The Present and Future State of Blended Learning in Workplace Learning Settings in the United States

Curtis J. Bonk, Indiana University, cjbonk@indiana.edu
Kyong-Jee "KJ" Kim, Portland State University
Eun Jung Oh, Univ of Georgia
Ya-Ting Teng, University of Illinois
Su Jin Son, University of Illinois

AHRD Conference, Indianapolis, 2007

Whose Learning Is It, Anyway? Learning & Training Innovations, Clay & Mindrum, July/August, 2003, p.33

"E-learning proponents promised just-in-time, just-for-me, anytime, anywhere, 24X7, interactive, streaming, real-time, asynchronous, pervasive, motivational, emotional, collaborative, multimedia, blended, adaptive, personalized, intuitive, rich, engaging, strategic, empowering, scalable, consistent, efficient, and cost-effective learning."

Blended learning Study: Introduction

- **The growing importance of blended learning in workplace learning internationally (Bonk & Graham, 2006; Rossett & Frazee, 2006)**
- **Confusions about blended learning exists (eLearning Guild, 2003)**
  - What does blended learning really mean?
  - What are optimal blends?
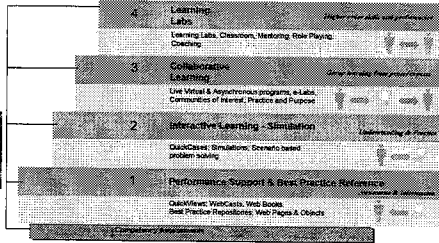 - How blended learning should be evaluated?

AMA Special Report, Blended Learning Opportunities; Alison Rossett (2006)

1. **Anchor Blend: Start FTF, then online**
2. **Bookend Blend: Three part: e.g., online preassessments, then FTF, and then online post assessments**
3. **Field Blend: Assets, resources, and choices including perhaps FTF**

The IBM Four Tier Learning Model (2006)
Blending Learning for Business Impact – IBM's case for learning success, *2006 Handbook of Blended Learning, Nancy Lewis, VP, & Peter Orton, IBM*

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
4. Personalized access to a range of materials
5. Accommodate more learning styles
6. Connect different nationalities and cultures
7. Reduction in physical class or space needs, commuting, parking
8. Increased opportunities for human interaction, communication, & contact among students
9. Introverts participate more
10. Cost effective, time, satisfaction

Precursors to this Study

"Online Training in the Online World" (2001-2002)	"Surveying the future of workplace e-learning: *The rise of blending, interactivity, and authentic learning"* (2003-2004)	"The Future of Blended Learning in Corporate and Other Training Settings: An International Study" (2005-2006)

Purpose of the Study

- To explore the current and future trends of blended learning in U.S. corporations.

Definition of Blended learning: Combination of face-to-face training and online learning.

Research Questions

- How is blended learning being perceived and practiced in workplace learning settings today?
- How is blended learning expected to be perceived and practiced in the next few years?
- Are there cross-cultural differences in the current status and future trends of blended learning? If so, what are the differences?

Tool Used was SurveyShare

Created Unique Surveys in Four Languages

Take Survey

Methods: Survey Respondents

- Target: Training/HRD (human resource development) professionals who belonged to professional organizations, discussion forums, or listservs on HRD, e-learning, or blended learning.

Methods: Survey Respondents

- **Respondents: (*N* = 118)**
  - Employed in various types of organization (e.g., government, business, not-for-profit)
  - 41% female, 59 male
  - ====================
  - Other four countries...
    - South Korea = 136
    - Taiwan = 112
    - United Kingdom = 202
    - China = 105

Size of Respondent Organizations

4. How many employees are in your organization?

1-100	12.71
101-500	13.56
501-1 000	14.41
1 001-5 000	27.97
5 001-10 000	11.02
More than 10 000	20.34
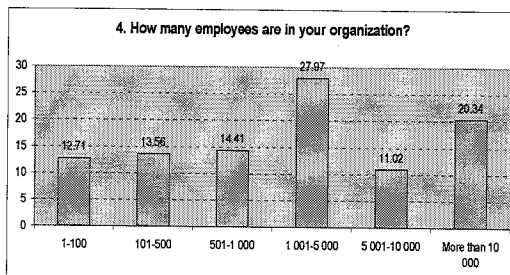
Primary Role of Respondents

