

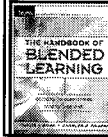
**Blended Learning:
Models, Cases, Stories, and Examples**

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<http://SurveyShare.com>



This the talk will cover:

1. Definitions of blended learning
2. Advantages and disadvantages
3. Models of blended learning
4. Examples of blended learning
5. Implications for blended learning



**Blended Learning:
Two Parts**

1. Models and Frameworks
2. Cases, Stories, and Examples



Part 1. Handbook of Blended Learning (HOBLe)

- University of Phoenix, Capella University, JIU, National University
- Microsoft, IBM, Sun, Cisco, Macromedia, Oracle, WebCT
- The World Bank, the DOD in USA
- In Canada: York University and the University of Calgary
- Other universities in Japan, Korea, Malaysia, Singapore, China, NZ, South Africa, Israel, Mexico, Australia, Wales, England, USA



Poll #1. Have you taught, taken, or designed a blended learning course?

A = yes

B = no

C = not sure, I am here to find out what blended means



Poll #2: Burning Blended Learning Q's

(Pick any that interest you)

- A. What does blended learning mean?
- B. What is typically being blended?
- C. How much to blend?
- D. Why blend (advantages and disadvantages)?
- E. Where is this all headed?

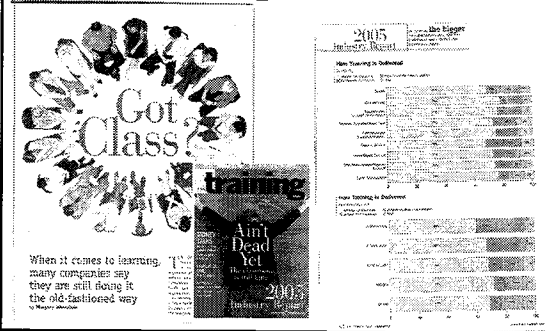
Whose Learning Is It, Anyway?

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."



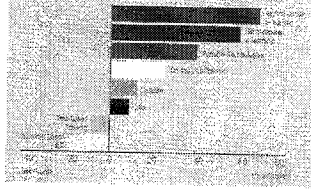
December 2005, Training Magazine



A Look at Learning Delivery: Understanding the Blend



Figure 3: Changes in Delivery Methods



Blended Learning Rationale

- BL link to nontraditional and distance learning.
 - Make learning available to learners in a variety of delivery formats (Bonk & Graham, 2006).
 - Make learning adaptable to myriad styles or preferences (Bonk & Zhang, in press).
 - Opportunities for authentic and self-directed learning avenues that have been espoused by nontraditional and distance learning experts for decades (Knowles, 1984; Wedemeyer, 1981).
 - Emerging technologies offer the options and opportunities that adult learners need (Capella, 2006).
 - Instruction must interest learners intrinsically, assist learners in self-development, address learning preferences or styles, & exploit resources of respective institutions or organizations (Bonk et al, 2007).

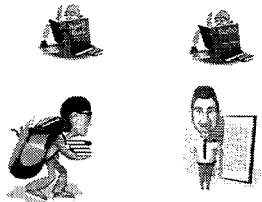
Why Blended?

- Fully e-learning has limitations (e.g., lack social interaction).
- Millions of learners around the planet are actually learning in this fashion of blended learning each day (Bonk & Graham, 2006).
- BL a top ten emerging trend in industry (ASTD, 2003).
- Conceivable that 80-90 percent of college and corporate training classes will be blended (Kim, Bonk, & Zeng, 2005).

Why not blended?

- Time to develop materials, deliver instructions, and enhance interactions.
- Instructors/trainers unwilling to change--skeptical of the effectiveness, fear of using the technology, peers can see them, and fear of lack of control.
- The barriers of institutional culture.
- Insufficient support from management.
- Learners need more self discipline and motivation.
- No one universal model of BL.

Blended Learning Defined and Explained



The Sloan Consortium (2003). Sizing the Opportunity: The Quality and Extent of Online Education in the U.S., 2002 and 2003 http://www.sloan-c.org/resources/sizing_opportunity.pdf

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.

