

## ***Blending learning opportunities: Orientation and illustrations***

Paul A. Beaufait

### **Abstract**

Blended learning alludes to a wide range of educational approaches and outcomes. Yet guidance and support for educators outside the field of computer-mediated communication, who adopt and engage in the process of blending, are surprisingly scarce. This paper sketches frameworks for envisioning blends of face-to-face and online learning in general. Then it provides illustrations of on-going English as an additional language (EAL) learning activities from a small public university in Japan. The author proposes two multi-dimensional conceptual frameworks to orient educators interested in exploring possible directions for blending face-to-face and online learning activities and resources. He then illustrates ways of implementing a learner-centered approach to blending learning activities with various artifacts of blending: statements of purpose, course goals, models, templates, and pointers to available resources.

*Often there are few educational designers available to assist educators, so only a small percentage of educators benefit from their assistance in creating pedagogically rich and engaging teaching and learning experiences. (Daiziel, 2008, p. 385)*

### **1.0 Background: blended and online learning**

As Rubesch and McNeil (2010) pointed out, "Online learning at the university level has been growing in popularity for the past two decades[,] with many educational institutions emphasizing the convenience, flexibility, and interactive nature of online courses" (p. 235). The first two of those characteristics, at least, would seem to be of as much interest to

learners as to educators. If it is evidence of effectiveness that the latter are seeking, there is a body of evidence available. However, the third characteristic, interaction, isn't necessarily an inherent feature of online learning, as a U.S. Department of Education meta-analysis indicated (USDoE, 2009; Meta-analysis of online learning, below).

### **1.1 From blended learning to blended work, and back again**

In order to reflect on blended learning from a range of perspectives, it may help to back-track Crichton and Naseem's (2011) assumptions of what is important for blended work, in particular the importance of:

1. "integrating face-to-face meetings with online interactions;"
2. rethinking ways in which people interact to optimize engagement and minimize risk and error; and
3. "restructuring the work day to respect time zones, cultural norms and individual work habits and needs" (p. 90).

Just as Crichton and Naseem did, when they extrapolated from the concept of blended learning to blended work, it may behoove educators to reexamine various possible blends of "physical and virtual presence, cultures, age groups, personal and professional experiences and expertise, time zones, institutional policies and expectations, gender, and technology access" (pp. 89-90). However, not all of those blends necessarily come into play in individual courses or particular educational institutions.

For example, MacKenzie, Promnitz-Hayashi, Jenks, et al. (2011) focused on particulars of blended learning spaces, "where online and face-to-face activities happen *within* the same class session and in the same classroom space" (p. 43, emphasis added), in various departments at a single institution. Their findings suggested that such activities "promote learner autonomy in an orally communicative environment – balancing individualization, interaction, and interdependence" (p. 57).

### **1.2 Meta-analysis of online learning**

For the purpose of a meta-analysis of online learning, the U.S. Department of Education (USDoE, 2009) focused on "learning that takes place partially or entirely over the Internet," while excluding "purely print-based correspondence education, broadcast television or radio,

videoconferencing, videocassettes, and stand-alone educational software programs that do not have a significant Internet-based instructional component" (p. 9). This focus enabled comparison of online *alternatives* to face-to-face teaching, with blended (online plus face-to-face) *enhancements* of traditional, real-time instruction (USDoE, p. 9). The majority of the total 84 studies meeting selection criteria were from post-secondary settings (USDoE, p. 37).

Nevertheless, the conceptual framework for the USDoE meta-analysis was broad enough to distinguish three typical learning experience and pedagogical schemes.

- The first represented *online content delivery*, or transmission from teachers;
- The second scheme comprised *online artifact manipulation* by learners;
- Only the third was *interactive*.

That is, the third analytical scheme comprised "inquiry-based collaborative interaction with other learners ... [in which] teachers become co-learners and act as facilitators" (USDoE, 2009, pp. 3-5).

### 1.3 Potential benefits

Summing up the meta-analysis by the USDoE (2009), Kessler (2010) contended, "[S]tudents who studied in online learning environments performed modestly better than peers who were receiving face-to-face instruction" (1. Online Education "Doesn't Have to Suck", ¶4). She drew the conclusion, "The modest difference ... was larger for those students who learned through a blend of online and physical classroom conditions" (6. The Virtual Classroom Can Make the Physical Classroom More Effective, ¶2).

Similarly, but coming from a teacher-support perspective, Kraglund-Gauthier (2011) posited various benefits of e-learning, namely that it:

- Engenders "a strong sense of community" among learners;
- Supports effective, inclusive, and responsible group work; and
- Scaffolds "collaborative constructivist learning."

Moreover, she argued: "Mode doesn't matter! It's more about effective teaching practices" (Kraglund-Gauthier, 2010, Pedagogical benefits, slide 21). So why aren't all institutions

providing ample, effective, engaging, e-learning opportunities in blended or entirely online courses?

