

# A Review of Language MOOCs and Development of a Design Framework



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# Agenda

1. Literature review on Language MOOC
2. Scope of our review and search strategy
3. Findings - features of 100 LMOOCs analysed using the model of web-based design for learning by Hall, Watkins, and Eller (2013)
4. Implications - a proposed design framework for LMOOCs + our example
5. Q & A



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110 million learners in  
13,500 courses at 900  
universities

**MOOCs  
matter**



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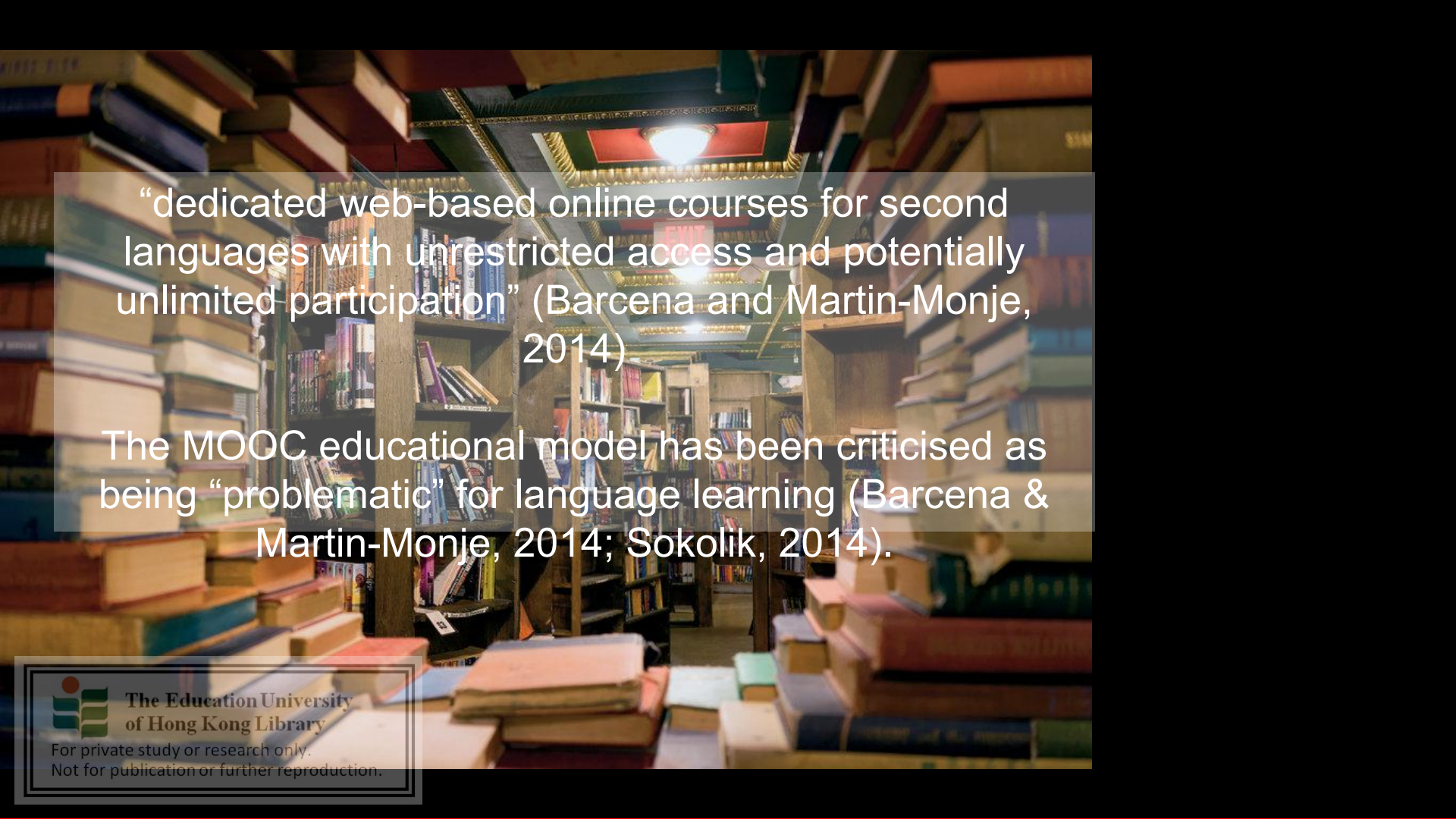


# What actually is a LM000C?



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“dedicated web-based online courses for second languages with unrestricted access and potentially unlimited participation” (Barcena and Martin-Monje, 2014).

