

Blended Learning A to Z: Myths, Models, and Moments of Magic

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The Blended Learning Electrician



Online Labs for the Blended Learning Electrician



Online PD for the Blended Learning Electrician



Mobile Apps for the Blended Electrician



NJATC Blended Learning LMS Homepage



List of "My Courses"

DC Theory Course (Lesson Menu)

DC Theory – Lesson 9 (Series Circuits)

Reports Menu (Training Director, Instructor, Student)

Detailed reports (e.g., Session Summary)

What I will discuss...

1. Definitions of blended learning
2. Myths of blended learning
3. Models of blended learning
4. Examples of blended learning



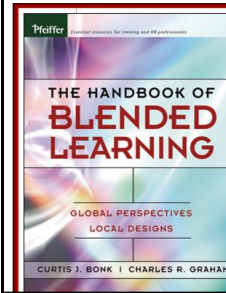
Myth #1: If you read the enough research you will be able to know the impact of blended learning.

1. Improved Pedagogy
 - More interactive instead of transmissive
 - Authentic, real world, etc.
2. Increased Access/Flexibility
3. Increased Cost Effectiveness



Recent Reports on Blended

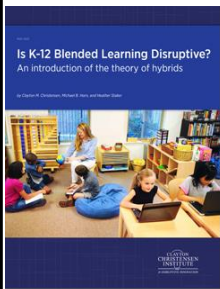
The Handbook of Blended Learning: Global Perspectives, Local Designs (Bonk & Graham)
<http://www.dtic.mil/cgi-bin/GetTRDoc?Location=U2&doc=GetTRDoc.pdf&AD=ADA495731>



U.S. Army Research Institute for the Behavioral and Social Sciences
 Research Report 1883
 Training Digital Skills in Distributed Classroom Environments: A Blended Learning Approach
 Jennifer S. Tucker
 U.S. Army Research Institute
 David M. McGinnis, Bruce C. Lefkowitz, Christopher B. Mearns, and Andy Perrault
 Learning Innovation Corporation
 Amanda N. Gassman
 Columbia State University
 Consortium Research Fellow Program
 March 2013
 Approved for public release; distribution is unlimited.

Is K-12 Blended Learning Disruptive
 Heather Staker and Michael B. Horn,
 Innosight Institute, May 2013

<http://www.projectred.org/uploads/The-Rise-of-K-12-Blended-Learning.pdf>



About the authors

MICHAEL B. HORN is an investor and Executive Director of Education Knowledge Ventures, a non-profit think tank devoted to applying the theories of disruptive innovation to problems in the social sector. He is currently managing several efforts to be one of the 100 most important people in the creation and advancement of the use of technology in education.

HEATHER CLAYTON STAKER is a Senior Research Fellow for the Education Practice at Innosight Institute. He has published numerous books from Harvard College and received an MBA, with distinction, from Harvard Business School. He has experience in a variety of industries for McKinsey & Company and is a member of the California State Board of Education.

THE RISE OF K-12 BLENDED LEARNING

Ten Strategies to Improve Blended Course Design

Faculty Focus, July 26, 2013, Ike Shibley

http://www.facultyfocus.com/white_papers/ten_strategies_to_improve_blended_course_design/

FACULTY FOCUS
 HIGHER ED TEACHING STRATEGIES FROM MAGNA PUBLICATIONS

LEARN A PROVEN METHODOLOGY FOR DESIGNING BLENDED COURSES

Ten Strategies to Improve Blended Course Design
 Blended learning offers flexibility, accessibility, and a way to maximize the benefit of face-to-face interaction between instructor and student. When course content, technology, and great teaching opportunities are combined with a blended design, the result is a course that is more effective, more engaging, and more accessible to all components of the student population. This book provides a methodology for designing blended courses that take up the challenge and are enriched with increased learning opportunities and flexibility along with improved student success. In addition, this course design opportunity will discuss how blended learning can maximize the benefit of the classroom.