Blended Learning Definitions

Graham, Ure, & Allen (2003, July). Blended Learning Environments
A Literature Review and Proposed Research Agenda

The three most commonly cited definitions include:

1. BL = combining instructional modalities (or delivery media)
2. BL = combining instructional methods
3. BL = combining online and F2F instruction

1. Blending Delivery Media

- "Blended learning means the combination of a wide range of learning media (instructor led, web based courseware, simulations, job aids, webinars, documents) into a total training program designed to solve a specific business problem." (Bersin & Associates, 2003, p. 3)

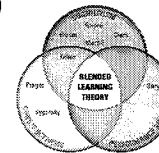
2. Blending Instructional Methods

- "Blended learning: to combine various pedagogical approaches (e.g., constructivism, behaviorism, cognitivism) to produce an optimal learning outcome with or without instructional technology." (Driscoll, 2002, p. 54)

2. Blending Instructional Methods

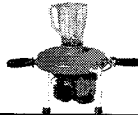
- "Blended learning is the use of two or more distinct methods of training." (Rossett, 2002, p. 59-60)
- "[Blended learning is] training delivered by a combination of methods." (House, 2002)

Jared Carman (2002);
blended learning design



3. 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)



Common Blended Ingredients

Jared Carman (2002), KnowledgeNet, Blended learning design

1. Live Events (face-to-face) or synchronous online (live events get attention)
2. Self-paced learning and reflection (own time)
3. Collaboration and teamwork (peer-to-peer and peer-to-mentor)
4. Assessment and evaluation (test out)
5. Performance on the job and associated performance support (job aids, PDAs, etc.)

BLENDED LEARNING DESIGN: FIVE KEY INGREDIENTS

Jared M. Carman
Director, Product Development
KnowledgeNet

October 2002

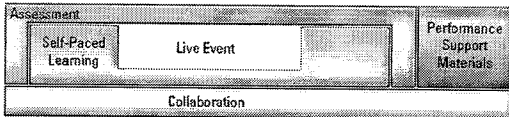


Figure 2: 5 Ingredients for Blended Learning

Blended Learning Models

By Purnima Valiathan (2002), Learning Circuits, ASTD (Skill-Driven BL Plan)

	Technology-based Techniques	Non-technology based Techniques
Announcement	LMS, email push	Flyer, mail, phone
Overview session	Email, Webinar	traditional classroom
Self-paced learning	Web-based tutorial, e-books, EPSS, simulations	Articles, books, job-aids, on-the-job, training
Query resolution	Email, FAQ, instant messenger	face-to-face meeting
Demonstration	Web meeting, simulations	traditional classroom
Practice	simulation	workbook assignment
Feedback	email	face-to-face meeting, print report
Closing session	Email, Webinar	traditional classroom
Certification	Web-based test	print test

Types of Delivery Technology (Option Six, 2006)

The type of media can include but is not limited to:

- Online or Web-Based Delivery
- CD-ROM
- Video/Audio Conference
- Analog or Digital Video including Pod Casts
- Live or Virtual Simulations
- Classroom (ILT)
- Communities of Practice
- OJT or Mentoring
- Performance Labs
- Job Aids

What's Available to Blend? (Option Six, 2006)

Locus of Control:

- Instructor-led
- Facilitated
- Self-Paced

Delivery Technology:

- Web-Based
- CD-ROM
- Video/Audio Conference
- Print
- Videotape
- Simulation
- Classroom

Delivery Timing:

- Synchronous
- Asynchronous

Instructional Strategies:

- Didactic Learning
- Problem Based Learning

Performance Support Strategies

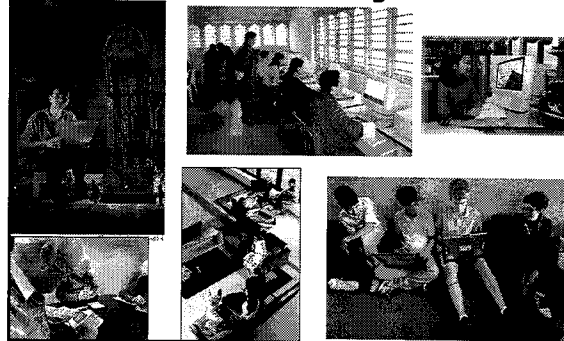
- Communities of Practice
- OJT
- Mentors
- Performance Labs
- Job Aids

Analysis & Design Considerations, (Option Six, 2006)

How can target audience characteristics flavor the blend?

Characteristic:	What if...	Possible Blends:
Size	large	self-paced; WBT; asynchronous; communities
Location	centralized	ILT; classroom; synchronous; mentors
Accessibility to Training	poor	facilitated; OJT
Skill Level	diverse	self-paced
Motivation	high	self-paced; asynchronous; performance labs

Who is demanding fully online and blended learning?