The MOOC educational model has been criticised as being “problematic” for language learning (Barcena & Martin-Monje, 2014; Sokolik, 2014).



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# Issues

very low completion rates

Low engagement



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# Causes

Lack of personalisation

Lack of opportunities for interaction



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# But

Unique challenges in LM00Cs

Very few studies

Mostly exploratory

Most publications not peer-reviewed



# Methodology

## Exploratory research

*“The exploration of a new design framework, in this way, help us for a better understanding of the existing LMOOCs, test their feasibility, and determine the best methods to be used in a subsequent study.”*



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# Platforms



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# Platforms Chosen



- Created by **Stanford University's** professors.
- Founded in **2012**.
- More than **200** universities, organizations and corporations offers courses.
- Approx. **71 million learners**.
- More than **470 specializations**.
- More than **4400 courses**.
- Offers **individual courses, Specializations, certificates, and Degree Programs**.



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# Platforms Chosen



- Created by **Harvard** and **MIT**.
- Founded in **2012**.
- More than **145** schools, organizations and corporations offers courses.
- Approx. **24 million learners**.
- Approx. **80 million enrollments**.
- More than **3000 courses**.
- Offers **individual courses, professional certificates, MicroBachelors, MicroMasters programme, Online Masters Degree, XSeries and Executive Education courses**.

# Search Terms

- Language
- Language Learning
- English
- Chinese
- Spanish, etc.

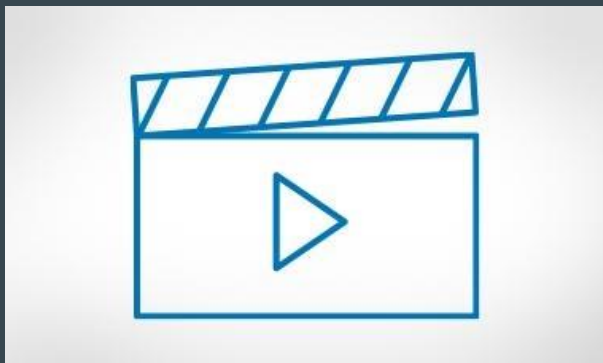


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# Features - videos



Videos in the edX/Coursera platform



Videos hosted on YouTube



Interactive videos using HTML 5 package



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# Features - assessments

## Graded

- Quizzes
- Peer-graded assessments



## Ungraded

- Ungraded quizzes
- Practice peer-review assessments



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# Features - readings

- Supplementary reading content in the content.
- Optional reading content via outside links; websites, book chapter(s), etc.

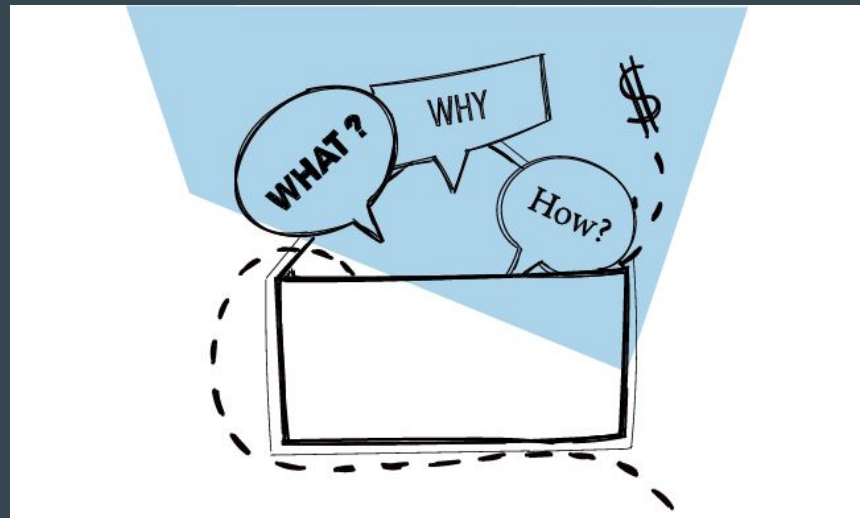


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# Features - discussion

- ❖ Open-ended questions:
  - Related to the content.
  - Related to the technical assistance
  - Related to the given assessments
  - Seeking feedback from the learners
- ❖ Communication with instructors/tutors.
- ❖ Communication among the learners.



