines.
Google Sites *Summative Assessment – Performance Based* Google sites is an online platform for users to easily create online website content and share information online.
Canva *Summative Assessment – Student Created Products* Online tool for creating graphics. Allows for infographics, which allows learners to create their own infographic on a subject. Infographics could potentially be a suitable replacement for the typical five-paragraph essay
YouTube Studio *Summative Assessment – Student Created Products* YouTube study allows students to upload and edit images, videos, and recordings to create a new video that can be shared with their teacher.

Blended Learning Activities

Guidelines for the development of activities that can be used for Blended Learning Lessons

Online Activities Guidelines

Present Content Online for Flexibility and Efficiency

- Provide flexibility to students so that they can work through web pages, watch video presentations, or listen to lectures when they want, adjusting the pace or speed as desired.
- Provide portability where students can consume digital content on the go through mobile devices.
- Efficiently use carefully scripted online presentations that are concise that eliminate redundancies, pauses, and sidetracks.
- Design lectures that can be reused to save time and reuse content shared by other teachers.

Foster Community through Discussion Forums

- Class discussions provide opportunities for teachers to engage students in deeper exploration of a topic than content can provide.
- Discussions should be used to test a students understanding, ask questions, and debate points.
- Discussions foster the development of community, which is fundamental to student learning in the higher levels of the cognitive domain.
- Discussion forums promote the ability to interact asynchronously, that is, not in real-time and allow all students to participate because time and place constraints are removed.
- Use discussion forums to reduce the social pressures of face-to-face interaction.
- Use discussion forums as an opportunity for to reflect on the topic, provide evidence for their claims, and edit their responses.

Design Digital Content to Be Simple and Accessible

- Use headings and subheadings. This helps readers navigate and summarizes ideas.
- Leave plenty of white space in the margins. This helps readers focus on the text.
- Use high-contrast text and background colors (black and white is fine). This ensures visibility.
- Use a single, simple font in a standard size. This supports basic readability.
- Space lines between 1.25x and 1.5. This helps reading speed.
- Eliminate purely decorative images or media. These can distract students or create extraneous cognitive load.

Tips for Creating Digital Video Presentations

- Keep it simple. The content is more important than production value.
- Keep each video brief—around ten minutes. Allows videos to be more portable and reusable. And keeps a users natural attention span.
- Be yourself. Create a human connection with your students.
- Use screen recording software when you want to record walkthroughs of software or websites that students need to learn.
- If possible, use a high-quality microphone if you plan to record many videos or audio files.
- Make sure your videos are readily available via a LMS or social media like YouTube or Vimeo.
- Presentation slides are not enough. Slides are designed to support live presentation.

In-Person Activities Guidelines

Make Onsite Learning Active

- In-Person learning experience should be be more engaging and effective.
- Teachers and students should maximize onsite time by taking advantage of the strengths of the environment through hands-on activities.
- The flipped classroom model should be implemented by putting lectures or presentations online in order to save onsite time for hands-on or supported activities.
- Hands-on activities are to be used so that the teacher can observe and quickly intervene to correct and scaffold students' efforts.

Support Collaborative Learning

- Encourage Students to Support Their Peers Onsite
- Put students together to work on a common problem or task to create a sense of community and connectedness, increasing satisfaction and motivation
- Timelines for peer learning activity tasks that are performed onsite, should always be communicated to students.
- Provide enough time and direct students to wrap up a few minutes before the activity is scheduled to end.

Create Community Interaction with Onsite Discussions

- Leverage Onsite for Authentic, Face-to-Face Activities
- Use role playing for creating workplace situations or interactions to encourage face-to-face interactions with peers.
- Classroom discussions support unpredictability of the discussion due to the different experiences, perspectives, and knowledge that the students bring.
- Onsite discussions also have the advantage of sensory richness of a physical environment.
- Utilize face-to-face discussion to foster the humanness and empathy that accompanies seeing and hearing each other.

Connect Onsite to Online to Onsite

- Use a flipped classroom strategy where online materials prepare students for onsite, hands-on activities.
- Use online quizzes or self-check to help you prepare questions for the onsite session.
- Deliberately connecting and interweaving online and onsite activities creates a sense of cohesion and continuity between environments.

Activity Resources

Resource Links
BrainPop *Online Activities* BrainPop lets you assign short and engaging videos to your students. They are an excellent way to introduce a topic or give students extra practice. BrainPop Junior is for students younger than third grade.
PhET *Online Activities* PhET allows you to create a virtual simulation of a science lab. It can be used as a pre-activity before completing a real lab in person. PhET was developed by the University of Colorado, these simulations are open ended and inquiry-based.
Khan Academy *Online Activities* Khan Academy is an entirely free platform that has hundreds of videos on every topic imaginable. Also, there are practice exercises for all types of content. Students often use Khan Academy to prepare for a more collaborative activity in class.
Edmodo *Online Activities* Edmodo is a solution that integrates with both Google Apps and Microsoft Online. It serves as a collaborative, sharing platform for teachers, students, and parents. It is intended to support discovery, create groups, administer quizzes, and learn from like-minded teachers.
Edpuzzle *Online Activities* Allows educators to flip a classroom or lesson by editing a video and adding questions. Ideal for self-paced learning.

Blended Learning Tools and Technology

Guidelines for tools and technology that can be used for building and distributing Blended Learning Lessons.

Technology and Tools Guidelines

Developing a Shared Technology Strategy

- Provide an overview of the main types of eLearning, with working labels for each.
- List practical examples of successful eLearning programs which have delivered performance improvements and business results and the technology used.
- Develop a guide to the different types of LMS in the market (self-paced platforms, corporate LMSs, education LMSs, virtual learning environments), their key function sets and typical add-ons
- Provide a quick overview of the capabilities required to support eLearning effectively.
- Plan for the future, not just the present. It is important not only to focus on what you need now but what you might need in the near future.