Learning TRENDS by Elliott Masie - September 5, 2006.
#399.5 - Updates on Learning, Business & Technology.
52,716 Readers - <http://www.masie.com> - The MASIE Center

Average Percentage of Learning Delivery Methods
(240 organizations in learning Masie consortium):

- 46% Classroom.
- 27% e-Learning.
- 19% Blended.
- 10% Other Methods.

Classroom Delivery is used for
Leadership/Supervision; Sales/Customer Service;
Orientation/OnBoarding.

E-Learning Delivery is used for HR Compliance;
Safety; IT Systems/Software.

Why Blend and Advantages and Disadvantages of BL...



Why Teaching Fully Online or Blended? Three Key Reasons

1. Improved Pedagogy
 - Interactive vs. Transmissive environments
 - Authenticity integration into work
2. Increased Access/Flexibility
 - Reduced seat time courses – UCF M courses
3. Increased Cost Effectiveness
 - Corporate: ROI – IBM 47:1, Avaya, Microsoft
 - Higher Ed: PEW Grants

Where is Blended Beneficial?

<http://www.center.rpi.edu/PewGrant/ProjDesc.html>

- Large employee population or courses
- Classes with working students
- Students spread over a distance
- Classes with certification or standards
- New requirements for a profession
- Writing intensive classes
- Theory classes

Examples of Blended Learning, Margaret Driscoll, e-Learning, March 2002

- Put assessments/reviews online
- Follow-up in community of practice
- Put reference materials on Web
- Deliver pre-work online
- Provide office hours online
- Use mentoring/coaching tool
- Access experts live online
- Use e-mail and instant messaging



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

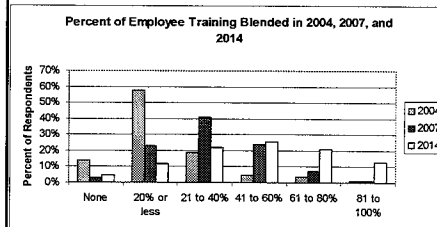


Fully Online and Blended Learning Disadvantages

1. Procrastination (trouble managing time and requirements)
2. Problems with technology at the beginning (instructor tries too much)
3. Can be overwhelming or too novel
4. Poor integration or planning
5. Resistance to change
6. Faculty skepticism, increase workload, and reduced productivity

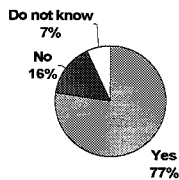


Corporate Training Blended (2003 study)



Korea most likely to have a strategic plan at 85% and UK was 79%; China least likely at 71% (USA (72%) and Taiwan (71%) slightly above)

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



3-4 Skills Most Taught Through Blended (Bonk, Kim, et al., 2007)

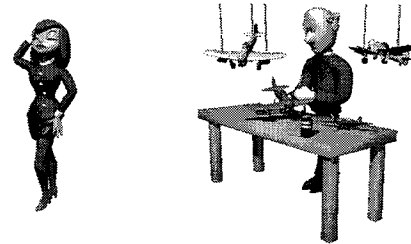
- UK: Computer Apps, Job, Communication/Teamwork, Personal Devel Skills
 - US: Computer Apps, Job, New Hire Orientation, Leadership
- =====
- Korea: Job Related, Leadership, New Hire Orientation, Basic Skills
 - Taiwan: Job Related, New Hire Orientation, Communication/Teamwork Skills
 - China: Communication/Teamwork, Basic Skills, Customer Service, Sales/Marketing

3-4 Skills Least Taught Through Blended

(Bonk, Kim, et al., 2007)

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

Frameworks and Models of Blended Learning...



Dimensions of Blended Learning

(Jay Cross, Foreword, 2006)

FIGURE E.1. DIMENSIONS OF THE BLENDED LEARNING STEW.