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# Features - others/tools

- ❖ Google Slides
- ❖ Vocaroo (for audio recording)
- ❖ Quizlet (for quizzes)
- ❖ BookWidgets (for interactive exercises)
- ❖ Padlocks
- ❖ Google forms
- ❖ Qualtrics
- ❖ SurveyMonkey
- ❖ Minnit (for discussion/chat)
- ❖ Genially (for interactive slides, gamification, quizzes, etc.)



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# Extraction from the platforms

- 100 LMOOCs
- 55 on Coursera
- 45 on edX

Data analysis of the Coursera LMOOCs has completed.



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# Hall, Watkins, and Eller (2013)'s web-based design model

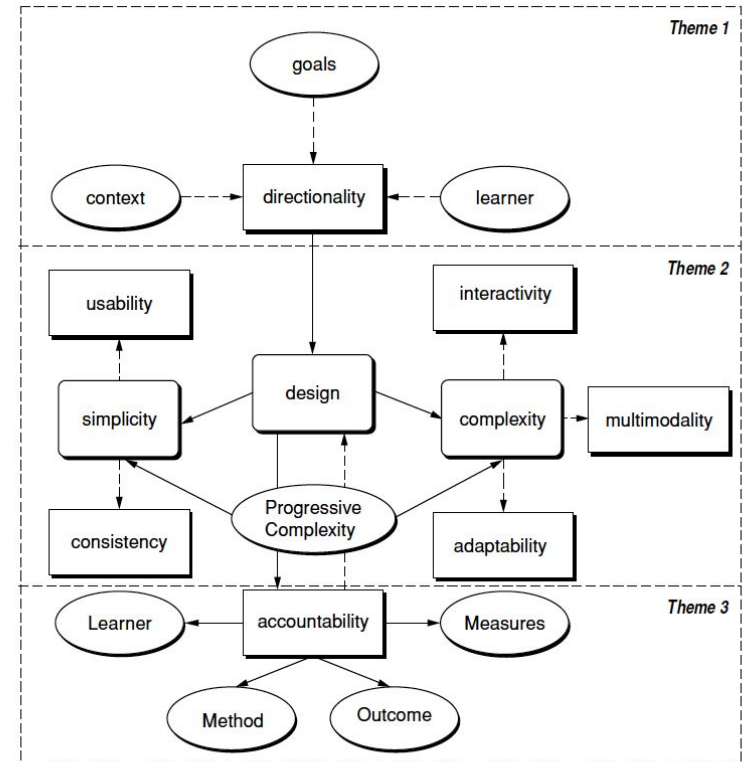


FIG. 25.1. Web Design for Learning Model. (Squares represent the seven basic components of the model.)



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# Hall, Watkins, and Eller (2013)'s web-based design model

- **Directionality**: Who are your intended audience (advanced learners, novice users)?
- **Design**: How do you balance between simplistic (usability, consistency) and complex (interactivity, multimodality, adaptability) design?
  - To maintain simplicity, how do you ensure that the LMOOCs are designed to be user-friendly and that learners' experiences are stress-free (**usability**)?
  - To maintain simplicity, how do you maintain **consistency** in relation to higher-order organisation of the LMOOCs?
  - To maintain complexity, how do you promote teacher-learners and learner-learner interactions? How do you strike a balance between synchronous and asynchronous interactions (**interactivity**)?
  - To maintain complexity, how do you include multimodal materials in your LMOOCs (**multimodality**)?
  - To maintain complexity, how do you personalise learning experiences of learners with different needs (**adaptability**)?
- **Accountability**: How are learners assessed in the LMOOCs?



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# Directionality

- Total: 100 LMOOCs
- edX: 28 introductory courses (14% instructor-led; 86% self-paced)
- edX: 13 intermediate courses (15% instructor-led; 85% self-paced)
- edX: 4 advanced courses (100% self-paced)
- Coursera: 33 introductory courses (100% self-paced)
- Coursera: 20 intermediate courses (100% self-paced)
- Coursera: 2 advanced courses (100% self-paced)



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# Directionality (total:100)

- edX
  - English MOOCs: 30
  - Chinese MOOCs: 2
  - Italian MOOCs: 5
  - French MOOCs: 1
  - Spanish MOOCs 4
  - Japanese MOOCs: 3
- Coursera:
  - English MOOCs: 36
  - Chinese MOOCs: 8
  - French MOOCs: 1
  - Spanish MOOCs: 5
  - Russian MOOCs: 5