Order Now

Designing Blended Courses the ADDIE Way

ADDIE: The Classic [early 1970's]
ADDIE: Analysis, Design, Development, Implementation, and Evaluation
 Online Learning Insights, May 28, 2013

<http://onlinelearninginsights.com/2013/05/28/addie-the-classic-instructional-design-model-for-online-courses/>

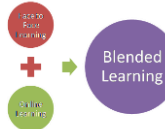


Blended Learning Defined and Explained



Myths #2: Blended learning is easy to define.
Myth #3: Blended learning is hard to define.
Blending Online and F2F Instruction

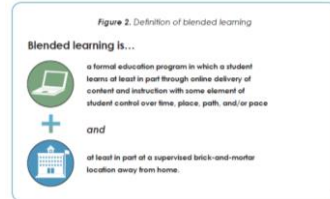
"Blended learning refers to events that combine aspects of online and face-to-face instruction" (Rooney, 2003, p. 26; Ward & LaBranche, 2003, p. 22)



Classifying K-12 Blended Learning
 Heather Staker and Michael B. Horn, May 2012

<http://www.projectred.org/uploads/The-Rise-of-K-12-Blended-Learning.pdf>

"Blended learning is any time a student learns at least in part at a supervised brick-and-mortar location away from home and at least in part through online delivery with some element of student control over time, place, path, and/or pace."



Classifying K-12 Blended Learning
 Heather Staker and Michael B. Horn, May 2012

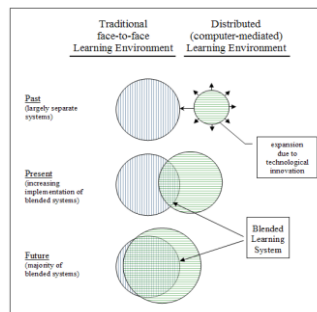
<http://www.projectred.org/uploads/The-Rise-of-K-12-Blended-Learning.pdf>

One critical part of the definition of blended learning is that it involves "some element of student control of time, place, path, and/or pace." Digital Learning Now describes each dimension:

- **Time:** Learning is no longer restricted to the school day or the school year.
- **Place:** Learning is no longer restricted to the walls of the classroom.
- **Path:** Learning is no longer restricted to the pedagogy used by the teacher. Interactive and adaptive software allows students to learn [in a method that is customized to their needs].
- **Pace:** Learning is no longer restricted to the pace of an entire classroom of students.

Source: "Roadmap for Reform," <http://digitalelearningnow.com/wp-content/uploads/2011/10/Roadmap-for-Reform.pdf>

Historical Emergence of Blended (Graham, 2006)



Myth #4: People will know what I am saying when I say "blended learning."

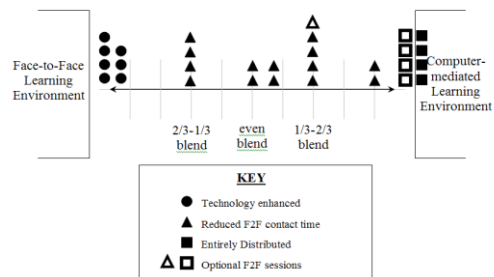
Myth #5: Blended is the same as "hybrid."

The Sloan Consortium

Proportion of content delivered online	Type of Course	Typical Description
0%	Traditional	Course with no online technology used - content is delivered in writing or orally.
1 to 29%	Web facilitated	Course which uses web-based technology to facilitate what is essentially a face-to-face course. Might use Blackboard or WebCT to post the syllabus and assignments, for example.
30 to 79%	Blended/Hybrid	Course that is a blend of the online and face-to-face course. Substantial proportion of the content is delivered online, typically uses online discussions, typically has some face-to-face meetings
80+%	Online	A course where the vast bulk of the content is delivered online. Typically has no face-to-face meetings.



Myth #6: Knowing "how much" to blend is vital.
Range of Blends in Pew Cases



KEY
 ● Technology enhanced
 ▲ Reduced F2F contact time
 ■ Entirely Distributed
 △ Optional F2F sessions

Source: Graham, C. R., & Allen, S. (2005). Blended learning: An emerging trend in education. In C. Howard & J. V. Boettcher & L. Justice & K. D. Schenk & P. L. Rogers & G. A. Berg (Eds.), *Encyclopedia of Distance Learning* (pp. 172-179). Hershey, PA: Idea Group Inc.