#### 1.4 Pressing problems

When seeking definitions to guide approaches to development of blended and entirely online learning opportunities, educators, rather than gravitating towards interactive and collaborative models, may be just as likely to gravitate towards conventional content transmission and artifact manipulation models (USDoE, pp. 3-5). The following definitions of blended and e-learning indicate such tendencies:

- "Blended learning is usually used to define a situation where different delivery methods are combined ... to deliver a particular course. These methods may include a mixture of face-to-face classrooms, online classrooms, and self-paced learning" (HBMEU, What is Blended Learning?, 2010).
- E-learning involves "the use of digital technologies and media to deliver, support and enhance teaching, learning, assessment and evaluation" (Armitage & Ros, 2003, p. 4).

The problems with those definitions are they tend to conflate learning with teaching. They also emphasize content and course delivery methods and venues, rather than focusing on learners and learning processes.

Daiziel (2008) surmised the extent of another problem, the lack of support for educators:

*Often there are few educational designers available to assist educators, so only a small percentage of educators benefit from their assistance in creating pedagogically rich and engaging teaching and learning experiences. This problem exists not only at the level of educational institutions, but even at the level of whole country education systems[,] where there is a recognized need to adopt pedagogically richer teaching and learning approaches, but relatively few expert educational design[er]s who can assist the huge educator workforce towards new approaches. (p. 385)*

Under these circumstances, Daiziel (2008) recommended providing "support [for] *incremental advances* from current practices and culture" (p. 385, emphasis added).<sup>1</sup> That is precisely the kind of approach that this paper advocates.

---

<sup>1</sup> Iterative and incremental design and development figure prominently in a new book by Michael Allen, scheduled for publication September 26, 2012 (Niebert, 2012).

## 2.0 Benchmarking: local points of reference

For a university-wide faculty development initiative at a small public university in Japan, working group members organized sessions on e-learning that highlighted clusters of challenges, concerns, interests, and risks. Highlights from those sessions included:

- Challenges of faculty and infra-structural readiness;
- Concerns about time necessary for planning, development, implementation, and review;
- Interests in appropriate paths for development and implementation of plans for e-learning; and
- Risks of exposure to cyber attacks or violations of intellectual property rights.

For example, a working group survey indicated that approximately 15% of faculty had provided e-learning opportunities for students. Comments and questions during the initial session focused in part on how time-consuming, if not troublesome, continuous or recurring planning, implementation, and review of e-teaching strategies is, especially when there is limited fiscal, temporal (relief time), and technical support for faculty members.

Figure 1, Challenges to adoptions of e-learning, shows two streamlined strands from a concept map reflecting such challenges and concerns.

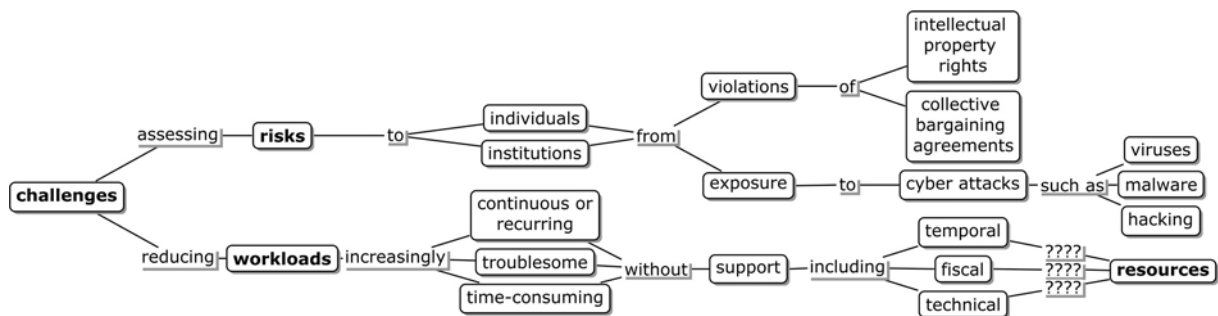


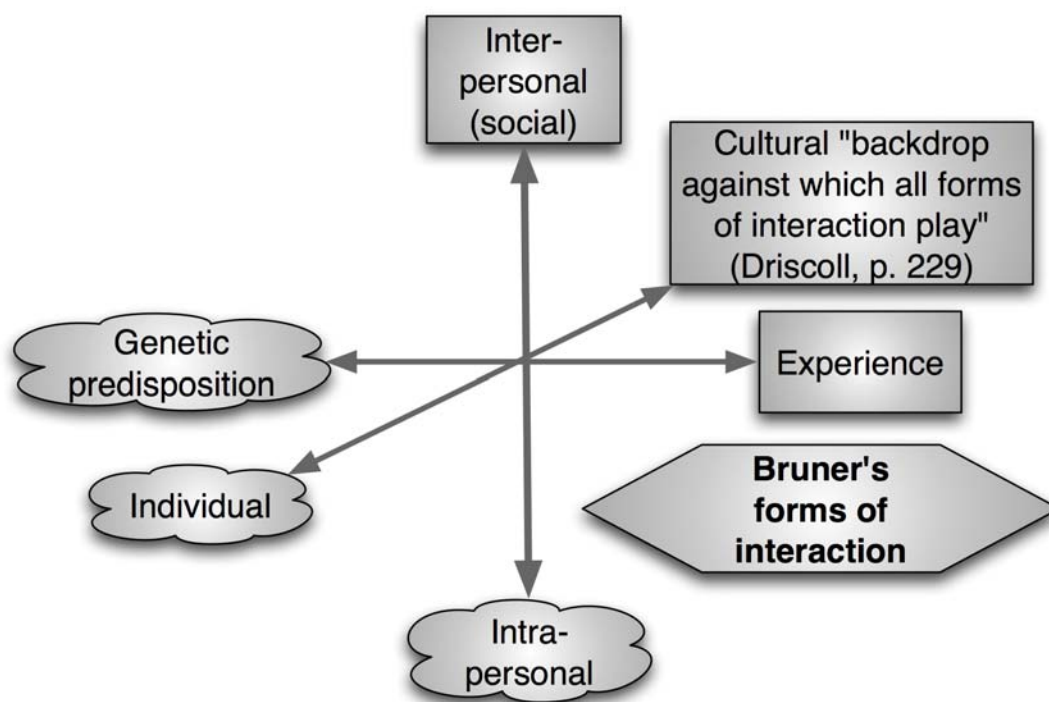
Figure 1. Challenges to adoptions of e-learning