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# Usability and consistency

- Clear introduction of course objectives, intended learning outcomes
- Linear/step-by-step learning trajectory - units/modules as organisational units of the course
- Fixed features provided by MOOC platforms
- Clear task instructions
- Desktop and mobile versions to enable seamless transition of learning between devices
- Two of the most popular MOOC platforms i.e., edX, Coursera
- Technical support and and users' guides available



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# Usability and consistency (an example)



Dear student,

We invite you to check in the content 'Introducción al MOOC - MOOC Introduction'. In this section, you will have two very important activities for the start of the course:

**Forum "Online Café":** The aim of this space, is to provide students with the chance to interact while getting to know each other. The forum is aimed at offering social support outside the academic and formal activities in the other discussion forums. Here you will be able to share, for example; presentations, discussions and invitations. It is a place to introduce yourself and get in touch with your classmates.

**Forum "Issues and concerns":** This forum is provided as a space for students to raise concerns or issues about technical or logistical aspects of the course or non-academic matters.

To get help with a technical problem, click on 'Help' and send a message to edX Student Support.

We want to encourage you to continue with this learning process and to complete it successfully. As the academic support of the MOOC, we will be aware to solve any incoming issues and provide you at all times an experience that guarantees your learning.

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Cordially,  
MOOC JaverianaX team

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Source: edX - JaverianaX: AEP1.0x Spanish for beginners: Learn in paradise

# Usability and consistency (an example)

## Issues and concerns

[Bookmark this page](#)

This forum is provided as a space for students to raise concerns or issues about technical, logistical aspects of the course or non-academic matters.

## Issues and concerns

[Hide Discussion](#)

**Topic:** Issues and concerns / Issues and concerns

[Add a Post](#)

Show all posts ▾

by recent activity ▾

 [Hola](#)

Hi happy learning

1

 [The Anonymous](#)

hi everyone.... eager to learn a new language. good luck everyone.

1

 [very much a beginner](#)

Looking forward to learning a new language

1

 [concerns](#)

never tried any foreign language, new to learn spanish

1

 [Issues and concerns](#)

Hi! I'm new to Spanish language, I love the language and so I'd like to learn it..

1

 [Spanish](#)

Source: edX - JaverianaX: AEP1.0x Spanish for beginners: Learn in paradise

# Interactivity

- Among the 100 LMOOCs analysed, 48 LMOOCs include discussion tasks (14 edX; 34 Coursera).
- Among the 48 LMOOCs which include a discussion component, the majority of them include a discussion task in each module/unit (usually at the end of the module/unit).
- However, these discussion tasks do not really provide the impetus for learners to engage in discussions (e.g., by providing an information gap). They simply adopt the format of a discussion forum. Some tasks are simply exercises which require long answers (e.g., a translation task).



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# Interactivity (an example)

Source: Coursera - Chinese for HSK 1



Where do you live? 你住在哪儿 Nǐ zhù zài nǎr?

Where do you live? Would you like to tell your classmates something about your city/town/village in Chinese pinyin or characters?



Participation is optional

Type your response here...

Reply



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# Interactivity (an example)

Source: Coursera - Chinese for HSK 1

## DISCUSSION FORUMS

### Beta Tester Forum

Hello Beta Testers! Post here If you see an issue with any element of the course that you suspect - but aren't sure - is a problem. Feel free to introduce yourself here as well to connect with your fellow beta testers.

Last post 11 days ago

69  
threads



### General Discussion

Use this forum to discuss things related to the course that don't belong in any of the other forums.

Last post 2 months ago

271  
threads



### Meet and Greet

Introduce yourself and say hello to your fellow classmates!

Last post 7 hours ago

127  
threads



# Interactivity (an example)

Source: Coursera - Chinese for HSK 1



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## WEEK FORUMS

### Week 1

Discuss and ask questions about Week 1.  
Last post 32 minutes ago

16843  
threads



### Week 2

Discuss this week's modules here.  
Last post 9 hours ago

7138  
threads



### Week 3

Discuss this week's modules here.  
Last post 2 hours ago

7307  
threads



### Week 4

Discuss this week's modules here.  
Last post 3 hours ago

4082  
threads



### Week 5

Discuss this week's modules here.  
Last post an hour ago

3746  
threads



### Week 6

Discuss this week's modules here.  
Last post 27 minutes ago

3419  
threads



# Interactivity (an example)

Source: Coursera - Chinese for HSK 1

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[Discussion Forums](#)

## Week 3

Discuss this week's modules here.

