Online learning tools are resources that can be used in all classrooms to support student learning and help professors provide anytime instruction. Blended environments allow differentiated opportunities for learning and collaborations that supplement face-to-face instruction. Understanding how to blend the best resources into classrooms is an individual journey based on careful analysis of learners and tasks.

**Learning Outcomes:**

Participants will:

- Discuss recent research on blended/hybrid classrooms

- Explore the variety of learning opportunities afforded through online environments to support blended classrooms

- Identify learning objectives that may be difficult to learn or that students consistently have difficulty with that can be supported through online resources

- Analyze learning problems in their classrooms that may be solved or supported through online tools and identify those tools

- Plan a blended online learning module for remediation of that objective

- Identify learning modules that may cross disciplines and result in the development of robust learning objects that can be shared

**Class Agenda**

- Introduction
- Presentation
  - What is Blended Learning…don’t we all use Blended Learning?
  - Some Research
  - Solving Instructional Problems
  - Sharing Learning Objects
  - Process for Developing Blended Learning

- Small Group Discussion and Brainstorming/Sharing
- Activity Sheet for Planning Blended Classrooms
## Blended Learning Strategies List

A non-exhaustive list of Blended Learning Ideas!

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Technology</th>
<th>Tips</th>
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<tbody>
<tr>
<td>Online Discussion</td>
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<tr>
<td>Getting to know peer learners/develop community</td>
<td>Introductory discussion Icebreaker</td>
<td>Practice for posting Tell about self/goals/interests</td>
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<tr>
<td>Virtual Office</td>
<td>Area in DB for questions for all</td>
<td>Encourage students to ask here-benefits all Must monitor daily</td>
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<tr>
<td>Whole class discussion</td>
<td>Discussion Board (DB)</td>
<td>Rubric evaluation of DB activity</td>
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<tr>
<td>Group Discussions</td>
<td>Create groups-Discussion Board</td>
<td>Choose/assign student facilitator</td>
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<tr>
<td>Topic interest discussions</td>
<td>Post interest threads-students choose</td>
<td>Choose/assign student facilitator</td>
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<tr>
<td>Article/Text focused discussion at high level with citation</td>
<td>Article/Text DB</td>
<td>Assign student to article-facilitate discussion</td>
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<td></td>
<td>Teacher facilitate with rubric</td>
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<tr>
<td>Learning Resources</td>
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<tr>
<td>Posting Course Resources for 24/7 access</td>
<td>Content repository Course link to resources Embed in Units</td>
<td>Organize resources by learning unit Provide extra and alternative resources</td>
</tr>
<tr>
<td>Remedial Resources</td>
<td>Post links for remedial resources</td>
<td>Task analyze objective-post prerequisite skills help for objective</td>
</tr>
<tr>
<td>Advanced Resources</td>
<td>Post support links for advanced learners</td>
<td>Allow for advanced learning on select topics/interest</td>
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<tr>
<td>Student selected/found support resources</td>
<td>Provide submission area for students to submit resources</td>
<td>Encourage student selection of resources that have helped them learn material</td>
</tr>
<tr>
<td>Documents posted in accessible format</td>
<td>Convert documents to .pdf</td>
<td>All students can open and document remains intact</td>
</tr>
<tr>
<td>Documents posted for 24/7 accessibility</td>
<td>All course documents online</td>
<td>No need to provide copies—students expected to come with course copies</td>
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<tr>
<td>Lectures</td>
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<tr>
<td>Audio Lecture online and syndicated</td>
<td>iTunes for University of Akron Podcast</td>
<td>Periodic or all lectures taped for posting and syndication Students download to iPODs</td>
</tr>
<tr>
<td>Video taped lectures</td>
<td>Distance Learning video tapes lectures and posts</td>
<td>Students have access to link to view lectures</td>
</tr>
<tr>
<td>Audio-enhanced PowerPoint</td>
<td>Tape audio with PPT and convert to Flash for size</td>
<td>Students have access to audio of PPT—your voice</td>
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</table>

**Prerequisite Course Skills /Course Preparation**

Prepare students for course Post pre-assessments and Create pre-assessment or
<table>
<thead>
<tr>
<th>requirements</th>
<th>aligned tutorials to prepare students before class</th>
<th>checklists of prereq skills—develop tutorial Capture learning objects from others</th>
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</thead>
<tbody>
<tr>
<td>Required learnings before class participation</td>
<td>Post materials and supports for required preparations</td>
<td>Create unit for students to complete BEFORE attending class</td>
</tr>
<tr>
<td>Self-assessment for course skills</td>
<td>Checklist or online quiz to determine student preparedness</td>
<td>Student check of learning, could also just be for materials, software, hardware reqs for course</td>
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</table>

**Collaborative Group Work**

<table>
<thead>
<tr>
<th>Group work</th>
<th>Provide asynchronous group space for team projects and interaction</th>
<th>Assign and change groups easily Group work online can be monitored Document sharing</th>
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<tbody>
<tr>
<td>Enable differentiated learning paths</td>
<td>Assign groups to different learning modules to accommodate learning styles or differentiated content</td>
<td>Formative assessments can drive differentiated content modules.</td>
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</table>

**Learning Objects**

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<tr>
<th>Sharing learning objects</th>
<th>Learning objects provide remediation or acceleration for students</th>
<th>Making learning objects available that have been developed and tested (data to show they enhance learning) helps everyone</th>
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<tbody>
<tr>
<td>Learning objects can be as small as a definition or as large as a learning unit.</td>
<td>Selected learning objects can be placed in a pre-assessment module to prepare learners for a unit.</td>
<td>Using learning objects in modular ways creates customized learning units for specific classes or students.</td>
</tr>
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C. Ward (2007)
Compelling Reasons for Creating Blended Learning

Multiple Perspectives on Content
- Varied set of learning styles
- Higher mastery of content when learners can take “multiple passes through material and deal with it through different learning processes.