Blending know-how	[- - - - -]	Learning knowledge
Individual	[- - - - -]	Community
Generic	[- - - - -]	Proprietary
Training	[- - - - -]	Knowledge sharing
Text	[- - - - -]	Visual
Self-directed	[- - - - -]	Guided navigation
Content focus	[- - - - -]	Experience focus
Exploring	[- - - - -]	Participating
Push	[- - - - -]	Pull
Personalized	[- - - - -]	One-size-fits-all
Skills	[- - - - -]	Values
Information	[- - - - -]	Transformation
Formal	[- - - - -]	Informal

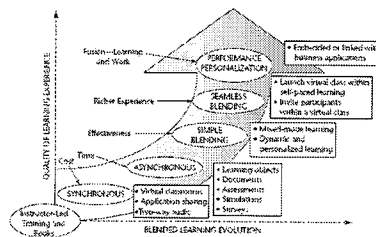


Harvey Singh (2006)

Blending Learning and Work

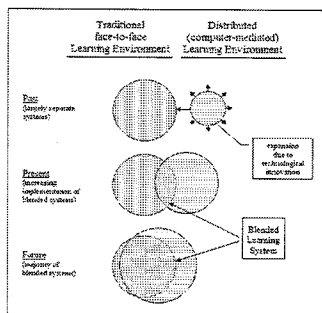
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FIGURE 34.1. PAST, PRESENT, AND FUTURE OF BLENDED LEARNING.



Historical Emergence of Fully Online and Blended

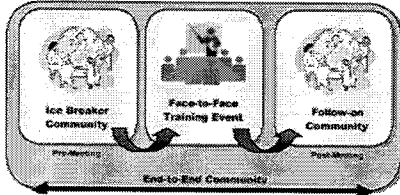
(Graham, 2006)



	Traditional F2F		Computer-mediated
Space	Live (physical F2F)	Mixed Reality	Virtual (distributed)
Time	Live Synchronous (very short lag time)		Asynchronous (long lag time)
Fidelity	High (rich all senses)	Medium (e.g., audio only)	Low (text only)
Humanness	High Human No Machine		No Human High Machine

(Graham, 2006)

A Blended Model: Corporate



Soren Kaplan, Ph.D.
Managing Director, iCohere, Strategies for Collaborative Learning

AMA Special Report, Blended Learning Opportunities

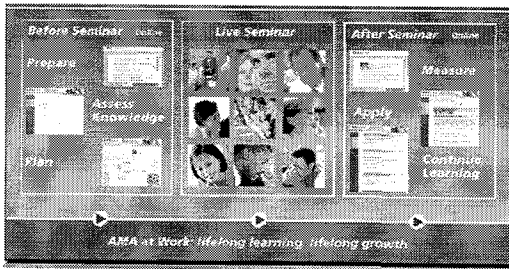
Alison Rossett (2006)

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



AMA Special Report, Effectively Implementing a Blended Learning Approach

(Steven Shaw & Nicholas Ignéri, 2006)



Source: American Management Association, AMA at Work

AMA Special Report, Blended Learning Opportunities

Alison Rossett (2006)

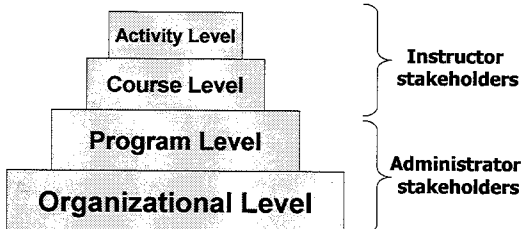
Table 1. What Might Go in the Blend

Live face-to-face (formal) <ul style="list-style-type: none"> • Instructional classroom (FTF) • 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/synchronous <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 • Listservs • 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

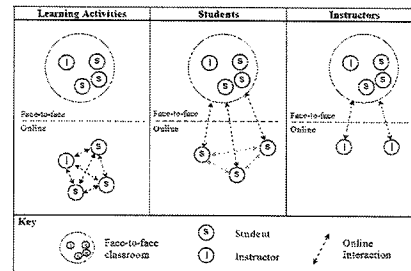
Models of Blending

Blending occurs at the following four levels:




1. Activity- and Course-Level Blends


Blended learning systems: Definitions and directions (Osguthorpe & Graham, 2003)



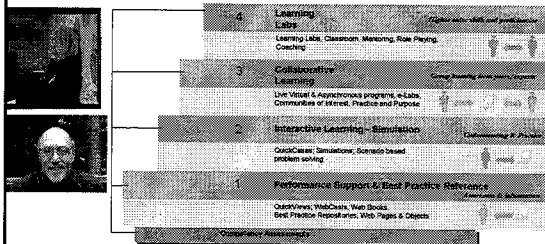
4. Blended Learning Form Factors (copyright Microsoft, Ziob & Mosher, 2006; Handbook of Blended Learning Environments)