[Subscribe](#)

**SORT BY:** Latest



Search



[New Thread](#)

### What time is it? - September 28, 2020

50 views 50 replies

[Instructor Created](#)

Last post by [Gabriela Andrea Scartascini Spadaro](#) · 2 hours ago

### Any strategies and tips for learning Chinese? - September 28, 2020

32 views 32 replies

[Instructor Created](#)

Last post by [Mitu Sarker](#) · 13 hours ago

### Any strategies and tips for learning Chinese? - October 12, 2020

0 views 0 replies

[Instructor Created](#)

Created by [Yu Bin](#) · 13 hours ago

### Where do you live? 你住在哪儿 Nǐ zhù zài nǎr? - September 28, 2020

40 views 40 replies

[Instructor Created](#)

Last post by [Mitu Sarker](#) · 14 hours ago

### Where do you live? 你住在哪儿 Nǐ zhù zài nǎr? - September 14, 2020

47 views 47 replies

[Instructor Created](#)

Last post by [Sofia Pignani](#) · 16 hours ago

Assignment: Self Introduction

### Self introduction of Chinese HSK1 by Sanchita

7 views 3 replies

# Adaptability

- A linear learning trajectory e.g., from Unit 1 to Unit 7 following a traditional course structure.
- Content is presented from the simplest to the most complex.
- Unit/module format lacks variety e.g., learners are usually asked to complete some tasks after watching a short lecture video or reading/listening to some materials.
- More advanced/less committed learners cannot skip units or parts of a unit.
- For instructor-led LMOOCs, units will only be “released” to learners at a designated time.



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# Adaptability (an example)

Source: edX - MandarinX: MX103x Mandarin Chinese Level 3

Expand All

> Overview

> Lesson 1

> Lesson 2

> Lesson 3

> Lesson 4

> Lesson 5

> Lesson 6

> Final Exam

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# Adaptability (an example)

Source: edX - MandarinX:  
MX103x Mandarin  
Chinese Level 3

▼ Overview	
Syllabus	
Learning tools	
▼ Lesson 1	
Introduction	
Vocabulary	
Grammar	
Dialogue	
Cultural Notes	
Vocabulary Book	✓
Sentence Book	✓
Quiz	
Quiz due Oct 14, 2020 14:08 HKT	
▼ Lesson 2	
Introduction	
Vocabulary	
Grammar	
Dialogue	
Cultural Notes	
Vocabulary Book	✓


























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# Adaptability (an example)

[Home](#) / [Course](#) / [Lesson 1 - Greetings](#) / [Dialogue \(9 short videos\)](#)

< Previous	 		 		 				 		 			 		 	Next >
------------	---	---	---	---	---	---	---	---	--	---	---	---	---	---	---	---	--------

Source: edX - TsinghuaX: TM01xTsinghua Chinese: Start Talking with 1.3 Billion People



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# Accountability

The most common types of assessment in LMOOCs:

- MCQs
- Fill in the blanks
- Box checking
- Drag and drop
- Drop-down menu
- True/False/ Yes/No
- Open-ended questions (e.g., on discussion forum)

Less common types of assessment in LMOOCs:

- Peer-graded assignments
- Peer assessment

# Accountability (an example)

Source: Coursera - Étudier en France: French Intermediate course B1-B2



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## Compréhension écrite

TOTAL POINTS 5

1. Cochez la phrase qui correspond le mieux à la situation de Nancy Huston en France :

1 point

- ☐ Elle regrette d'être venue en France car elle a le mal du pays.
- ☐ Elle a une « nouvelle » famille : les expatriés de son quartier.
- ☐ Elle est bien intégrée à une communauté.
- ☐ Elle a de bons contacts avec son entourage.

2. Pourquoi sa conduite peut-elle étonner les Européens ?

1 point

- ☐ Parce qu'elle a déménagé de nombreuses fois durant son enfance.
- ☐ Parce qu'elle n'a jamais éprouvé de nostalgie pour son pays d'origine.
- ☐ Parce qu'elle a l'intention de rentrer chez elle dans trois ans.
- ☐ Parce qu'elle n'a jamais vécu dans une ville plus de quelques mois.

3. Dans ce texte, Nancy Huston évoque les différentes sensations qu'elle éprouve quand elle retourne en Amérique du nord. Parmi les différentes sensations évoquées ci-dessous, il y en a **une** qu'elle n'éprouve pas. Laquelle?

1 point

(Cochez la seule sensation qu'elle n'évoque pas dans la liste ci-dessous).