5. What is your primary job role or title?

Training Manager or Director	28.21
Trainer or Instructor	14.53
Other	11.97
Instructional Designer or Content Developer	9.4
E-Learning Manager or Director	7.69
Chief Executive Officer or President	5.98
Human Resources Manager or Director	5.13
Consultant or Learning Technology Advisor	5.13
Training or Human Resources Support Staff	2.56
Chief Learning Officer or Knowledge Manager	2.56
Web Developer/Designer	1.71
Instructional Technologist	1.71
Information Architect	1.71
Systems Administrator or Director	0.85
Chief Technology Officer	0.85
Training Evaluator	0
Tool Developer or Programmer	0
Technical Writer	0
Salesperson Marketing Manager or	0
Performance Manager or Technologist	0
Loss Control Manager or Director	0
Information and Communications Technologist	0

Findings I:
Current State of
Blended Learning

7. Is your organization using blended learning as part of its employee training?

2% 9% 14% 37% 38%

- No, it is not something that we have considered
- No, but we are considering using it
- Yes, we have recently started using it
- Yes, we have been using it for more than 2 years now
- Not sure. What is blended learning?
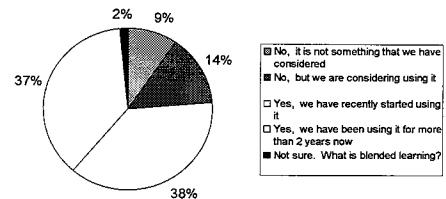
Respondents' Views of Blended Learning

8. Do you see blended learning as (pick the one that you feel best reflects your views):

Simply one of many methods to deliver training	Essential for employee training in your organization	Not fully proven but still worth trying	The current buzzword and nothing more	Just another way to cover up inadequacies of e-learning

(values shown: 59.63, 30.77, 7.69, 1.71, 0)
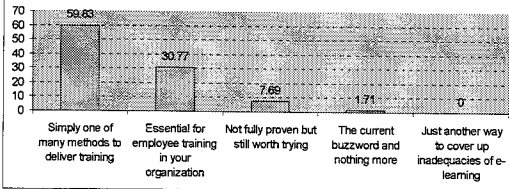
How do They Blend?

9. Blended learning programs in your organization typically include which of the following? (check all that apply)

Instructor-led training
Online self-paced materials
Custom e-learning content
Workbooks and other print material
Online testing
Synchronous conferencing, virtual classroom, or collaboration software
Asynchronous conferencing
Canned/off-the-self content
Collaborative learning and virtual teaming
Workplace-related assignments
Online coaching and mentoring
Online simulations and games
Chats and instant messaging
Other

(scale: 0 20 40 60 80 100)

Why Skills are Taught in Blended Courses?

10. Which one of the following skill areas are taught in blended courses?

Computer Application/Software Skills
Job-Related Skills
New Hire Orientation
Leadership
Management Education/Development)
Communication Skills / Teamwork
Processes Procedures and Business Practices
Mandatory and Compliance training
Customer Service Skills
Personal Development Skills
General Business Skills
Executive Education/Development
Ethics
Diversity/Cultural Awareness
Customer Product Training
Profession/Industry Specific
Product Specific Information
Computer Systems/Programming Skills
Sales/Marketing Skills
Basic Skills
Other

(scale: 0 10 20 30 40 50 60)

3-4 Skills Most Taught Through Blended

- US: Computer Applics, Job, New Hire Orientation, Leadership
- UK: Computer Applics, Job, Communication/Teamwork, Personal Devel Skills

========================
- Korea: Job Related, Leadership, New Hire Orientation, Basic Skills
- Taiwan: Job Related, New Hire Orientation, Communication/Teamwork Skills
- China: Communication/Teamwork, Basic Skills, Customer Service, Sales/Marketing

3-4 Skills Least Taught Through Blended

- US: Basic Skills, Sales/Marketing, Programming, Product Specific, Professional
- UK: Ethics, New Hire Orient, Basic Skills, Exec Ed