Live instructor-led	Self-paced learning	Tools for learning communities
<ul style="list-style-type: none"> Traditional classroom Onsite engagement Virtual online classroom Live video via satellite or videoconferencing Online coaching/mentoring 	<ul style="list-style-type: none"> Instructor-led classroom via e-mail Online or computer-based training (CBT) Self-study guides, manuals, texts Online resources and databases 	<ul style="list-style-type: none"> Chat Instant messaging (IM) Newsgroups and forums Collaboration 

Blended Learning Scenario (copyright Microsoft, Ziob & Mosher, 2006; Handbook of Blended Learning Environments)

Pre Class	Day 1	Day 2	Day 3	Day 4	Day 5	Post Class
Self-study prep	In classroom	Virtual class	e-Learning	Virtual class	In classroom	Community newsgroups
						

4. 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



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

TABLE S.1. IMPROVED BEHAVIOR EFFECT ON THE BUSINESS.

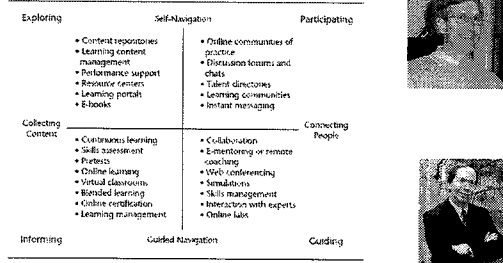
Attribute Emphasized in Training	Correlation with Financial Indicators
Increase in leadership competencies	.34***
Improvement in managerial style behaviors	.31***
Increase emphasis on aspects surrounding organizational climate	.27**
Increase in coaching behaviors	.32***
Improvement in managing telling behaviors	.29**
Better diagnosing and managing resistance to change	.24*
Gains from case study approach adopted in program	.35***
Increase in knowledge about leadership	.22*
Improved efficacy (confidence in managerial ability)	.26**
Reduction in perceived barriers to behavior change	.19*

*p < .1. **p < .05. ***p < .01. ****p < .001.

4. Specific Learning Elements An Learning Ecology from Sun Microsystems (Wenger & Ferguson, 2006)


A Learning Ecology Model for Blended Learning 89

FIGURE 6.6. SPECIFIC KNOWLEDGE SERVICES.



Current Learning Elements An Learning Ecology from Sun Microsystems

Current Learning Elements
Classroom (instructional) content
Self-paced web content
Self-study guides
Certification
Practice tests
Remote labs
eMentoring
Asynchronous discussion forums
Documentation
Procedural job aids
Guided lab activities
Learning management system
Transfer of Information – recorded audio and slide presentations
Webcasts
Video
Performance Support



Transforming Blends

(Kirkley & Kirkley; Oliver, Herrington, & Reeves, HOBLE, 2006)

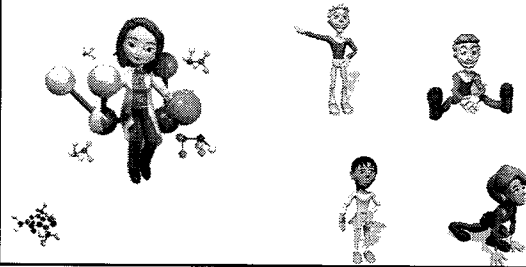


- Corporate/Military Training
 - Workplace learning (integrating learning into workflow)
 - Performance support and knowledge management using mobile technologies
 - Mixed-reality environments combining the virtual and real



Example of levels of mixed reality that allow a blending of the real and virtual worlds.

Best BL Model 99 Second Stretch Break!!!



Part II: 13 Fully Online and Blended Learning Problems and 43 Solutions



Problem Situation #1: Brief FTF Experiences

- Face-to-face (FTF) experiences are brief, one-week journeys. Need to need to build self-confidence, create social supports, teams, camaraderie, etc.

Blended Solution #1-10. Sample Activities for Brief Meetings

1. Assign web buddies, email pals, critical friends based on interests, confidence, location, etc.
2. Ice breakers—paired introductions, corners.
3. Solve case in team competitions with awards.
4. Test technology in a lab.
5. Assign teams and exchange info for small teams using text messaging.
6. Library (digital and physical) scavenger hunt.
7. Do a podcast documenting the meeting.
8. Have everyone create a blog on the experience.
9. Open an e-portfolio for each student
10. Brainstorm how might use technology in program.

Problem Situation #2: Learner Absenteeism

- Learners miss class due to work situation. Learners miss class to attend a conference or event or a personal problem arises. Or students asks to watch the class a second time.