Cognitive Rehearsal
- Learners master newly presented material by talking about the content
- Speaking about content is frequently richer for the speaker than the listener “hearing the content for a second time from your own lips”

Context is Often More Important than Content
- E-learning is filled with organizationally approved content, but learners have a need for context
- Example is the instructor who faithfully delivers this excellent PowerPoint content, but the steps aside to discuss the content in an application story

Value Sorting is Core to Blended Learning
- Learners need to sort content by value
  - **High value stuff:** The content and context that I need to remember, even memorize. It is what I take away from this learning activity
  - **Medium value stuff:** The content and context that I might need to use at some future date. I will become familiar with it but won’t memorize it. I know how to get to it when and if I need it.
  - **No-value stuff:** The content that I don’t need and won’t bother to learn or think about.
- Opportunities to develop multiple models to increase student ability to sort through content previously presented as “equally important.”

Learning is Longitudinal
- Blended learning dialogue about acceleration or compression of learning time-learner access to knowledge can be accelerated
- Learning is also accomplished over time, different times for different learners
- Assessments and evaluations need to be aligned to a more object-based, over-time paradigm instead of testing for competency after short modules

Learning is Social
- Humans thrive on social experiences, yet some learning experiences are structured to be unsocial
- Student seen as passive viewer of slides, listener of lectures, screen and mouse clicker, or quiet taker of assessments
- Blended learning recognizes and aligns with the social dimensions of learning

Learning is often Tacit and Unstructured
- Powerful learning is frequently unstructured and unconventional
- Sidebar conversation, discussion board, open structured online searching, following of interests and peer support and evaluations.
Examples of Pedagogical Strategies for Blended Learning

Student and Instructor Value Added

Purpose and Examples

Open Interaction
- Creating small group-debate/discussion team
- Encouraging integration of classroom lecture and reading
- Assigning discussion board roles (facilitator, summarizer, yenta, researcher, skeptic)
- Integrating online activities in evaluation of student performance
- Reducing classroom time during online activities

Knowledge Creation
- Inviting external experts to online classroom
- Combining asynchronous and synchronous online interactions
- Promoting anchored learning by requiring students to preview materials for online discussion
- Integrating online activities in evaluation of student performance
- Reducing classroom time during online activities

Information Distribution
- Posting articles to read before each class begins
- Posting materials used during class to review afterward
- Tracking students’ viewing of articles and materials
- Sending personal messages to students who do not check articles and materials
- Whole class announcements and e-mails
- Specific group e-mails and announcements

Efficient Management
- Allowing electronic submission of assignments
- Creating a list of standardized feedback to students enabling individualized feedback on each assignment

Two Scenarios of a Seminar - Conventional/Blended

Conventional scenario

Instructor:
Selects material for the course.

Class session:
Students choose topics for presentation and a time schedule is made.

Each Student:
Prepares presentation and summarizes material in his or her manuscript.

Class sessions:
Students present their material and deliver manuscript to instructor. Material is discussed, primarily between presenter and instructor.

Instructor:
Grades presentation and manuscript.

2.2 Scenario blending class sessions with e-learning following a more Person-Centered style

Instructor – over web:
Selects a field of interest and collects material.
Puts a brief description of major questions within the field on the web, encourages students to complement the questions and to look for further material.

Student – distant:
Thinks about his or her own interests within the given field.

Class session:
Discussion over individual interests, their overlap and complements and first preliminary decisions over who will provide brief keynotes on which topic.

Instructor or tutor – over web template:
Provision of workspaces for each student.
Brief map of the topic structure.
Time schedule to be filled out later.

Students – distant:
Search of material, communication between colleagues with overlapping or dependent topics.
First draft proposal on major questions to be dealt with in the presentation and manuscript.

Class session:
Each student presents his or her first proposal in up to 5 minutes, instructor’s and students’ comments, fine-tuning, final time schedule (could be done electronically)

Students – distant:
Initiation of forum threads (could equally be done by the instructor).
Upload of manuscripts and slides.

Class sessions:
Brief keynotes and moderated discussion on individual topic.

Students – distant
Self-evaluation, peer-evaluation, reaction sheets.

Instructor – distant:
Final grading based on self- and peer-evaluation.
ACTIVITY SHEET FOR PLANNING BLENDED CLASSROOMS

Learning challenges in my classroom:

Blended Learning Opportunities that I have used or might be interested in:

Designing blended learning strategies to support learning objectives
1. Identify some specific Learning Objectives that have been hard for students to grasp
2. Identify possible blended learning strategies that could support these learning objectives.

<table>
<thead>
<tr>
<th>Learning Objective</th>
<th>Blended Learning Strategy (BLS List)</th>
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</table>
Choose one objective and plan an online learning module.

1. Clearly stated behavioral objective

2. Develop assessment to show mastery

3. Analysis of significant learner or task issues
   EXAMPLES
   a. Learners do not grasp this through text
   b. Task needs to be broken down into smaller segments for understanding
   c. Student typically do not have pre-requisites for this task

4. Select blended learning strategies for assessment and instruction to integrate into your lessons and classroom

5. Determine class management and logistical issues for implementation

6. Collect data on this change/compare
Resource Articles/Books

A Blended Learning Experience for Teaching Microbiology 

Future Direction of Blended Learning in Higher Education 
www.publicationsshare.com/c083_bonk_future.pdf

Conceptual Model of Reusable Learning Scenarios for Person-Centered e-Learning 
www.pri.univie.ac.at/Publications/2003/icl03-derntl.pdf