========================
- Korea: Product Specific, Diversity, Customer Product Training, Compliance
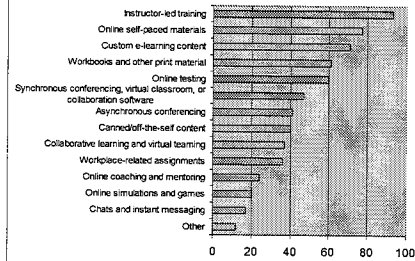- Taiwan: Diversity, Exec Education, Programming, Leadership, Product Specific, Business Practices
- China: Computer Systems/Programming, New Hire Orientation, Leadership, Product Specific

Greatest Benefit: Why do Blended?

11. What is the greatest benefit of blended learning?

Learning Appropriateness
Richer Instructional Content
Cost-effectiveness
Acceptability
Throughput
Familiarity
Scalability
Speed of Distribution

(scale: 0.00 5.00 10.00 15.00 20.00 25.00 30.00)
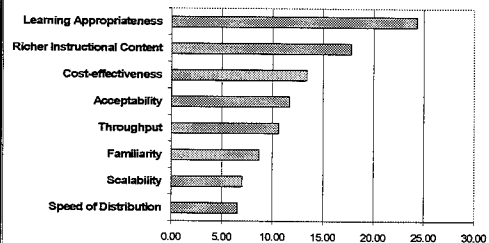
Key Drivers for Blended Learning?

13. What are the key drivers of blended learning in your organization? (check all that apply)

- Improving the quality of the learning experience
- Increasing the availability and accessibility of learning
- Cost reductions
- New strategic directions or visions within the organization
- External pressures including keeping up with the competition
- Shear enthusiasm from one or more key individuals within the organization
- Other

0.00 10.00 20.00 30.00 40.00 50.00 60.00

Greatest Obstacles to Blended?

12. What is the greatest obstacle or problem you face in utilizing blended learning?

- Time to develop blended learning resources
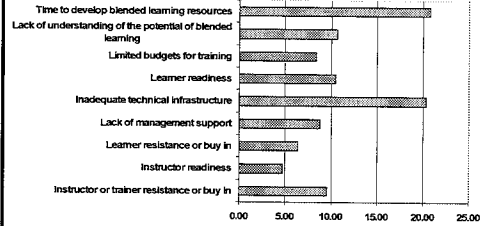- Lack of understanding of the potential of blended learning
- Limited budgets for training
- Learner readiness
- Inadequate technical infrastructure
- Lack of management support
- Learner resistance or buy in
- Instructor readiness
- Instructor or trainer resistance or buy in

0.00 5.00 10.00 15.00 20.00 25.00

•Taiwan (44%), US (45%), and China (46%) governments were the least supportive. UK most supportive (62%), while Korea was 2nd (52%).

15. Is the government of your country supportive of blended-learning?

	22.94	22.02	47.71	3.67	3.67
	Very supportive	Somewhat supportive	Neutral	Not supportive	Not supportive at all
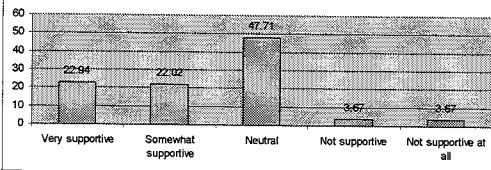
Korea most likely to have a strategic plan at 85% and UK was 79%; China least likely at 71%; USA (72%) and Taiwan (71%) also less likely.

16-a. Does your organization have a strategic plan for training and development?

4%
24%
72%

- ☐ Yes
- ■ No
- ☐ Do not know
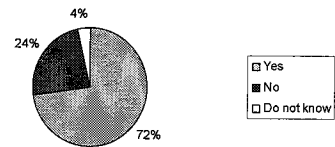
Is the Plan Shared with Employees?

16-b. If you have a plan, is it shared with employees on an internal company intranet web site?

5%
41%   54%

- ☐ Yes
- ■ No
- ☐ Do not know
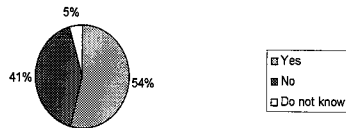
Is the Plan Publicly Available?

