

World Mission Education Series - [wmed@tpg.com.au](mailto:wmed@tpg.com.au)

# Blended Learning – An Annotated Bibliography

November 1, 2007 Edition

Robert L Woodruff



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## Introductory Notes:

Blended Learning is an education phrase which has several definitions, but the one used in this literature review is the most common: Teaching which combines more than one approach or delivery method. In this literature it is referring to using the combination of classroom (or video face-to-face) and distance or online approaches in the same course. By combining modalities, the teacher and student are able to maximize the strengths of any course – adding the advantages of classroom with the advantages of online education to give a rich learning experience which excels those which rely only on traditional classroom or, for that matter, only on distance or online models.

Those who subscribe to Blended learning suggest strongly that EVERY class should be blended wherever possible. For instance, many universities are using this mode even for campus based students. It shortens the seat time in lectures and other traditional activities by putting the onus on the students to view streaming presentations and stored power point presentations or other pre-prepared materials. The classroom or face-to-face time then is used where it best serves: Interaction and processing the information or educational outcomes until they are owned by each participant.

Of course, I have read and thought through many more articles than the ones listed here. Some were so esoteric that I chose to leave them out for another time; others didn't say anything unique.

Each of these listed here said much more than can be summarized in a few short sentences. Thus, the source is given for those who choose to read the entire article. One practioner (Villanti, page 8) summarized material that was spread throughout the articles better than any of the materials yet encountered. It would be worth your time to consider the five pedagogical advantages of Blended Learning over traditional-only pr online-only teaching. She is a teacher! She quickly gets to the point and says what she has to say in very clear language.

Of course, this document will grow as further helpful materials are uncovered. For this reason, I have placed a date on the cover page. I am always interested in reading materials you may encounter as well. Let me know what you are learning either in theory or in application of this approach to course design. We are on this journey together.

Your Brother in Christ,

Bob Woodruff

World Mission Education Coordinator

Bernardo, J. W. a. I. (2006). "Blended Learning: Understanding the Middle Ground between Traditional Classroom and Fully Online Instruction." Journal of Educational Technology Systems **34**(1): 23.

Blended learning is any combined use of electronic learning tools that supplement, but do not replace, face-to-face learning. This article reflects how two researchers are trying to comfortably and logically place blended learning somewhere in the middle of two extremes--traditional classroom at one end and fully online distance learning at the other end. Twenty-two faculty and 38 students at the State University of New York Institute of Technology (SUNYIT) responded to a survey on perceptions held about blended learning. Responses from faculty revealed enrollment as a major factor in the increased use of this course design; quality of assignments and course grades that are as good or better; and courses that are producing improved writing and discussions. While the design is easy to use, faculty reported more work on their part and some loss of traditional classroom dynamics. Students reported flexibility, convenience, and independence as advantages, along with confusion, reduced social interaction, and more work as disadvantages. However, there appears to be a net economic gain for students, as tuition and financial aid remain unchanged while expenditure in time and travel are reduced. Course management technology and course design recommendations are provided for faculty consideration. The boundaries between traditional classroom instruction and fully online distance learning are blurring. As course design moves more toward a fully online look-alike, expectations for a smoothly operating course will be higher for both faculty and students.

Brunner, D. (2007). Using "Hybrid" Effectively in Christian Higher Education. Christian Scholar's Review. Holland. **36**: 12.

Hybrid is used in this article in the place of Blended Learning for a specific aspect of the latter, namely the convergence of online and classroom education, with a reduction of face-to-face time in the latter. The author also uses this term "Hybrid" as Blended Learning, in his opinion, is an "academic" term that few outside of academia might understand. The author trialed Hybrid teaching after having taught the same course in classroom only. His conclusions that this model offers "enticing possibilities for improving learning in Christian higher education..." He notes, among other observations, that both the students and the teachers MUST be developed to know how to use this "Blended" (or hybrid model as he calls it). He notes that this allows less seat time with supplemental online computer learning without diminishing the value of the former.

He also notes the value of this model for socialization - the classroom time can give a jumpstart on socialization to the point where the online itself is also more socialized.

Byrne, M. T. a. R. (2007). "Regular versus Online versus Blended: A Qualitative Description of the Advantages of the Electronic Modes and a Quantitative Evaluation." International Journal on E-Learning **6**(2): 257-266.