Hopefully, this paper will help prepare educators here to envision if not to embrace such challenges.

### 3.0 Orientation for educators: conceptual frameworks

This section of the paper presents two multi-dimensional conceptual frameworks, or compasses,<sup>2</sup> to help orient educators who are interested in exploring opportunities for blending face-to-face and online learning activities and resources. That is, for educators who recognize associated risks and workloads, yet hope to make their blending endeavors more deliberate, less troublesome, and eventually more rewarding than they might seem.

The first framework (*Figure 2*) indicates perspectives from educational psychology, namely Bruner's interactions, and the second (*Figure 3*) provides additional perspectives on various learning and teaching alternatives for blending learning opportunities. To help educators chart courses among virtually limitless possibilities, the author proposed these compasses as rough models representing but a few dimensions of learning, because "[t]he provision of models is important for discovery," as hypotheses against which to examine one's findings, and as guides for precision of inquiry (Driscoll, 2000, pp. 230-231).



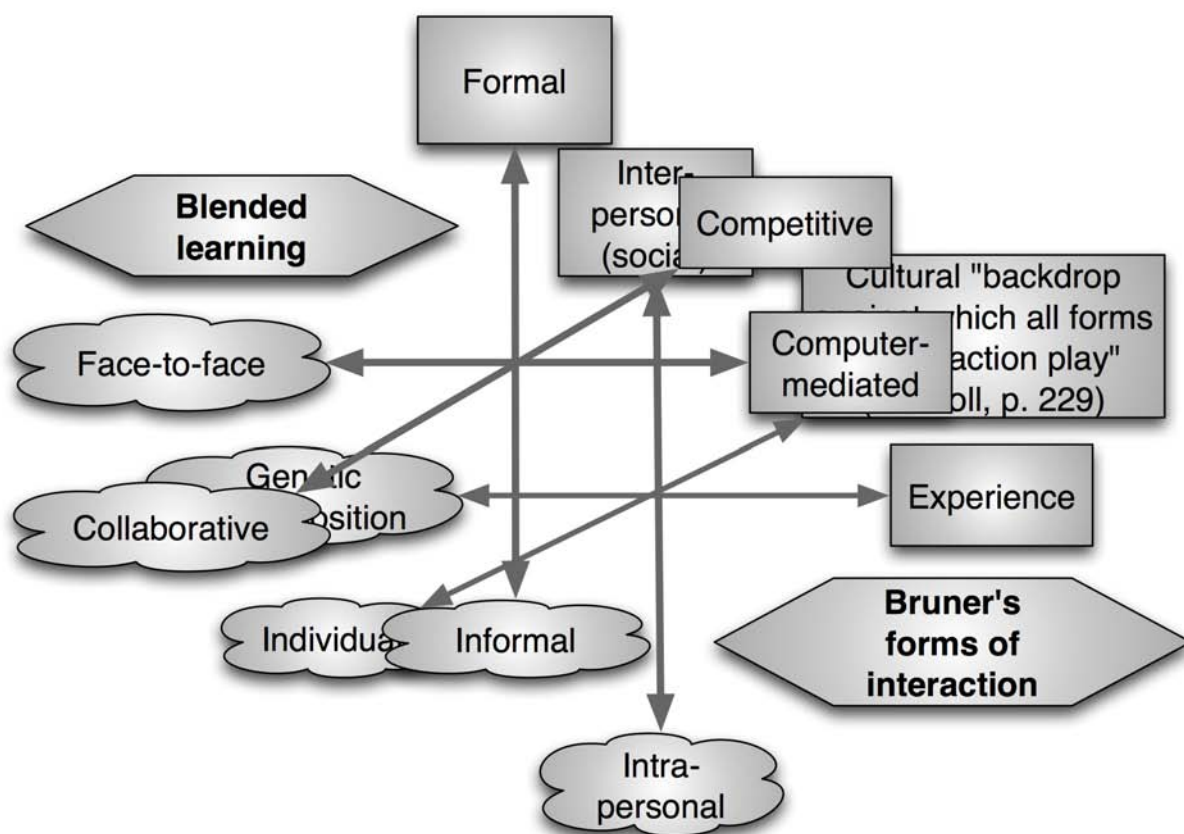
*Figure 2.* Bruner's forms of interaction

---

<sup>2</sup> The metaphor of compasses for educator orientation derives from presentations entitled *Blending Learning Opportunities: Outer and Inner Spaces*, at an institution-wide faculty development session (January 20, 2011) and at JALT CALL 2011 (June 4, 2011).