- ☐ Elle ressent une répugnance physique.
- ☐ Elle se sent très à l'aise immédiatement.
- ☐ Elle éprouve une impression ambivalente.
- ☐ Elle se sent oppressée par la vie quotidienne.

4. D'après elle, qu'est-ce qui est le plus difficile lors de ses retours temporaires au pays ?

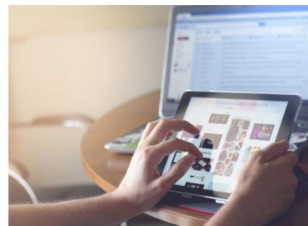
1 point

- ☐ Passer par l'étape de la mauvaise humeur.
- ☐ Réaliser qu'elle n'est plus au courant de la vie culturelle.
- ☐ Ressentir son attachement pour ses proches.
- ☐ Reparer anglais dans sa vie quotidienne.

# Accountability (an example)

Source: edX - UPValenciaX: HIENGLISH201.4x  
Upper-Intermediate English: Technology Today

## An effective website



Pic 01

Every business, however small, can benefit (1)  having a website. You may want (2)  sell a product or service or simply provide information. By having a web presence you (3)  marketing to the whole world, which can only mean an increase (4)  customers. You don't need an expensive professionally produced website. With a bit of thought and a web page design application (5)  as FrontPage or Dreamweaver, anyone can create an effective website.

First you need to plan your website (6)  paper. Decide what pages you will need, and (7)  they will link together. You should start (8)  the homepage and plan the rest of the website around it.

This is the page your potential clients will see first, so it needs to be clear, attractive and invite them to find (9)  more. The written content and graphics should persuade the customer (10)  this is something they really want or need.

It is essential that customers can find their way around your website and get the information they need. When they hit your homepage, they need to see clearly how to get (11)  other important pages. Use navigation bars with unambiguous labels. Each page of the website should include a link back (12)  the homepage.



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# Accountability (an example)

Source: edX - UPValenciaX: HIENGLISH201.4x  
Upper-Intermediate English: Technology Today

## Exercise 1

[Bookmark this page](#)

### Exercise 1

8 points possible (ungraded)

Read the following sentences and choose the most suitable alternative for each of them.

1. I wish I  remember where I put my keys.
2. Come on! My laptop has broken down again! I wish  bought it.  

☒ Select an option  
hadn't  
wouldn't  
didn't
3. I'd rather you  with us this C
4. I wish I  have so much work to do. I'm really stressed out.
5. If only  to her mother! None of these horrible things would have happened.
6. My friends have a terrible headache today. If only they  so much beer yesterday.
7. It's high time my brother  to look after himself.
8. A cheque is all right, but he'd rather you  him cash.

# Accountability (an example)

Source: edX - UPValenciaX: HIENGLISH201.4x Upper-Intermediate English: Technology Today

## Writing a project report

[Bookmark this page](#)

**You are working in London on a very promising research project. The manager or leader of the project wants to publish some of the results you have obtained from a survey among people of various ages. Write a report (150-200 words) describing some of the results or findings, drawing some conclusions and some recommendations for the future as well as suggesting some possible ways to achieve improvements.**

For example, you are going to launch a new and very innovative technological device. You have conducted a survey to test the acceptance that this product is going to have among clients.



Pic 01



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# Accountability (an example)

Source: edX - UPValenciaX: HIENGLISH201.4x  
Upper-Intermediate English: Technology Today

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## EXERCISE 1. WORKING IN LONDON

This assignment has several steps. In the first step, you'll provide a response to the prompt. The other steps appear below the **Your Response** field.

IN PROGRESS

### 1 | Your Response due Jan 26, 2021 05:45 HKT (in 3 months, 2 weeks)

Enter your response to the prompt. You can save your progress and return to complete your response at any time before the due date (Tuesday, Jan 26, 2021 05:45 HKT). **After you submit your response, you cannot edit it.**

The prompt for this section

Write your report in 150-200.

Your Response (Required)

Enter your response to the prompt above.

Save your progress

THIS RESPONSE HAS NOT BEEN SAVED.

You may continue to work on your response until you submit it.