Abstract: The first part of this article discusses the advantages of offering courses online or in a blended format from an instructor's and manager's perspective. These advantages include: (a) improved distance support of faculty in the delivery of courses; (b) effective delivery of tutoring for students; (c) increased facility in the sharing of digital course materials and learning objects; (d) greater sharing of faculty workload; (e) effective development of virtual learning communities; (f) increased facility in student assessment and feedback; and (g) more effective program management and monitoring. The second part of the article shows that students appear to be more satisfied with the blended mode of delivery over strictly online and regular classroom formats. On the other hand, quantitative analysis shows that student satisfaction with online and regular courses and online and regular instruction appears equal. (Contains six figures.)

D. Randy Garrison, T. A. a. W. A. (2004). "Critical Thinking, Cognitive Presence, and Computer Conferencing in Distance Education." Eric Document Online Submission.

This article describes a practical approach to judging the nature and quality of critical discourse in a computer conference. A model of a critical community of inquiry frames the research. A core concept in defining a community of inquiry is cognitive presence. In turn, the practical inquiry model operationalized cognitive presence for the purpose of developing a tool to assess critical discourse and reflection. Ensuing empirical findings related to an attempt to create an efficient and reliable instrument to assess the nature and quality of critical discourse and thinking in a text-based educational context are presented. Finally, it is suggested the cognitive presence (i.e. critical, practical inquiry) can be created and supported in a computer and supported in a computer conference environment with appropriate teaching and social presence.

Daly-Jones O; Monk A, W. L. (1998). "Some advantages of video conferencing over high-quality audio conferencing: fluency and awareness of attentional focus." International Journal of Human-Computer Studies **49**(1): 38.

This paper describes two experiments that demonstrate significant advantages for video conferencing over audio-only conferencing,. Video resulted in more fluent conversation, particularly where there are more than two discussants. There was a large and significant effect on interpersonal awareness as assessed by ratings of the illusion of presence, and most clearly, awareness of the attentional focus of the remote partner(s). The ratings by video conference were similar to those for the co-located discussants, demonstrating the effectiveness of the video link.

Doo H. Lim, M. L. M. a. V. W. K. (2006). "Online Vs. Blended Learning: Differences in Instructional Outcomes and Learner Satisfaction." Eric Document Online Submission ED492755.

This study is from the University of Tennessee. In an effort to compare learning outcomes and other instructional conditions between online and blended delivery methods, this study was conducted to analyze the differences in instructional and learner factors between two groups of learners exposed to online only and blended delivery formats. Findings, discussion and implication so f differences in learning outcomes between the two delivery formats to improve either the online or the blended method were included. IT includes the most extensive historical review of the movement in distance education through its various iterations. Blended learning rated significantly higher than online only in instructional effectiveness and was rated much more highly in Group or individual projects and discussion activities. It provided clearer instructions to learners than online only.

Greenberg, A. (2004). "Navigating the Sea of Research on Video Conferencing-Based Distance Education: A Platform for Understanding Research into the Technology's Effectiveness and Value." Wainhouse Research Whitepaper.

This is an honest summary of research on videoconference based distance education. It demonstrates that video conference is neither more nor less effective as classroom presentation. It is equally as effective. Its genius is interactivity, thus the appropriate time to use it is when interactivity is critical. It also demonstrates that video conference teaching is a cost effective model of distance education, taking less staff and infrastructure costings than other forms of distance education. It lists research which is "friendly" toward vc teaching, that which is "unfriendly" and that which is neutral, which suggests that presuppositions leading to research in this area predicts outcomes of that same research. A good article with an excellent bibliography.

Jordan, A. P. R. a. H. M. (2004). "Blended Learning and Sense of Community: A comparative analysis with traditional and fully online graduate courses." The International Review of Research in Open and Distance Learning 5(2).

Blended learning is a hybrid of classroom and online learning that includes some of the conveniences of online courses without the complete loss of fact-to-face contact. The present study used a causal-comparative design to examine the relationship of sense of community between traditional classroom, blended, and fully online higher education learning environments. Evidence is provided to suggest that blended courses produce a stronger sense of community among students than either traditional or fully online courses.