16-c. If you have a plan, is it shared in a publically viewable Web site for anyone to download any time?

11%   12%
77%

- ☐ Yes
- ■ No
- ☐ Do not know
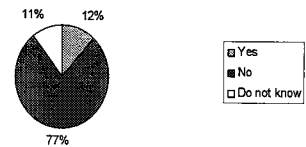
Is it Working Effectively?

16-d. If you have a plan, is it working effectively?

25%

44%

31%

- ⊡ Yes
- ▣ No
- ☐ Do not know
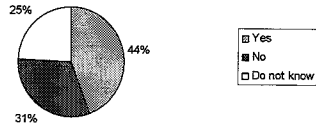
Does it Address Online Learning?

16-e. If you have a plan, does it address online learning?

11%

30%

59%

- ⊡ Yes
- ▣ No
- ☐ Do not know
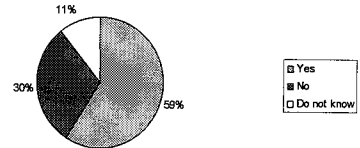
Does it Address Blended Learning?

16-f. If you have a plan, does it address blended learning?

13%

48%

39%

- ⊡ Yes
- ▣ No
- ☐ Do not know
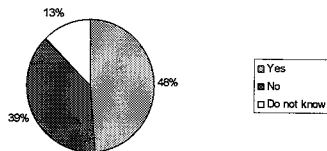
If Yes, Does it Lay Out a Model?

16-g. If you have plan and it addresses blended learning, does it describe or lay out a specific learning model or framework for your organization?

19%

18%

63%

- ⊡ Yes
- ▣ No
- ☐ Do not know
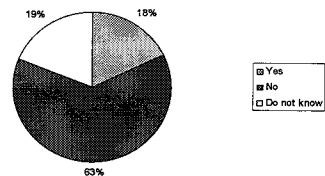
Does Your Organization Need Strategic Planning Advice?

16-h. Does your organization need strategic planning advice regarding blended learning?

15%

25%

60%

- ⊡ Yes
- ▣ No
- ☐ Do not know
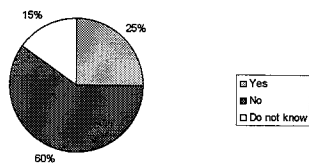
Does Your Organization Need Any Other Blended Learning Advice?

16-i. Does your organization need any other type of advice related to blended learning (e.g., design, development, implementation, evaluation, etc.)?

16%

31%

53%

- ⊡ Yes
- ▣ No
- ☐ Do not know
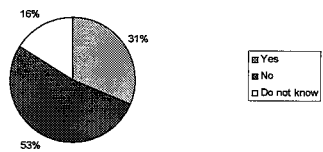
Does Your Organization Need Any Other Blended Learning Advice?

Internationally, 47 percent need advice on BL design, development, implementation, or evaluation. This too would be lucrative area for consulting!
24% UK
21% USA
52% Korea
69% Taiwan
77% China
47% Overall

- The percent of organizations evaluating the quality of blended learning in China (35%) and Taiwan (20%) is significantly lower than other countries.
- UK (66%), USA (66%), Korea (62%)

17. Does your organization evaluate the quality of blended learning courses?

13%
21%
66%
- Yes
- No
- Do not know
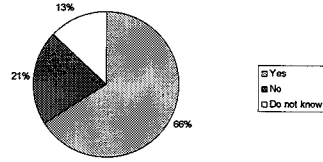
Is Yes, Who is the Primary Evaluator?

18. If you answered "Yes" to the previous question who is the primary evaluator of the program?

External consultants	Human resource personnel
Internal consultants	Line managers
Training department personnel	Others

- UK
- US
- Korea
- Taiwan
- China
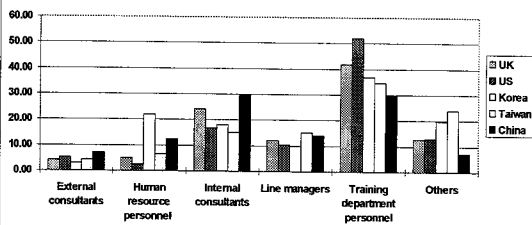
If Yes, Evaluate BL at What Levels?