The purpose of the graphic representation in *Figure 2* (above) is to focus attention on learners and learning in a learner-centric universe. For instance, learning may occur as a result of individual manipulation of artifacts, during interaction with other people, or through intra-personal reflection on experience.

The second conceptual framework, *Figure 3*, Blended learning over forms of interaction, represents certain aspects of blended learning above and beyond a temporal (asynchronous–synchronous) dimension. The point of the overlay in *Figure 3* (below), showing *Figure 2* in the background, is to indicate the complexity of blending and learning processes. Yet here, again, learning is the central concept in dynamic interaction along all three axes, both simultaneously and distributed over periods of time.



*Figure 3.* Blended learning over forms of interaction

Though teachers and teaching are notably absent from those two graphic representations, teachers can nonetheless occupy roles of both actors and role models in inter-personal or social interaction with learners (*Figure 2*, top), co-learning or interacting, if you will.

Teachers also may be agents capable of, if not responsible for, the production or provision of pre- and post-learning cultural artifacts and backdrops (*Figure 2*, upper right). That is, for the materials and settings among and around which various blends of learner interaction may take place in formal learning situations (*Figure 3*, top).

The next section, **Activities for coursework**, presents digital artifacts from teaching as well as learning activities, as illustrations of blending. The activities those artifacts represent extend *beyond* content delivery, to learner artifact manipulation and cooperative interaction.

#### 4.0 Activities and resources for coursework

To illustrate blended learning activities for colleagues and peers, this section showcases statements of purpose, outlines course goals, and points out freely available resources for implementing a learner-centered approach to teaching undergraduate EAL reading courses. It distinguishes computer-based from online resources, for example concept-mapping software from a course wiki and a project blog.

This section also reviews purposes, processes, and products of two types of blended learning activities. One of those exploited a wiki, campus email, and a free concept-mapping program (**FreeMind**) for purposes of organizing, visualizing, and reviewing vocabulary collections.<sup>3</sup> The second, more interactive than the first, leveraged **Google Forms** and **Google Spreadsheets** in order to elicit students' reading preferences, and to produce classroom displays and blog posts reflecting those student preferences.

#### 4.1 Amplification of purpose

A set of generic course goals, prepared in committee, served as a springboard for development of the following statement of purpose in the course syllabus:

*The aims of these ... [undergraduate, 2nd-year, EAL reading] courses, both required for graduation, are to develop students' attitudes, knowledge, and skills with respect to reading purposes and processes, communicative competence, autonomous language learning, and vocabulary development. (Syllabus, 英語 V(c), Aims and Overview, ¶1, 2011)*

---

<sup>3</sup> URLs for web resources in **bold** type are in a list following the References section.



In a nutshell, that 2nd-year course sequence entailed near-term, long-term, and global goals that extended and refined the focus on students' learning in and through blended learning environments. That was both in- and outside of class, off- and on-line, as well as *asynchronous* or *synchronous* – two more dimensions of blended learning (USDoE, pp. 1-2). Though reading and vocabulary comprehension achievements may be near at hand, extensive writing in the target language is far off – years away from current curricula.<sup>4</sup>

In fact, when the author submitted that syllabus, he was uncertain whether a blended learning space similar to those mentioned by MacKenzie, Promnitz-Hayashi, Jenks, et al. (2011), albeit less flexible and sophisticated, would be available. So the syllabus made no mention of blending. Though learner autonomy, satisfaction, and success may come hand in hand at any time (some now, and hopefully more in the future), discerning current and potential outcomes is beyond the scope of this paper. Instead, this paper presents and reflects upon a gradual process of blending to enhance combined online and face-to-face learning opportunities.

#### **4.2 Blending resources: incremental enhancements**

As Daiziel (2008) suggested, the author has made (and is still making) a gradual transition in preparation of coursework, from that involving little online interaction to one involving more. This transition has occurred in conjunction with shifts in available and useful resources, first for use offline, and primarily in-class:

- For the teacher:
  - Texts: course book (Anderson, 2007) and teacher's guide (Anderson, 2008);
  - Media: classroom audio CD, ExamView Assessment Suite (CD-ROM).
  
- For students:
  - A/V presentations (delivered by the teacher);
  - Texts: dictionaries, library collections, handouts, textbooks.

---

<sup>4</sup> Though there is no English writing component in the administrative studies curriculum, teachers are at liberty to set assignments which call for writing, off-line or on-, in various courses, for example, brief explanations of unit preferences in a survey and feedback activity elaborated later in this paper. However, experience suggests that many if not most students have difficulty writing even brief (sentential) explanations or mail messages in English.

There is little out of the ordinary in the lists of off-line resources above. Though classroom presentations were already an audio-visual blend with whiteboard, overhead video camera, and computerized displays; course textbooks remained core resources. The author also has used the assessment suite CD-ROM, offline, to generate paper and pencil tests of reading and vocabulary comprehension.

To supplement those resources, in the past and outside of class, the author occasionally would send, and call for replies to, email messages. The author also created a wiki to present assignments, and to supplement presentations and archive other resources delivered in class. Yet email and the wiki had been directly accessible only to students with computers at home, or using university computers outside of class.