Liam Rourke, T. A., Dr Randy Garrison, Walter Archer (2001) Assessing Social Presence in Asynchronous Text-based Computer Conferencing. Journal of Distance Education **Volume**, DOI:

This article explores the computer conferencing's role in student-teacher and student-student interaction. It suggests that they CAN support strong linkages and abilities to communicate interactively. The article outlines three areas of "presence" which are important to higher learning models, namely

Social Presence;  
Cognitive Presence; and  
Teacher Presence.

This article then explores social presence as it relates to computer conferencing, but also provides strong materials indicating the importance of cognitive presence and teacher presence.

One area of special note for our purposes is the Teacher Immediacy discussion. The following nonverbal skills (which I suggest are so easily utilized in video conference interaction, include

Engaging in eye contact with students,  
adopting a relaxed body posture  
using gestures  
Smiling.

Each creates positive affective attitude of the students to the learning.

Gorham in 1988 further suggested talking about experiences which happen outside the classroom, humor, addressing students by name and praising students' work or comments significantly contribute to students affective learning.

A strong Model for assessing social presence in a classroom setting or extension work is included in table 1.

Lim, D. H. M., Michael Lane; Kupritz, Virginia W (2006). "Online vs. Blended Learning: Differences in Instructional Outcomes and Learner Satisfaction." Online Eric Submission **ED492755**: 8.

In an effort to compare learning outcomes and other instructional conditions between online and blended delivery methods, this study was conducted to analyze the differences in instructional and learner factors between two groups of learners exposed to online only and blended delivery formats. Findings, discussion, and implications of differences in learning outcomes between the two delivery formats to improve either the online or blended delivery method were included. (Contains 7 tables.) [For complete proceedings, see ED491487.]

Markus Reiserer, B. E. a. H. M. (2002). "Fostering Collaborative Knowledge Construction in Desktop Video-conferencing. Effects of Content Schemes and Cooperation Scripts in Peer Teaching Settings." Retrieved 2/08/2006, 2006, from <http://newmedia.colorado.edu/cscl/119.htm>.

This research report centered on peer teaching in which Video Conference teaching was used between students learning the same material. The challenge to foster collaboration using Video Conference teaching was explored. The conclusions indicated that more research was needed on this topic. A bibliography on knowledge constructs etc. and scripted cooperation in student dyads is included.

Mortera-Gutierrez, F. (2006). "Faculty Best Practices Using Blended Learning in E-Learning and Face-to-Face Instruction." International Journal on E-Learning(V 3 n3): 313-337.

Presenting a higher education case study from Mexico: "Instituto Tecnológico y de Estudios Superiores de Monterrey" (ITESM-CCM) College, Mexico city campus, describing faculty best and worst practices using a blended learning approach in e-learning and face-to-face instruction. The article comments on conceptual definitions of blended learning, its epistemological and pedagogical bases and foundations, and the technological and instructional problems, difficulties, constraints, and successes that ITESM-CCM faculty has when they are using a blended learning approach. (Contains 1 note, 3 tables, and 2 figures.)

Pape, L. (2006). "From Bricks to Clicks: Blurring Classroom/Cyber Lines." School Administrator **63**(7): 6.

In recent years, thanks to the evolution of the Internet, wide availability of classroom computers and increased broadband access, blended learning is emerging as a new tool in the K-12 educational toolkit. Defined as learning that combines online and face-to-face approaches, blended learning is accomplished through the combined use of virtual and face-to-face resources. Blended learning enables classroom teachers to increase student learning opportunities beyond the school day and school year, more closely resembling the 24/7 model with the current generation of students is most familiar. This article describes the multiple advantages of blended learning and its two models; the web-enhanced classroom and the hybrid classroom.

Romiswzowski, A. J. (2005). Online Learning: Are We On the Right Track(s)? Online Learning: Personal reflections on the transformation of education. G. Kearsley. Englewood Cliffs, NJ, Educational Technology Publications: 318-346.

This chapter differentiates between "Presential" and Distance learning (rather than face-to-face). It makes a strong argument for face-to-face not ensuring Presential awareness, but must be designed into any system of interactive learning. A teacher may be in the same room or on a video screen, but not seem present due to lack of interaction, warmth etc. It must be designed into the course presentation model if psychological presence is to be perceived by the student. The 'distant' professor is not an option if Presential is to happen rather than distant teacher-learner interaction. Not the medium, but the medium utilized appropriately, allows for Presential presence rather than distance.

