# Effective Online Training Approaches and Recommendations

Christophe Bontemps

Statistical Institute for Asia and the Pacific



GIST Webinar Series on Selected Topics on Management Aspects of Capacity Building





► Contribution to improve the efficiency of e-learning



- ► Contribution to improve the efficiency of e-learning
- ► How to design and develop e-learning courses has been documented *e.g.* by **FAO elearning Academy**



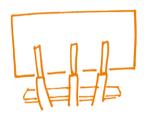
Source: The Open Science Training Handbook

- Contribution to improve the efficiency of e-learning
- ► How to design and develop e-learning courses has been documented *e.g.* by **FAO elearning Academy**
- Focus on delivery, for different types of online courses



urce: The Open Science Training Handbook

- ► Contribution to improve the efficiency of e-learning
- ► How to design and develop e-learning courses has been documented *e.g.* by **FAO elearning Academy**
- Focus on delivery, for different types of online courses
- Mostly based on SIAP's lecturers experience





# TRAINING APPROACHES, TOOLS & INTERACTIONS



# TRAINING APPROACHES, TOOLS & INTERACTIONS

► Facilitated courses: "Webinars, chats, polls, forums, interactive elements, . . . "

Courses' type	Interactive elements available	Characteristics
Facilitated	Webinars	Online courses with a
	Polls	predefined pace and regular
	Interactive slides	direct interactions with the
	Interactive videos	lecturer(s).
	Animates	Somehow lecturer led
	Quizzes	
	Q&A	
	Forums	
Self-paced	Interactive slides	Online courses with no
	Interactive videos	imposed timing, duration, or
	Animates	predefined pace.
	Quizzes	Somehow learner Led
MOOC	Webinars	Online courses with a large
	Polls	number of participants
	Interactive slides	where it is difficult to create
	Interactive videos	direct interactions with
	Animates	learners.
	Quizzes	
	Q&A	
	Forums	
	Peer-reviewed exercises	
Virtual training	Polls	Online courses with a small
	Quizzes	number of participants
	Q&A	where direct interactions are
	Forums	encouraged.
	Peer-reviewed exercises	



- ► Facilitated courses: "Webinars, chats, polls, forums, interactive elements, . . . "

Courses' type	Interactive elements available	Characteristics
Facilitated	Webinars	Online courses with a
	Polls	predefined pace and regular
	Interactive slides	direct interactions with the
	Interactive videos	lecturer(s).
	Animates	Somehow lecturer led
	Quizzes	
	Q&A	
	Forums	
Self-paced	Interactive slides	Online courses with no
	Interactive videos	imposed timing, duration, or
	Animates	predefined pace.
	Quizzes	Somehow learner Led
MOOC	Webinars	Online courses with a large
	Polls	number of participants
	Interactive slides	where it is difficult to create
	Interactive videos	direct interactions with
	Animates	learners.
	Quizzes	
	Q&A	
	Forums	
	Peer-reviewed exercises	
Virtual training	Polls	Online courses with a small
	Quizzes	number of participants
	Q&A	where direct interactions are
	Forums	encouraged.
	Peer-reviewed exercises	



- ► Facilitated courses: "Webinars, chats, polls, forums, interactive elements, . . . "
- ► Self-paced: "Webinars, chats, polls, forums, interactive elements...."

Courses' type	Interactive elements available	Characteristics
Facilitated	Webinars	Online courses with a
	Polls	predefined pace and regular
	Interactive slides	direct interactions with the
	Interactive videos	lecturer(s).
	Animates	Somehow lecturer led
	Quizzes	
	Q&A	
	Forums	
Self-paced	Interactive slides	Online courses with no
	Interactive videos	imposed timing, duration, or
	Animates	predefined pace.
	Quizzes	Somehow learner Led
MOOC	Webinars	Online courses with a large
	Polls	number of participants
	Interactive slides	where it is difficult to create
	Interactive videos	direct interactions with
	Animates	learners.
	Quizzes	
	Q&A	
	Forums	
	Peer-reviewed exercises	
Virtual training	Polls	Online courses with a small
	Quizzes	number of participants
	Q&A	where direct interactions are
	Forums	encouraged.
	Peer-reviewed exercises	J V