Class meetings currently take place in an open computer lab that will accommodate 40 or more students at a time. The types of resources available for students to use in class have multiplied. Online resources at their fingertips during class meetings include:

- Blog pages, posts, and comments;
- Classroom and other presentations stored online;
- Concept maps, and tools for creating their own;
- Online dictionaries, thesauri, and translation services galore;
- Google Docs, Forms, and Spreadsheets; webmail; and
- Wikis, cross-linked to blogs, and comprising resources for assignments.

Many of these resources are particularly useful in reading classes. They extended the range of genres or types of text for students to browse, read, study, and exploit. For instance, students have virtually immediate access to the course wiki (**English V-VI**) to peruse assignments, and can go to a blog page to find a ready-made list of previewed online dictionaries (**The Writing Studio Blog, Dictionaries and Thesauri**).<sup>5</sup>

### 4.3 Online resources for vocabulary visualization: models and templates

Similarly, students could go to the wiki to find a model concept map: *Figure 4*, A FreeMind model. *Figure 4* represents the outcome of a vocabulary skill-building process that students can use repeatedly to organize groups of words they learn into concept maps. This concept-mapping activity added manipulative (hands-on) and visual dimensions to

---

<sup>5</sup> URLs for web resources in **bold** type are in a list following the References section.

vocabulary-categorizing practice such as that in the course book (Anderson, 2007, Unit 6, Chapter 2, Vocabulary Skill, p. 77).

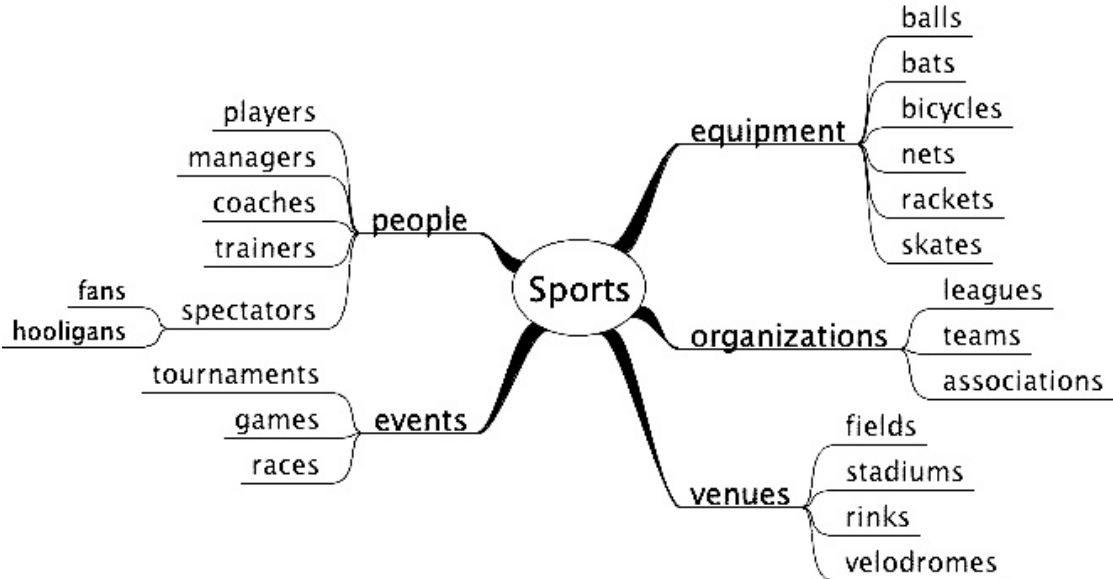


Figure 4. A FreeMind model

Students also could get a template for a word web, *Figure 5*, A FreeMind template, from the wiki to use in conjunction with free concept-mapping software (**FreeMind**) installed on university computers. The main branches of this template amplified suggestions for connecting and increasing vocabulary in the course book (Anderson, 2007, Vocabulary Learning Tips, pp. 6-7). If students had networked computers at home, they could download and install the software there, as well, and thus extend the range of possible venues where they could use the template.

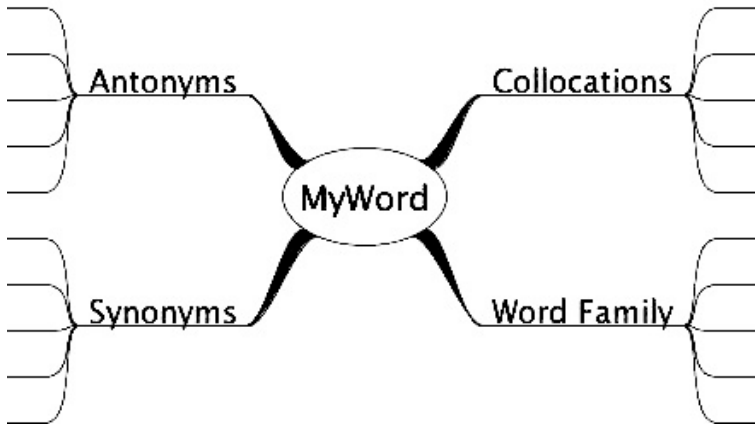


Figure 5. A FreeMind template

For vocabulary collection, representation, and review, computer-generated maps submitted via email replaced previous paper-based submissions. At present, students may do these vocabulary-mapping activities to earn extra-credit and improve their course grades (**English V-VI, Assignments**).