Implementation Strategy for Technology and Tools

- Identify the problem blended learning will solve before buying any devices or tools.
- Build out the back-end infrastructure to ensure sufficient connectivity to support the selected blended learning structural approach.
- Use creative ways to overcome community network limitations. Look at adding additional service antennae on school and city buildings and installed Wi-Fi hotspots in the homes of school employees and students to provide extended wireless connectivity,
- Be prepared for integration: it often is not easy.
- Scope out the project with what needs to be integrated, and what modifications to current applications may be required.
- Plan for a staged implementation process for your LMS based on the scoping findings.

Choosing the right LMS System

- Use your vision of learning and development to drive selection. Create a high-level statement of where you want to get to, and why. It outlines your business goals for the investment.
- Talk with vendors and look at different LMS systems. Before you begin the formal request stage, ask some venders to do a demo
- Define your audience on who you would like to train.
- Determine the type of LMS system you would like to implement a cloud-based solution or an internally hosted LMS system.
- Determine the key features you are looking for. Some are: Customization and Branding, Integrations, Security, Native Mobile Apps, Reporting, Assessments and Surveys, Certifications, Gamification, Communication tools, SCORM and Tin Can Compliance, E-commerce and many more.
- Determine the type of support you are expecting from a vendor, Phone support, online support, knowledge base and video tutorials.
- Determine your budget. Are you looking for a Free LMS tool that is opensource or a commercial version.
- Test Drive the system by requesting a demo, free trial or utilizing a freemium version of the software.

Technology and Tools Resources - LMS

Resource Links
Moodle *Learning Management System* Moodle is a free and open-source learning platform. The LMS is fully customizable and extensible. Seamlessly integrates with solutions like Google Apps, Microsoft Office 365, and more.
Blackboard *Learning Management System* The platform comes in both software-as-a-service (SaaS) and non-SaaS models. The service provider offers all core learning management features as well as powerful data analytics, communication channels, collaboration tools, and web conferencing. Class facilitators can easily deliver homework, tests, and track grades. They can manage online and blended classes.
Schoology *Learning Management System* Learning platform that aims to provide all the tools that you need to design lessons, communicate with students, and collaborate with educators. Its strength lies in its focus on building and connecting your learning community from students to administrators. Includes class-level channels and allows you to connect your entire school. You can cerate online spaces where students can engage with their teachers outside class hours.
Google Classroom *Learning Management System* The platform is free and it helps teachers create classes, send assignments, communicate with students, grade coursework, and post feedback all in one place. It also streamlines repetitive tasks so educators can focus on teaching. While it is not as comprehensive as other LMS, its integration with the rest of Google products makes it a powerful platform.
Canvas by Instructure *Learning Management System* Canvas by Instructure is a popular learning ecosystem among colleges and universities. The LMS is part of its digital learning solutions that include powerful course assemblers, dashboards, test engines, and more. The platform's modules allow educators to organize course work and content into units. The Outcomes feature combines state-wide assessment and grading rubrics that allow administrators to align with existing standards.

Blended Learning Professional Development

Guidelines for supporting Professional Development around creating and educating on Blended Learning.

Professional Development Guidelines

Techniques to successful Professional Development

- Allow teachers to experience blended learning as a learner. Effective blended-learning professional development can include learning experiences that highlight these instructional approaches, challenging how teachers view instruction and creating opportunities to understand student perspectives on learning in a blended setting.
- Encourage peer observations in blended-learning classrooms. Observe peers at other school sites to be exposed to a wider range of approaches and philosophies.
- Offer technology implementation training, including lessons on educational software utilization, troubleshooting, and student data analysis. Technology integration should be woven into professional development on instructional practice instead of becoming the focal point.
- Teach classroom management strategies specifically for a blended-learning classroom. Educators must consider the impact of digital citizenship as well as logistical considerations regarding software access and hardware management

Professional Development Strategies

- Provide professional learning opportunities to staff members that explain the functionality and applications of new technologies.
- Offer examples and “use cases” that demonstrate how new technologies can improve the delivery of instructional content to students.
- Provide teachers time to practice and experiment with new technologies and blended learning strategies.
- Create on-demand professional learning for staff members.
- Develop and curate a collection of podcasts and YouTube videos that explain and demonstrate blended learning approaches.
- Support peer-to-peer professional learning. Identify teachers and staff members willing to serve as informal “coaches” to advise and support colleagues who need help integrating blended learning strategies.

Strategies for Schools

- Professional development should be provided frequently and consistently to support targeted student growth goals
- Utilize data-driven systems to measure progress in professional development for educators.
- Professional development resources must fit your curriculum, prescribed standards, and student achievement goals.

Professional Development Resources

Resource Links
Online Learning Consourtium *Resource Links* As a means of assisting educators with the task of preparing for an effective remote learning and bleneded learning environment. The online learning consortium compiled a list of helpful tools and resources for developing content for Blended Learning. This is not an all-encompassing collection but is meant to support K-12 educators in this critical time.
Coursera *Training Resource* Is a free online platform that contains many free courses around developing blended learning courses along with courses on the tools that you need to create your content for your Blended Learning course.
EdX Training Resource EdX is a non-profit, massive open online course (MOOC) provider. They partner with the world's leading universities and organizations to offer high-quality online courses to learners across the world. They have a catalog of over 3,500+ courses. Courses consist of video and text content, discussion forums, and a number of problem and assessment types.
Alison Courses on Alison are based on courses from institutions of higher learning including Yale, Columbia, and Cambridge, as well as corporations like Microsoft and Google—and it's often presented by the same professors and experts who teach the live versions of the courses. It contains many resources for educators in the development and use of tools for blended learning courses.