# TRAINING APPROACHES, TOOLS & INTERACTIONS

- ► Facilitated courses: "Webinars, chats, polls, forums, interactive elements, . . . "
- ► Self-paced: "Webinars, chats, polls, forums, interactive elements...."
- → Interactions *among* learners

Courses' type	Interactive elements available	Characteristics
Facilitated	Webinars	Online courses with a
	Polls	predefined pace and regular
	Interactive slides	direct interactions with the
	Interactive videos	lecturer(s).
	Animates	Somehow lecturer led
	Quizzes	
	Q&A	
	Forums	
Self-paced	Interactive slides	Online courses with no
	Interactive videos	imposed timing, duration, or
	Animates	predefined pace.
	Quizzes	Somehow learner Led
MOOC	Webinars	Online courses with a large
	Polls	number of participants
	Interactive slides	where it is difficult to create
	Interactive videos	direct interactions with
	Animates	learners.
	Quizzes	
	Q&A	
	Forums	
	Peer-reviewed exercises	
Virtual training	Polls	Online courses with a small
	Quizzes	number of participants
	Q&A	where direct interactions are
	Forums	encouraged.
	Peer-reviewed exercises	



- ► Facilitated courses: "Webinars, chats, polls, forums, interactive elements, . . . '
- → Interactions **from** & **to** lecturers + *among* learners (social learning)
- **Self-paced:** "Webinars, chats, polls, forums, interactive elements...."
- → Interactions *among* learners
- ▶ MOOCs: "Webinars, chats, polls, forums, interactive elements....

Courses' type	Interactive elements available	Characteristics
Facilitated	Webinars	Online courses with a
	Polls	predefined pace and regular
	Interactive slides	direct interactions with the
	Interactive videos	lecturer(s).
	Animates	Somehow lecturer led
	Quizzes	
	Q&A	
	Forums	
Self-paced	Interactive slides	Online courses with no
	Interactive videos	imposed timing, duration, or
	Animates	predefined pace.
	Quizzes	Somehow learner Led
MOOC	Webinars	Online courses with a large
	Polls	number of participants
	Interactive slides	where it is difficult to create
	Interactive videos	direct interactions with
	Animates	learners.
	Quizzes	
	Q&A	
	Forums	
	Peer-reviewed exercises	
Virtual training	Polls	Online courses with a small
	Quizzes	number of participants
	Q&A	where direct interactions are
	Forums	encouraged.
	Peer-reviewed exercises	1



- ► Facilitated courses: "Webinars, chats, polls, forums, interactive elements, ... "
- → Interactions **from** & **to** lecturers + *among* learners (social learning)
- ► Self-paced: "Webinars, chats, polls, forums, interactive elements...."
- → Interactions *among* learners
- ▶ MOOCs: "Webinars, chats, polls, forums, interactive elements....
- → Interactions **from** lecturers + *among* learners

Courses' type	Interactive elements available	Characteristics
Facilitated	Webinars	Online courses with a
	Polls	predefined pace and regular
	Interactive slides	direct interactions with the
	Interactive videos	lecturer(s).
	Animates	Somehow lecturer led
	Quizzes	
	Q&A	
	Forums	
Self-paced	Interactive slides	Online courses with no
	Interactive videos	imposed timing, duration, or
	Animates	predefined pace.
	Quizzes	Somehow learner Led
MOOC	Webinars	Online courses with a large
	Polls	number of participants
	Interactive slides	where it is difficult to create
	Interactive videos	direct interactions with
	Animates	learners.
	Quizzes	
	Q&A	
	Forums	
	Peer-reviewed exercises	
Virtual training	Polls	Online courses with a small
	Quizzes	number of participants
	Q&A	where direct interactions are
	Forums	encouraged.
	Peer-reviewed exercises	1 -