#### **4.4 Eliciting student preferences: survey and feedback**

The survey and feedback activities below typify the sort of blending that is possible, and indicate reasons for which it is desirable, with a variety of physical, computer-based, and online resources. The primary impetus of these activities is to begin to foster autonomy among students, who until now may have enjoyed limited choice in material to read and study. After they leave formal coursework, they will face myriad choices. That is, especially should they wish to continue studying EAL on their own.

The activities in this illustration replaced a paper-based survey that the author had undertaken for several years in order to determine students' preferences for units to read from the course textbook (Anderson, 2007). Activities involved in-class work with course books, and then moved online. The wiki assignment and emailed reminders pointed out an online survey form for collecting students' responses, in particular, their choices of units to read each semester (**English V-VI, Assignments: Reading Habits, Unit Preferences, ...**).

The activities took place in the two overlapping phases listed below: The first phase was announcing and administering the survey; the second was providing feedback in two time frames: 1) immediate, and 2) time-delayed. Primary resources are in parentheses.

##### **4.4.1 Survey phase**

- In-class and online assignments: For a preview, please see the wiki (**English V-VI**);
- In-class preparation (textbook: Anderson, 2007, front matter & table of contents);
- Email announcement (Gmailed invitations to a Google Form<sup>6</sup>); and
- Online submittals (Google Form): ACTIVE Unit Preferences Questionnaire.

---

<sup>6</sup> Though it is possible to include Google Forms in email messages, the on-campus webmail system didn't display the forms. So students needed to follow links included in the messages to open the forms in web browsers.

#### 4.4.2 Feedback phase

- Immediate (synchronous) feedback

Now that students can fill out and submit Google Forms in class, they do so first semester, with teacher supervision and assistance, as necessary. Immediate supervision entails benefits found by MacKenzie, Promnitz-Hayashi, Jenks, et al., in their study of blended learning spaces (2011). During the activity, the teacher can monitor, display, and even mark (color code) raw data as students submit it from desktop computers.

For example, the top half of *Figure 6*, In-class and next class screen displays, shows dark grey (originally red cell background) coding to indicate faulty choices of units that students already had studied, and grey (originally yellow), to indicate a typing (capitalization) fault at the beginning of a given name.

Given name	1st Choice	Reason for 1st Choice	2nd Choice	Reason for 2nd Choice
Mika	Unit 10	Because I become 2( Recently, I feel phisic I want to learn about l	Unit 03	Because yesterday, f
Aya	Unit 08	This unit is my intere Because I think pleas So I like to study this	Unit 03	I want to study abroa Because I want to tra So I want to study this
kazumasa	Unit 05	I want to study unit 05	Unit 07	Because I'm intereste

2010.10	1st choice	1st (%)	2nd choice	2nd (%)	3rd choice	3rd (%)	Weighted values
Unit 01	27	14%	9	5%	12	6%	111
Unit 02	25	13%	11	6%	10	5%	107
Unit 03	38	20%	18	9%	12	6%	162
Unit 04	15	8%	25	13%	16	8%	111
Unit 05	15	8%	40	21%	22	11%	147
Unit 06	15	8%	18	9%	15	8%	96
Unit 07	8	4%	12	6%	26	14%	74
Unit 08	20	10%	21	11%	13	7%	115
Unit 09	3	2%	5	3%	4	2%	23
Unit 10	4	2%	12	6%	16	8%	52
Unit 11	12	6%	14	7%	22	11%	86
Unit 12	10	5%	7	4%	24	13%	68

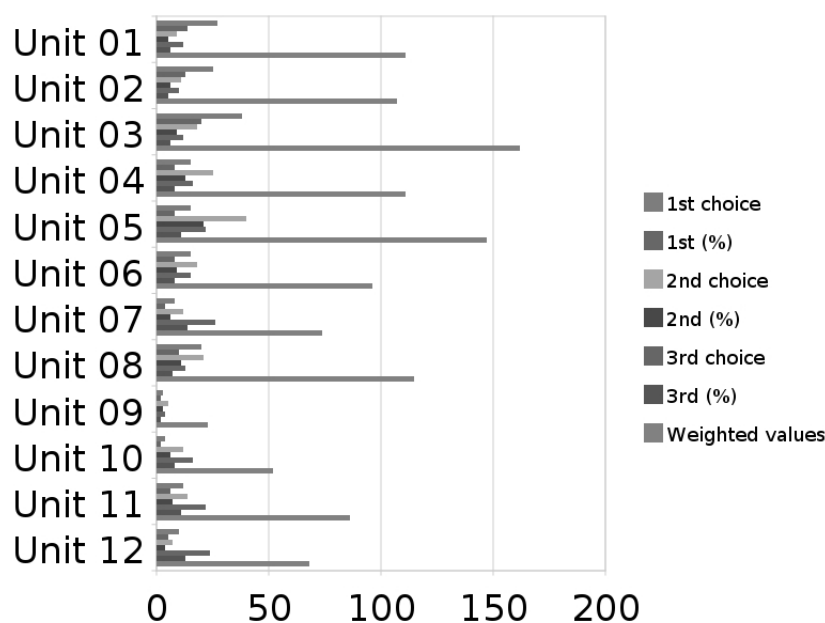
*Figure 6.* In-class and next class screen displays

Identifying such faults in class, at virtually the time of submittals, both orally and visually, tends to minimize subsequent faults. This process resonates with Crichton and Nasreem's priority on minimizing errors in blended work (2011, p. 90).