Myth #7: Blended learning works everywhere.
Where is Blended Beneficial?

- Intro Classes (Spanish, psych, algebra, biology)
- AP Classes
- Classes with low success rates
- Classes with students working part-time
- Required classes
- Students are rural or spread over a distance
- Classes with certification or standardization
- Classes with new requirements or standards
- Writing intensive classes, theory classes, etc.
- Lab classes?

Examples of Blended Learning

- Put assessments/reviews online
- Online discussions
- Online labs
- Put reference materials on Web
- Deliver pre-work online
- Provide office hours online
- Use mentoring/coaching tool
- Access experts live online



Myth #8: People learn more in face-to-face settings than blended or fully online ones.

Fully Online and Blended Learning Advantages

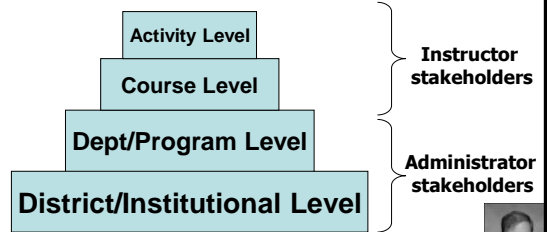
1. Increased Learning (better papers, higher scores)
2. More effective pedagogy and interaction
3. Course access at one's convenience and flexible completion (e.g., multiple ways to meet course objectives)
4. Reduction in physical class or space needs, commuting, parking, etc.
5. Increased opportunities for human interaction, communication, & contact among students
6. Introverts participate more



Myth #9: Instructors can have a logical discussion with administrators about blended learning.

Models of Blending

Blending occurs at the following four levels:



Myth #10: There is a best model of blended.
AMA Special Report, Effectively Implementing a Blended Learning Approach
 (Steven Shaw & Nicholas Igneri, 2006)



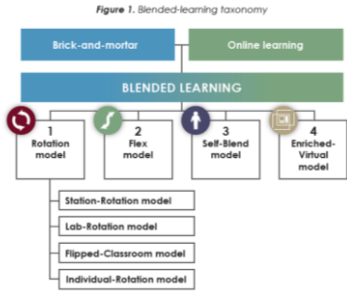
Source: American Management Association, AMA at Work

10 Blended Learning Models

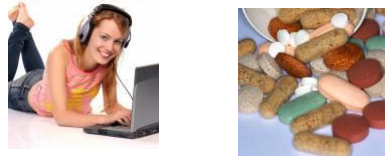


Classifying K-12 Blended Learning
 Heather Staker and Michael B. Horn, May 2012

<http://www.innosightinstitute.org/innosight/wp-content/uploads/2012/05/Classifying-K-12-blended-learning2.pdf>



Blended Model #1.
Face-to-Face Primary
 (online is for remediation of supplement)



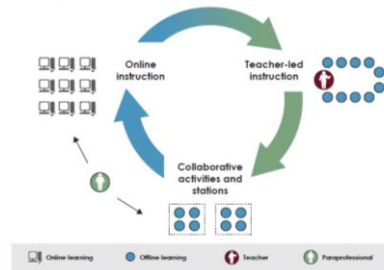
Blended Model #2. Rotation
 (students alternate FTF and Online instruction)



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 Heather Staker and Michael B. Horn, May 2012

<http://www.innosightinstitute.org/innosight/wp-content/uploads/2012/05/Classifying-K-12-blended-learning2.pdf>

Figure 4. Station-Rotation model, KIPP LA Empower Academy



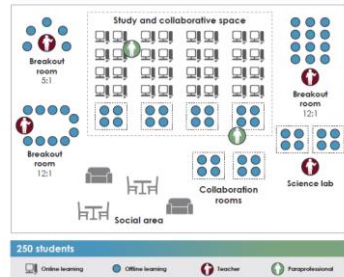
Blended Model #3. Flex
 (curriculum primarily online with instructors available FTF)



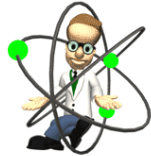
Classifying K-12 Blended Learning
 Heather Staker and Michael B. Horn, May 2012

<http://www.innosightinstitute.org/innosight/wp-content/uploads/2012/05/Classifying-K-12-blended-learning2.pdf>