- ► Facilitated courses: "Webinars, chats, polls, forums, interactive elements, . . . "
- → Interactions **from** & **to** lecturers + *among* learners (*social learning*)
- ► Self-paced: "Webinars, chats, polls, forums, interactive elements, . . . "
- → Interactions *among* learners
- ► MOOCs: "Webinars, chats, polls, forums, interactive elements, . . . "
- → Interactions **from** lecturers + *among* learners
- ► Virtual training:

Courses' type	Interactive elements available	Characteristics
Facilitated	Webinars	Online courses with a
	Polls	predefined pace and regular
	Interactive slides	direct interactions with the
	Interactive videos	lecturer(s).
	Animates	Somehow lecturer led
	Quizzes	
	Q&A	
	Forums	
Self-paced	Interactive slides	Online courses with no
	Interactive videos	imposed timing, duration, or
	Animates	predefined pace.
	Quizzes	Somehow learner Led
моос	Webinars	Online courses with a large
	Polls	number of participants
	Interactive slides	where it is difficult to create
	Interactive videos	direct interactions with
	Animates	learners.
	Quizzes	
	Q&A	
	Forums	
	Peer-reviewed exercises	
Virtual training	Polls	Online courses with a small
	Quizzes	number of participants
	Q&A	where direct interactions are
	Forums	encouraged.
	Peer-reviewed exercises	1 -



- ► Facilitated courses: "Webinars, chats, polls, forums, interactive elements, . . . "
- ► Self-paced: "Webinars, chats, polls, forums, interactive elements, . . . "
- ► MOOCs: "Webinars, chats, polls, forums, interactive elements. . . . "
- → Interactions **from** lecturers + *among* learners
- ► Virtual training:

0
Interactions depend on number of attendees
Christophe Bontemps

Courses' type	Interactive elements available	Characteristics
Facilitated	Webinars	Online courses with a
	Polls	predefined pace and regular
	Interactive slides	direct interactions with the
	Interactive videos	lecturer(s).
	Animates	Somehow lecturer led
	Quizzes	
	Q&A	
	Forums	
Self-paced	Interactive slides	Online courses with no
	Interactive videos	imposed timing, duration, or
	Animates	predefined pace.
	Quizzes	Somehow learner Led
MOOC	Webinars	Online courses with a large
	Polls	number of participants
	Interactive slides	where it is difficult to create
	Interactive videos	direct interactions with
	Animates	learners.
	Quizzes	
	Q&A	
	Forums	
	Peer-reviewed exercises	
Virtual training	Polls	Online courses with a small
	Quizzes	number of participants
	Q&A	where direct interactions are
	Forums	encouraged.
	Peer-reviewed exercises	1



► Heterogeneity in capacity of participants





- Heterogeneity in capacity of participants
- ► Engaging a Large Group of Participants





- Heterogeneity in capacity of participants
- Engaging a Large Group of Participants
- Unknown Motivation of Participants





- Heterogeneity in capacity of participants
- Engaging a Large Group of Participants
- Unknown Motivation of Participants
- Creating Common Interest





- Heterogeneity in capacity of participants
- Engaging a Large Group of Participants
- Unknown Motivation of Participants
- Creating Common Interest
- ► Following Learners' Trajectories





- Heterogeneity in capacity of participants
- Engaging a Large Group of Participants
- Unknown Motivation of Participants
- Creating Common Interest
- Following Learners' Trajectories
- Collect real-time preferences





- ► Heterogeneity in capacity of participants
- Engaging a Large Group of Participants
- Unknown Motivation of Participants
- Creating Common Interest
- Following Learners' Trajectories
- Collect real-time preferencesImplications





- ▶ Heterogeneity in capacity of participants
- Engaging a Large Group of Participants
- Unknown Motivation of Participants
- Creating Common Interest
- Following Learners' Trajectories
- Collect real-time preferencesImplications
- → for training institutes (*Which topics for e-learning?*, ...)