19. At what levels does your organization evaluate blended learning? (check all that apply)

Level 1 - learner satisfaction with the course — 80.52
Level 2 - learning gains or skills and knowledge — 70.13
Level 3 - change in behavior on the job — 35.06
Level 4 - impact on the organization or results — 31.17
Level 5 - return on investment — 27.27
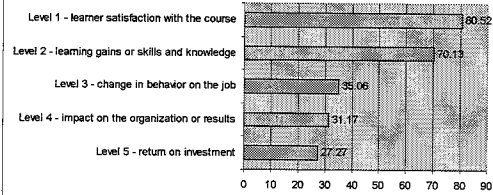
Percent Currently Blended?

20. What percentage of the training in your organization is currently devoted to blended learning?

None	1-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91-100%	Do not know
7.89	39.47	11.4	10.53	7.89	4.39	2.63	3.51	4.39	0	0.88	7.02
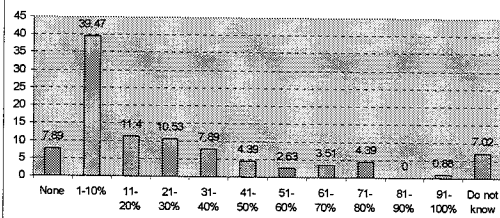
Findings II:
The future State of Blended Learning

22. How will your organization's spending on blended learning change during the next few years?

Will decrease significantly	Will decrease a little bit	Will be the same	Will increase a little bit	Will increase significantly	Don't Know
3.42	3.42	11.11	45.3	15.38	21.37
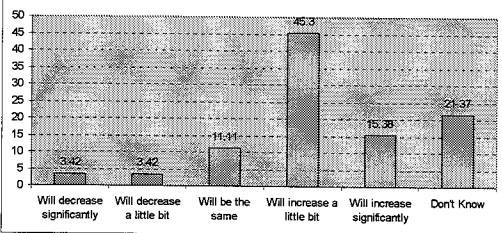
Most Significant Issue or Problem with

23. From the perspective of your organization, what is the most significant issue or problem with blended learning that must be addressed during the next few years?

Insufficient management support and commitment	13.91
Fast changing technology	13.91
Lack of understanding of what blended learning really is	12.17
Organizational / cultural resistance	8.7
Learners lacking self-regulated learning skills	8.7
Limited bandwidth	7.83
Limited organizational vision and planning	6.96
Boring and low quality content	6.96
Other	5.22
Learner resistance/hesitancy	5.22
More hype than fact	3.48
High costs of delivery	3.48
Lack of quality instructors	2.61
Lack of standards	0.87
Unethical vendors	0

What will Spur the Growth of BL?

24. Which of the following will spur or promote blended learning the most in the next few years?

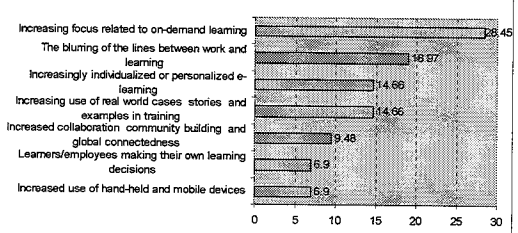|	
Increasing focus related to on-demand learning	26.45
The blurring of the lines between work and learning	16.87
Increasingly individualized or personalized e-learning	14.66
Increasing use of real world cases stories and examples in training	14.66
Increased collaboration community building and global connectedness	9.48
Learners/employees making their own learning decisions	6.9
Increased use of hand-held and mobile devices	6.9

	Connected Commun/ Inc. collab	Hand-Held/ Mobile	On Demand Lrng	Stories/ Real Cases
US	9	7	28	15
UK	12	7	23	9
Korea	13	10	23	15
Taiwan	26	2	9	35
China	31	6	9	23
Overall	17	7	23	18

	Personalized E-Learning	Employees Make their Decisions	Blurring Work-Learning
US	15	7	19
UK	15	17	16
Korea	8	17	13
Taiwan	11	8	8
China	6	15	8
Overall	12	14	14

---

25. Please check up to 4 of the following instructional approaches or strategies that will become more widely used in blended learning during the coming decade.