Smyth, R. (2005). "Broadband videoconferencing as a tool for learner-centred distance learning in higher education." British Journal of Educational Technology **36**(5).

This article explores the possibilities of shifting the focus of education from the teacher to the learner using the vehicle of Video Conference Teaching and interaction. Dr Smyth The value of Video Conference connectivity gives itself to the purpose of Rich Media experiences. She further presents a full table showing some of the modalities, including lectures, tutorials, higher degree supervision and team meetings for students working on a joint project though not close to one another geographically. She concludes that Video Conference use in distance education improves the teacher and student access to other students, thus reducing the isolation of remote learners and building support networks.

Advantages of using video conference facilities of on-campus students are also explored. The options include real-time, archived or face-to-face activities.

This article includes a very extensive bibliography which itself is valuable in identifying other useful information on adult learning, theory and practice.

Soylu, B. A. M. Y. (2004). "A Study on Students' Views about Blended Learning Environment." Eric Document Online Submission **ED494342**: 12.

In the 21st century, information and communication technologies (ICT) have developed rapidly and influenced most of the fields and education as well. Then, ICT have offered a favorable environment for the development and use of various methods and tools. With the developments in technology, blended learning has gained considerable popularity in recent years. Together with the developments it brought along the description of particular forms of teaching with technology. Blended learning is defined simply as a learning environment that combines technology with face-to-face learning. In other words blended learning means using a variety of delivery methods to best meet the course objectives by



combining face-to-face teaching in a traditional classroom with teaching online. This article examines students' views on blended learning environment. The study was conducted on 64 students from Department of Computer Education and Instructional Technologies in 2005-2006 fall semester in Instructional Design and Authoring Languages in PC Environment at Hacettepe University. The results showed that the students enjoyed taking part in the blended learning environment. Students' achievement levels and their frequency of participation to forum affected their views about blended learning environment. Face-to-face interaction in blended learning application had the highest score. This result demonstrated the importance of interaction and communication for the success of on-line learning. (Contains 3 tables.)

Vaughan, N. (2007). "Perspectives on Blended Learning in Higher Education." International Journal on E-Learning 6(1): 14.

Vies, F. A. G. L. D. a. J. M. (2005). "An Instructional Model for Web-Based e-Learning Education with a Blended Learning Process Approach." British Journal of Educational Technology 36(2): 19.

Web-based e-learning education research and development now focuses on the inclusion of new technological features and the exploration of software standards. However, far less effort is going into finding solutions to psycho pedagogical problems in this new educational category. This paper proposes a psycho pedagogical instructional model based on content structure, the latest research into information processing psychology and social constructivism, and defines a blended approach to the learning process. Technologically speaking, the instructional model is supported by learning objects, a concept inherited from the object-oriented paradigm.

Villanti, C. (2003). "Making the pedagogical case for blended learning." AFT on Campus(October).

The article posits 5 pedagogical arguments for blended learning over online or face to face only. They are:

1. Distance Education (DE) enthusiasts have criticized on-campus courses as too faculty-centered and traditional faculty have criticized DE courses as too student-centered (without teacher). Blended enables a balance between faculty centered and student centered models. Further, the multiple modalities of hybrids enable faculty to utilize a great variety of educational approaches, to better address the diversity of student learning styles, and provide students a wider range of ways in which to participate.

2. Hybrid courses counter the virtual versus real debate. There are many who believe that learning cannot happen in the absence of the whole person. Hybrids allow for students and faculty to speak their ideas, to hear concepts explained, and to interpret eye contact, facial expressions and body language. Further, in hybrid courses, faculty and students can develop a strong sense of classroom community both online and in person.
3. The blended (or hybrid) approach improves verbal and written communication better than either approach alone.
4. Hybrid courses can improve access better than on-campus only and student retention better than online only.
5. Hybrid courses balance "consumer perks" such as convenience and flexibility with student accountability, assessment and academic integrity.

Zanetis, R. S. a. J. (ND). "Internet-based videoconferencing for teaching and learning: A Cinderella Story." University Self Publish - available on request from Bob Woodruff: 12.

Videoconferencing has changed. It is emerging from its former status as a workhorse for administrative purposes, to realize its potential as a rich communication tool useful for teaching and learning. This paper defines videoconferencing by taking the criticisms of the past and comparing them to current capability. It concludes by exploring the huge future potential of Internet-based videoconferencing in education.