Submit your response and move to the next step

NOT AVAILABLE

### 2 | Assess Peers due Jan 31, 2021 05:45 HKT (in 3 months, 3 weeks)

NOT AVAILABLE

### 3 | Assess Your Response due Feb 2, 2021 05:45 HKT (in 3 months, 3 weeks)

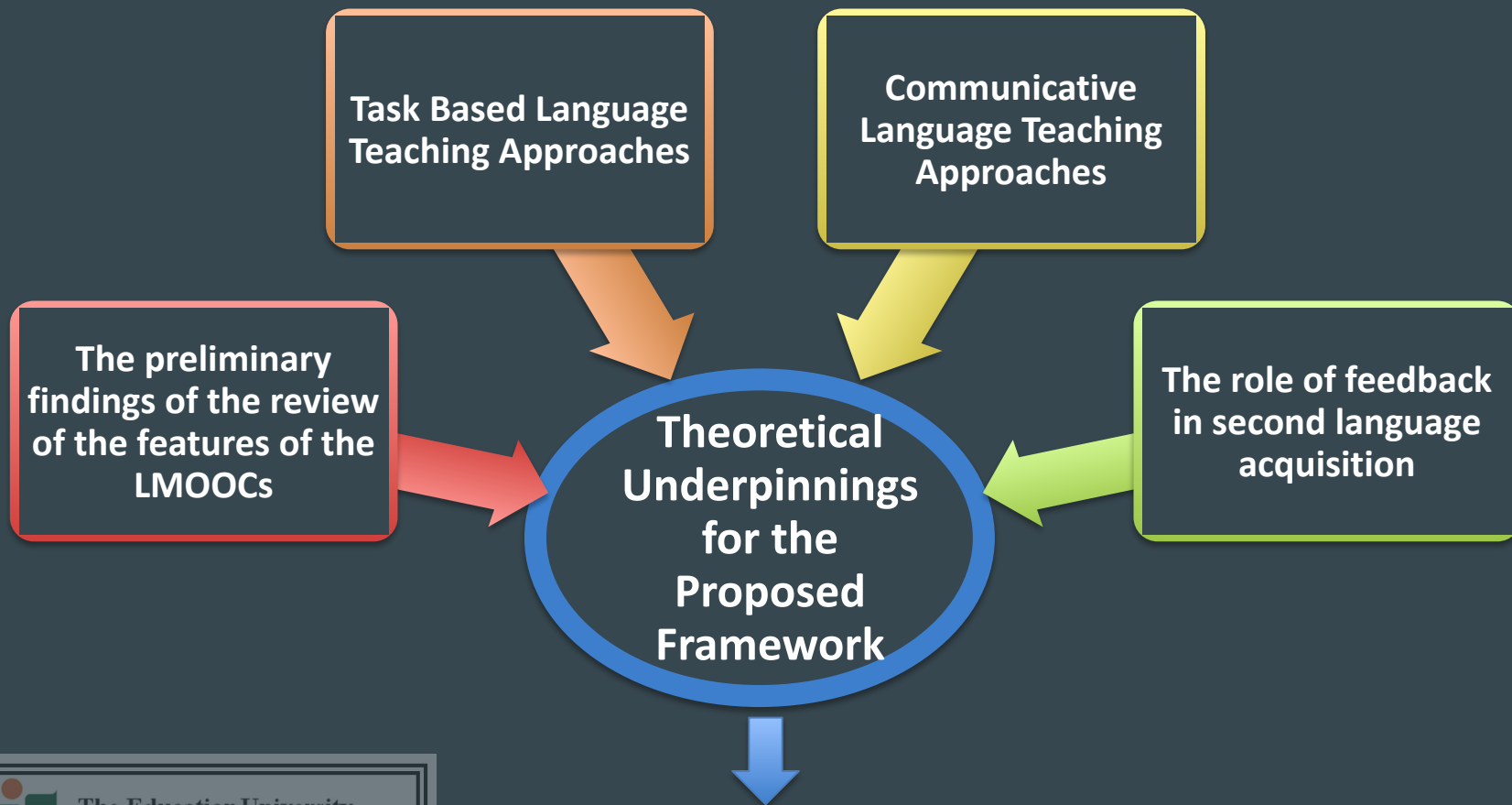
▸ Your Grade: Not Started

# 4. A Proposed Design Framework for LM00Cs



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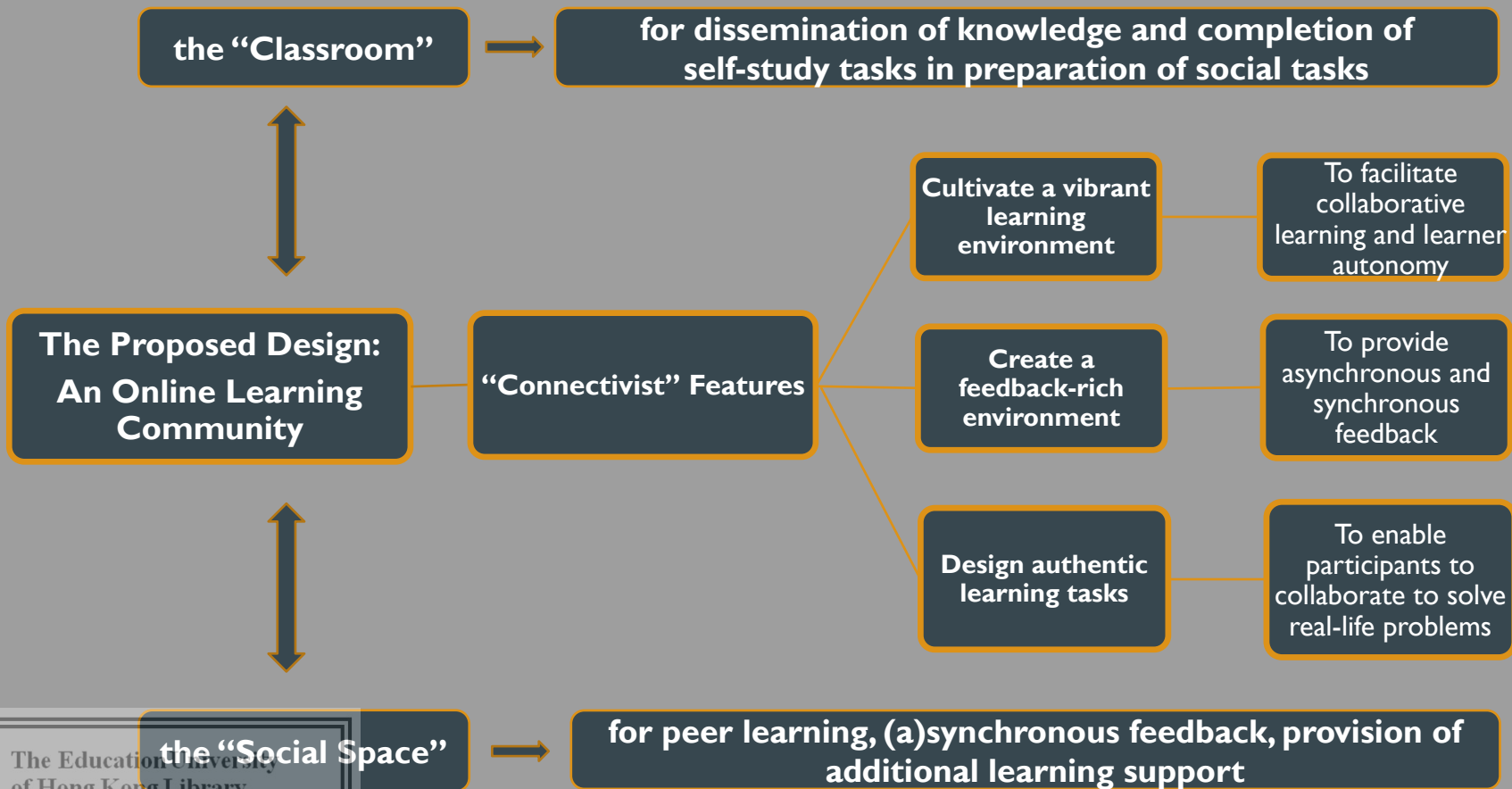


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**Meaning, Authenticity, Interaction, Collaboration, & Support**





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the “Classroom”: Edx

For global learners: pre-recorded videos, live Youtube sessions, quizzes, readings, peer-assessment, forum discussion, etc.

**Our LMOOC  
Design:  
IELTS  
Preparation  
&  
Intercultural  
Communication**

**Cultivate a vibrant learning  
environment**

- synchronous learning support, e.g. formal synchronous teaching sessions and advising/feedback sessions, live chats, file sharing for additional learning resources, etc.

**Create a feedback-rich  
environment**

- self-assessment and peer-assessment opportunities
- synchronous and asynchronous tutor feedback/discussion on exemplars

**Design authentic learning  
tasks**

- collaborative learning activities, e.g. mini project tasks
- forum discussion activities and quizzes



the “Social Space”:  
**Microsoft Teams**

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For EdUHK students: pre-recorded videos, Microsoft Teams synchronous and asynchronous discussion between instructors and students and students and students , readings, peer-assessment, etc.