- Time-delayed (asynchronous) feedback

Though collective preferences are easier to tally when data is already in a Google Spreadsheet, than if the teacher (or an assistant) must enter preference data by hand; it still takes time to tabulate and represent definitive results, especially if the process involves concatenation of preferences from two or more classes. For example, the lower half of *Figure 6* (above) represents time-delayed feedback showing totals of both first and second semester choices, pushing weighted values for Units 03 and 05 higher than those for any unit completed first semester (dark grey rows in the lower half of *Figure 6*).<sup>7</sup>

*Figure 7*, Graphic output from a Google Spreadsheet, is an example of automated visualization enabling teachers to present feedback in class or online to students not long after they complete a survey.<sup>8</sup>



*Figure 7.* Graphic output from a Google Spreadsheet

For additional examples of time-delayed (asynchronous) feedback for students on a completed unit preferences survey, please see the following posts on the Language Learner Development Project Blog (**LLD Project Blog**):

<sup>7</sup> The weighting formula is: 1st choices x 3 + 2nd choices x 2 + 1st choices.

<sup>8</sup> Survey administrators using Google Forms have the option of letting survey takers see current results (exclusive of spreadsheet-based weighting), when the latter complete the survey.

1. **ACTIVE Skills for Reading: Book 1, 2011-12, first go** (May 19, 2011), and
2. **Unit Preferences and Reading Habits Questionnaire: Data with markup** (May 12, 2011).

As the earlier of those two blog posts explained, and screenshots illustrated, subsequent, teacher markup of students' data entries can highlight numerous issues related to content and form, for instance:

- ... too much or too little [personal] background information...;
- ... inappropriate choices of units ... [as in *Figure 6*, top half, above];
- ... redundant set[s] of individual responses in less than 10 minutes;
- ... unnecessary line returns, or lack of capitalization ... [in text-entry items];
- ... grammar and stylistic faults also marked with leading asterisks ("\*..."); [and]
- ... entries typed with double-byte Japanese characters, or including double-byte Japanese spaces." (LLD Project Blog, **Unit Preferences ...**; May 12, 2011)

## 5.0 Reflections on learning activities

With regard to the blended learning compass (*Figure 3*, Blended learning over forms of interaction, above), first semester iterations of the computerized, survey and feedback activity above ranged from face-to-face to online, and back, on the x-axis. They ranged toward the lower part of the *positive* end of the formality (y-) axis, since they constitute accredited coursework, but outcomes depended upon student contributions rather than either textbook authors' designs or teachers' decisions. They also were cooperative, that is, tending toward the collaborative rather than the competitive end of the z-axis, which corresponds to the USDoE's definition of interactive (2009, p. 5).

Although students' first semester online choices of units to read often conflicted with each other's in contention for priority allocation of class time for collective, inter-personal study; second semester elimination of choices (units studied already) concentrated students' preferences, and hopefully their personal investments in reading and sharing personal responses to remaining units in class, as well. The temporal locus of second semester survey responses also could shift from *during* class time to *between* classes as homework, with a corresponding decrease of both formal teacher supervision and virtually synchronous feedback while students completed the survey.

Classroom discussions after the survey provided learning opportunities toward the inter-personal or social end of the y-axis in *Figure 2*, Bruner's interactions, and promoted semi-formal speaking experience (x-axis, right), on which students can build in the future. Yet these online and classroom activities left open opportunities for students to read and reflect less formally on other units on their own (z-axis, intra-personal), at any time. In fact, the teacher encouraged them to do so at the end of formal coursework.

## **6.0 Implications for educators**

There are numerous conceptual variations of blended learning, and even contentious views of what, if anything, valuable the concept of blended learning generally entails (Oliver and Trigwell, 2005). That is, if it involves anything more than different modes of content delivery or instructional methods. This paper has focused on multi-dimensional conceptual frameworks – compasses for educator orientation, followed by concrete illustrations of blending with learner artifact manipulation as well as cooperative, inter-personal interactions for educators to use as models as they explore possibilities of blending within reach, but perhaps until now out of sight.

Granted, the two conceptual schemes proposed, and the activities and artifacts used to illustrate them here, may be insufficient, in and of themselves, to precipitate the sort of radical re-conception of blended learning that Oliver and Trigwell (2005) suggested would be necessary. Nevertheless, the compass points may well serve to guide educators who engage in, or consider engaging in, the process of blending opportunities for learners, as those educators envision, situate, manifest, and reflect on their plans to create and enhance opportunities for learner interactions in both face-to-face and online learning environments.

## **Acknowledgements**

It is a pleasure to acknowledge the encouragement and support of both Prof. Richard S. Lavin, Coordinator for Foreign Language Education Support at the Prefectural University of Kumamoto, and our colleague and collaborator, Assoc. Prof. Joseph Tomei at Kumamoto Gakuen University. The author also would like to thank the *JALT CALL Journal* editors and reviewers for their comments and consideration. Any remaining errors or omissions are the author's responsibility.