- ► Heterogeneity in capacity of participants
- Engaging a Large Group of Participants
- Unknown Motivation of Participants
- Creating Common Interest
- Following Learners' Trajectories
- Collect real-time preferences
   Implications
- → for training institutes (Which topics for e-learning?, ...)
- → for lecturers/facilitators (How to reach/assess learning objectives ?, ...)

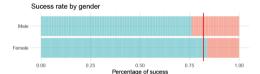




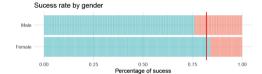


## SIAP's examples

Success by Sex



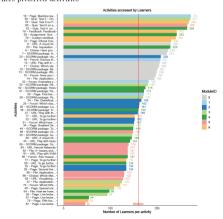
- Success by Sex
- → For training institutes



#### SIAP's examples

- Success by Sex
- $\hookrightarrow$  For training institutes
- Preferred activities

#### Learners preferred activities

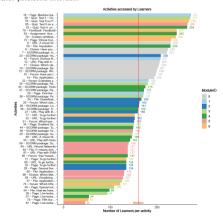




#### SIAP's examples

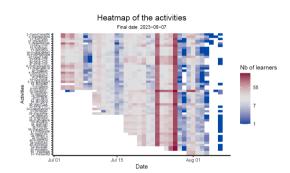
- Success by Sex
- → For training institutes
- Preferred activities
- → For lecturers (design)

#### Learners preferred activities



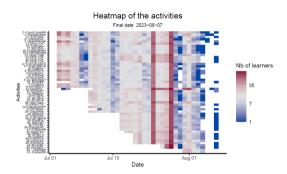


- Success by Sex
- → For training institutes
- Preferred activities
- → For lecturers (design)
- Activities viewed (heat map)



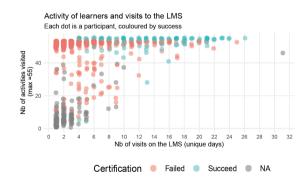


- Success by Sex
- → For training institutes
- Preferred activities
- → For lecturers (design)
- ► Activities viewed (*heat map*)
- → For lecturers and training institutes



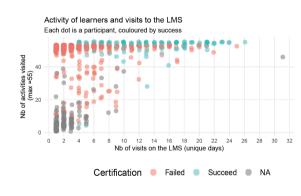


- Success by Sex
- → For training institutes
- Preferred activities
- → For lecturers (design)
- Activities viewed (heat map)
- → For lecturers and training institutes
- Success vs learner's engagement



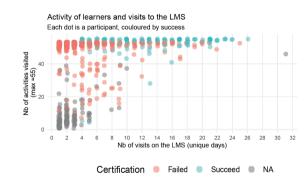


- Success by Sex
- → For training institutes
- Preferred activities
- → For lecturers (design)
- Activities viewed (heat map)
- → For lecturers and training institutes
- ► Success vs learner's engagement
- → For lecturers (evaluation/assessment)



#### SIAP's examples

- Success by Sex
- → For training institutes
- Preferred activities
- → For lecturers (design)
- Activities viewed (heat map)
- → For lecturers and training institutes
- Success vs learner's engagement
- → For lecturers (evaluation/assessment)





. . .



▶ Definition of a "course" vary across lecturers/institutions





- Definition of a "course" vary across lecturers/institutions
- Duration, level, type of a course have impacts on the e-course delivery





- Definition of a "course" vary across lecturers/institutions
- Duration, level, type of a course have impacts on the e-course delivery
- Learners backgrounds and motivations are always unknown





- ▶ Definition of a "course" vary across lecturers/institutions
- Duration, level, type of a course have impacts on the e-course delivery
- Learners backgrounds and motivations are always unknown
- Final *feedbacks forms* are not enough to understand learners needs and learning paths