Authentic cases and scenario learning	50
Self-paced learning	48.28
Problem-based learning	45.69
Guided learning	44.83
Coaching and mentoring	41.38
Virtual team collaboration and problem solving	40.52
Simulations or gaming	34.48
Exploration and discovery	19.83
Discussion	18.97
Modeling of the solution process	13.79
Lecturing and instructor-directed activities	13.79
Debates and role play	6.03
Socratic questioning	2.59

Slide 1

Knowledge management tools were ranked as the key technology among five countries for the next few years; highest in Korea (36%).

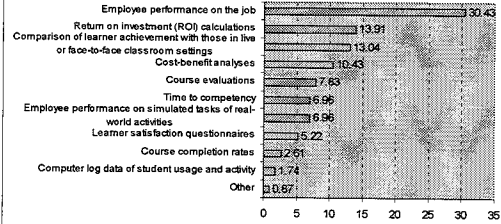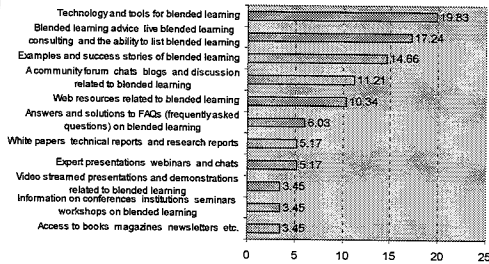| KM	LCMS RLO	E-Sim	Phone/ Mobile	Webcast/ Streaming	
27	21	10	10	10	UK
22	23	9	5	25	US
36	3	12	8	8	Korea
31	3	6	14	6	Taiwan
29	5	21	17	3	China
29	12	12	10	10	Overall

Slide 2

How to Measure the Quality of Blended Courses?

28. How will the quality of blended learning be most effectively measured during the coming decade?

	Value
Employee performance on the job	30.43
Return on investment (ROI) calculations	13.91
Comparison of learner achievement with those in live or face-to-face classroom settings	13.04
Cost-benefit analyses	10.43
Course evaluations	7.83
Time to competency	6.96
Employee performance on simulated tasks of real-world activities	6.96
Learner satisfaction questionnaires	5.22
Course completion rates	2.61
Computer log data of student usage and activity	1.74
Other	0.87

Slide 3

What Would You like in a BL portal?

29. What would you like the most in a blended learning portal?

	Value
Technology and tools for blended learning	19.83
Blended learning advice live blended learning consulting and the ability to list blended learning	17.24
Examples and success stories of blended learning	14.66
A community forum chats blogs and discussion related to blended learning	11.21
Web resources related to blended learning	10.34
Answers and solutions to FAQs (frequently asked questions) on blended learning	6.03
White papers technical reports and research reports	5.17
Expert presentations webinars and chats	5.17
Video streamed presentations and demonstrations related to blended learning	3.45
Information on conferences institutions seminars workshops on blended learning	3.45
Access to books magazines newsletters etc.	3.45

Slide 4

Conclusions/Implications

- Increasing popularity & importance of BL
- Needs for training and HRD professionals on guidance on what BL means and how to implement BL in their organization
- Fast changing technology as one of the most significant issues in implementation of BL
- More collaborative, authentic and interactive instructional strategies and emerging technologies will impact the delivery of BL in coming years
- USA less likely to strategically plan for blended learning, share plans, or develop BL models.

Slide 5

Questions and Comments?
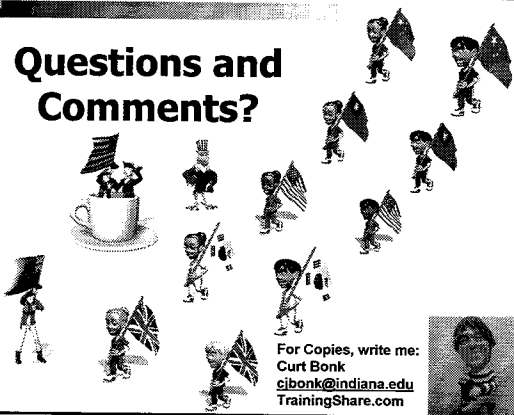
For Copies, write me:
Curt Bonk
cjbonk@indiana.edu
TrainingShare.com