Figure 10. Flex model, San Francisco Flex Academy



Blended Model #4. Online Lab
 (lab or field experience component of course is online)



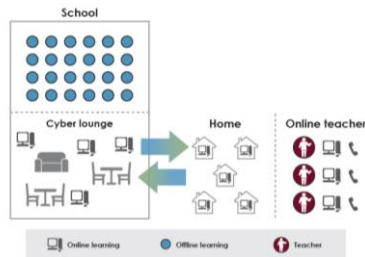
Blended Model #5. Self-Blend
 (students decide on which courses they take online or which portion of the course is online)



Classifying K-12 Blended Learning

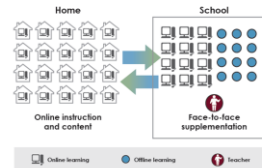
Heather Staker and Michael B. Horn, May 2012
http://www.innosightstuts.org/innosight/wp-content/uploads/2012/03/Classifying-K-12-Blended-Learning_2.pdf

Figure 11. Self-Blend model, Quakertown Community School District



Blended Model #6. Online Driver
 (now: "Enriched Virtual Model")
 (courses primarily online and physical facilities used to supplement or as needed)

Figure 12. Enriched-Virtual model, Albuquerque eCADEMY



Blended Model #7. Bookend
 (first and last part of the course is online and middle portion is online; AMA Special Report, Blended Learning Opportunities, Alison Rossett (2006))



Blended Model #8. Anchor
 (start with FTF or what students are familiar with and then move to online)



Blended Model #9. Field (combine FTF and online as needed...mix and match)

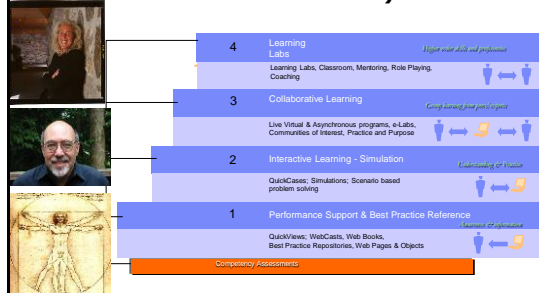


Table 1. What Might Go in the Blend

Live face-to-face (formal) <ul style="list-style-type: none"> Instructional classroom (F2F) Workshops Coaching, mentoring On-the-job (OTJ) training Work-based problems 	Live face-to-face (informal) <ul style="list-style-type: none"> Collegial relationships Work teams Apprenticeships
Virtual collaboration/asynchronous <ul style="list-style-type: none"> Live e-learning classes E-coaching, e-mentoring Instant messaging, SMS 	Virtual collaboration/asynchronous <ul style="list-style-type: none"> Email Online communities and discussion boards Listserve Blogs, wikis, podcasts
Self-paced learning (print, CD/DVD, electronic, wireless) <ul style="list-style-type: none"> Online modules Online resource links Simulations and scenarios Assessments and self-assessments Workbooks, readings 	Performance support <ul style="list-style-type: none"> Online help systems Print job aids Online knowledge databases Documentation Performance support tools

Adapted from (Rossett, Douglas, & France, 2003, July)

Blended Model #10. Degrees of Humanness (rely on computer-based feedback and interaction at first and switch to human feedback later on)

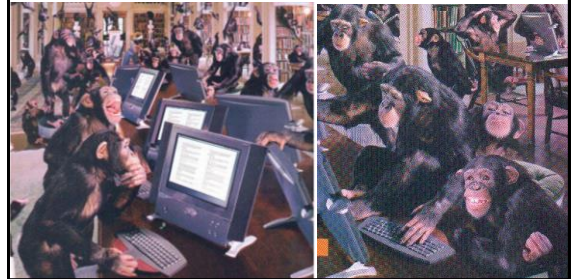


Framework for organizational development through training Assess, Learn, and Apply (Copyright Microsoft, Ziob & Mosher, 2006; Handbook of Blended Learning)

Microsoft Products and Services for Lifelong Learning

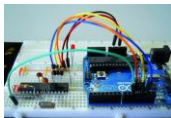


Part II: 10 Blended Learning Solutions



The Blended Learning platform or Learning Management System (LMS) is the next level of learning and engages the student in the classroom:

- Dynamic simulations
- Virtual safety scenarios
- Effective interactive exercises
- **Real-world scenarios**
- Instant assessment feedback (e.g., student time in system, other class stats)



The Blended Learning platform is efficient and empowers the instructors by creating a more effective learning experience:

- All homework questions, electronic media, and student activity is managed by this system
- Flexible in allowing the instructor to tailor the class according to the student's needs
- Reduces homework review time
- Increase time to utilize labs and other non-homework activities
- Active learning environment for the apprentices
- **Utilize online simulators where expensive equipment is not available or as precursors to physical labs is now achievable.**



Blended Solution #1. Short Video Animations and Reflections (e.g., Ohm's Law)

Blended Solution #2. In-depth Immersive Activities (e.g., Test and Measurement Academy)

Blended Solution #3. Virtual Safety Training

Blended Solution #4. General Information Animations

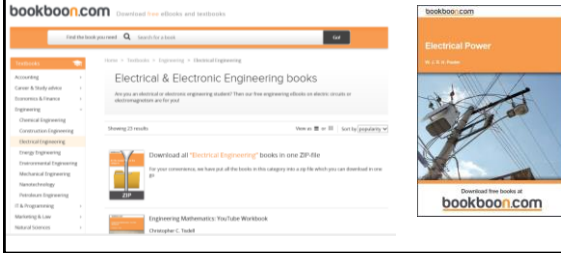
CONDUCTOR	480/277V WYE	480V/277V WYE
PHASE A	BLACK	RED
PHASE B	RED	YELLOW
PHASE C	YELLOW	GREEN
NEUTRAL	WHITE	WHITE
GROUND	GREEN	GREEN
ISOLATED GROUND	GREEN/YELLOW	GREEN/YELLOW

Blended Solution #5. Electronics News Blog Readings and Reflections <http://www.electronics-lab.com/blog/>

Blended Solution #6. Podcast Show Reflections <http://www.podbean.com/podcast-detail?pid=28181>

Blended Solution #7. Free E-books (e.g., BookBoon.com)

<http://bookboon.com/en/electrical-electronic-engineering-e-books>

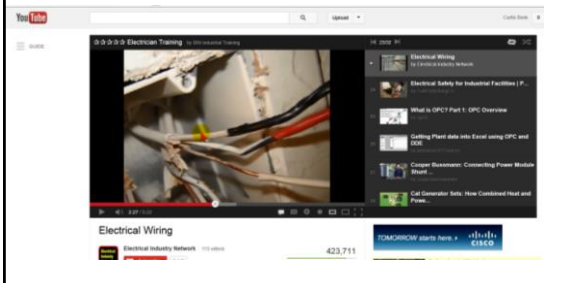


Blended Solution #8. Online Role Play or Debate

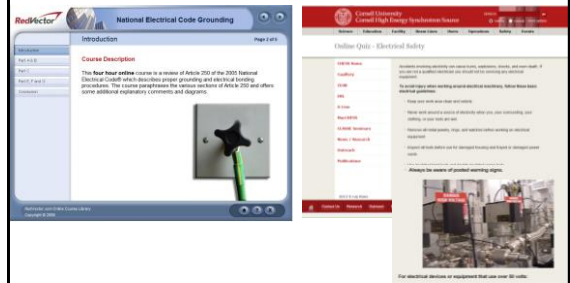
(Tulane University, Exercise for Renewable Energy, Freeman Sch. of Business, roles include power traders, electric utility analyst, independent power producers & utility dispatchers)



Blended Solution #9. Anchor Course Concepts and Activities in Brief Shared Online Videos

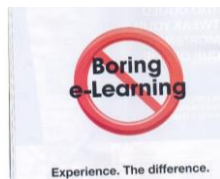


Blended Solution #10. Online Practice Tests and Quizzes



Again, this talk covered...

1. 1 Definition of blended learning
2. 10 Myths of blended learning
3. 10 Models of blended learning
4. 10 Examples of blended learning



Any Questions?

- 😊 Slides at: TrainingShare.com
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