## References

- Anderson, Neil. (2007). *ACTIVE Skills for Reading: Second Edition, Book 1*. Boston, MA: Thomson ELT.
- Anderson, Neil. (2008). *ACTIVE Skills for Reading: Second Edition, Teacher's Guide 1*. Boston, MA: Thomson Heinle.
- Crichton, Susan, & Naseem, Azra. (2011). Blended work: Experiences from international development projects. In Sandy Hirtz & Kevin Kelly (Eds.), *Education for a Digital World 2.0: Innovations in Education*. (pp. 89-102). Victoria, BC: Open School BC.
- Driscoll, Marcy P. (2000). *Psychology of Learning for Instruction: Second Edition*. Needham Heights, Massachusetts: Allyn and Bacon.
- Gardner, Howard. (1993). *Multiple Intelligences: The Theory in Practice*. New York: Basic Books.
- MacKenzie, Dirk; Promintz-Hayashi, Lara; Jenks, Daniel; Geluso, Joe; Delgado; Roman; Castellano, Joachim; & Hinkelman, Don. (2011). Blended learning spaces: Synchronous blending. *The JALTCALL Journal* 7(1), 43-60.
- Rubesch, Troy, and McNeil, Merica. (2010). Online versus face-to-face: Motivating and demotivating factors in an EAP writing course. *JALTCALL Journal*, 6(3), 235-250.
- Kraglund-Gauthier, Wendy. (2011). Supporting Online Teachers: Moving Pedagogical Know-How into Virtual Classrooms [CIDER Session {webinar}, 2011.01.05]. <http://cider.athabascau.ca/CIDERSessions/sessionarchive/>
- Dalziel, J. (2008). Learning design: Sharing pedagogical know-how. In T. Iiyoshi & M. S. V. Kumar (Eds.), *Opening up education: The collective advancement of education through open technology, open content, and open knowledge* (pp. 375–387). Cambridge, MA: MIT Press. <http://mitpress.mit.edu/books/chapters/0262515016chap24.pdf>
- Kessler, Sarah. (2011). The case for the virtual classroom [blog post]. <http://mashable.com/2011/01/03/virtual-classroom/>
- Niebert, Jennifer. (2012, September 19). Book Review: Leaving ADDIE for SAM, by Michael Allen with Richard Sites. *Learning Solutions Magazine*. Retrieved from <http://www.learningsolutionsmag.com/articles/1012/book-review-leaving-addie-for-sam-by-michael-allen-with-richard-sites>
- Oliver, Martin; & Trigwell, Keith. (2005) Can 'Blended Learning' Be Redeemed?, *E-Learning and Digital Media*, 2(1), 17-26.
- U.S. Department of Education [USDoE]. (2009). Evaluation of evidence-based practices in online learning: a meta-analysis and review of online learning studies [PDF: revised Sept. 2010]. <http://www2.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf>

## Web resources by section

### 4.0 Activities and resources for coursework

- **FreeMind** – free mind-mapping software:  
[http://freemind.sourceforge.net/wiki/index.php/Main\\_Page](http://freemind.sourceforge.net/wiki/index.php/Main_Page)
- **Google Forms**: <http://www.google.com/google-d-s/forms/>
- **Google Spreadsheets**: <http://www.google.com/google-d-s/spreadsheets/>

### 4.2 Blending resources: incremental enhancements

- **English V-VI** (course wiki): <http://englishv-vi.wikispaces.com/>
- **The Writing Studio Blog, Dictionaries and Thesauri** (blog page with embedded Google Spreadsheet):  
<http://writingstudioblog.blogspot.com/p/dictionaries-thesauri.html>

### 4.3 Online resources for vocabulary visualization: ...

- **FreeMind** – free mind-mapping software: See Web resources, section 4.0 (above).
- **English V-VI, Assignments**: [http://englishv-vi.wikispaces.com/Assignments\\_V-VI](http://englishv-vi.wikispaces.com/Assignments_V-VI)

### 4.4 – 4.4.1 Eliciting student preferences: survey and feedback

- **English V-VI, Assignments: Reading Habits, Unit Preferences, ...**:  
[http://englishv-vi.wikispaces.com/Assignments\\_V-VI#UnitPreferences1](http://englishv-vi.wikispaces.com/Assignments_V-VI#UnitPreferences1)

### 4.4.2 Feedback phase

- **LLD Project Blog**: <http://lldproject.edublogs.org/>
  - **ACTIVE Skills for Reading: Book 1, 2011-12, first go**:  
<http://lldproject.edublogs.org/2011/05/19/active-skills-for-reading-book-1-2011-12-first-go/>
  - **Unit Preferences and Reading Habits Questionnaire: Data with markup**:  
<http://lldproject.edublogs.org/2011/05/12/unit-preferences-and-reading-habit-s-questionnaire-data-with-markup/>

## About the author

Paul Beaufait is an associate professor affiliated with the information administration section of the faculty of administrative studies at the Prefectural University of Kumamoto. His principle research interests are in collaboration, didactics, educational technologies, language education, and the scholarship of teaching and learning.