

Annual Conference 2014: Scalable Learning in a Fast Changing Environment –
New Partnerships and Business Models

Partnerships and a business model for IOE's first MOOC 'ICT in Primary Education'

Diana Laurillard

The partnership: UOL Institute of Education and UNESCO Institute for IT in Education

<http://www.ioe.ac.uk/>

<http://iite.unesco.org/>

UNESCO IITE *Analytical Survey of ICT in Primary Education*

International team of 8 authors, from Canada, Chile, Hungary, Hong Kong, Russian Federation, Slovakia, UAE, UK

Volume 1: Exploring the origins, settings and initiatives, 2013

Desk-based research

Volume 2: Policy, Practices, and Recommendations, 2014

Survey, visits and interviews with 32 leading innovator schools in 19 countries

IOE-IITE partnership for a *MOOC on ICT in Primary Education* May-July 2014

6 weeks, 10 hours per week, Certificate of Attendance

May-July 2014: MOOC on ICT in Primary Education

An IOE – UNESCO IITE partnership

<https://www.coursera.org/course/ictinprimary>

The screenshot shows the Coursera course page for 'ICT in Primary Education: Transforming children's learning across the curriculum'. The page features the Coursera logo, navigation links for 'Courses', 'Specializations', 'Institutions', and 'About', and a user profile 'Diana Lauril...'. The course title is prominently displayed, along with logos for the University of London, IOE, and UNESCO IITE. A video player shows two children working with yellow and black striped blocks, with a 'Watch Intro Video' button overlaid. Below the video, there is a 'Why and how are teachers integrating ICT...' section. The 'About the Course' section describes the course's focus on ICT integration in primary education. The 'Sessions' section shows a dropdown menu for 'May 27th 2014' and a 'Join for Free' button. A red box highlights the text '>9000 teachers registered, 174 countries'.

Global Partners

Courses Specializations Institutions About | Diana Lauril...

Edit Course Description Edit Session Descriptions Edit Session Materials

UNIVERSITY OF LONDON IOE UNESCO IITE

ICT in Primary Education: Transforming children's learning across the curriculum

Why and how are teachers integrating ICT (Information and Communication Technology) into primary education? In this course we analyse examples from schools in different parts of the world, and bring professional teachers, headteachers and policymakers together to share their best ideas and inspiring stories. The materials in the course are based on studies carried out for the UNESCO Institute of IT in Education, Moscow.

About the Course

Teachers and policymakers working in all sectors of education now recognise the importance and value of technology for learning and teaching. The Institute of Education, University of London (IOE <http://www.ioe.ac.uk/>) and the UNESCO Institute for IT in Education (IITE <http://iite.unesco.org/>) are collaborating to run this professional development course for teachers, headteachers and policymakers working in the Primary Education sector.

Sessions

May 27th 2014

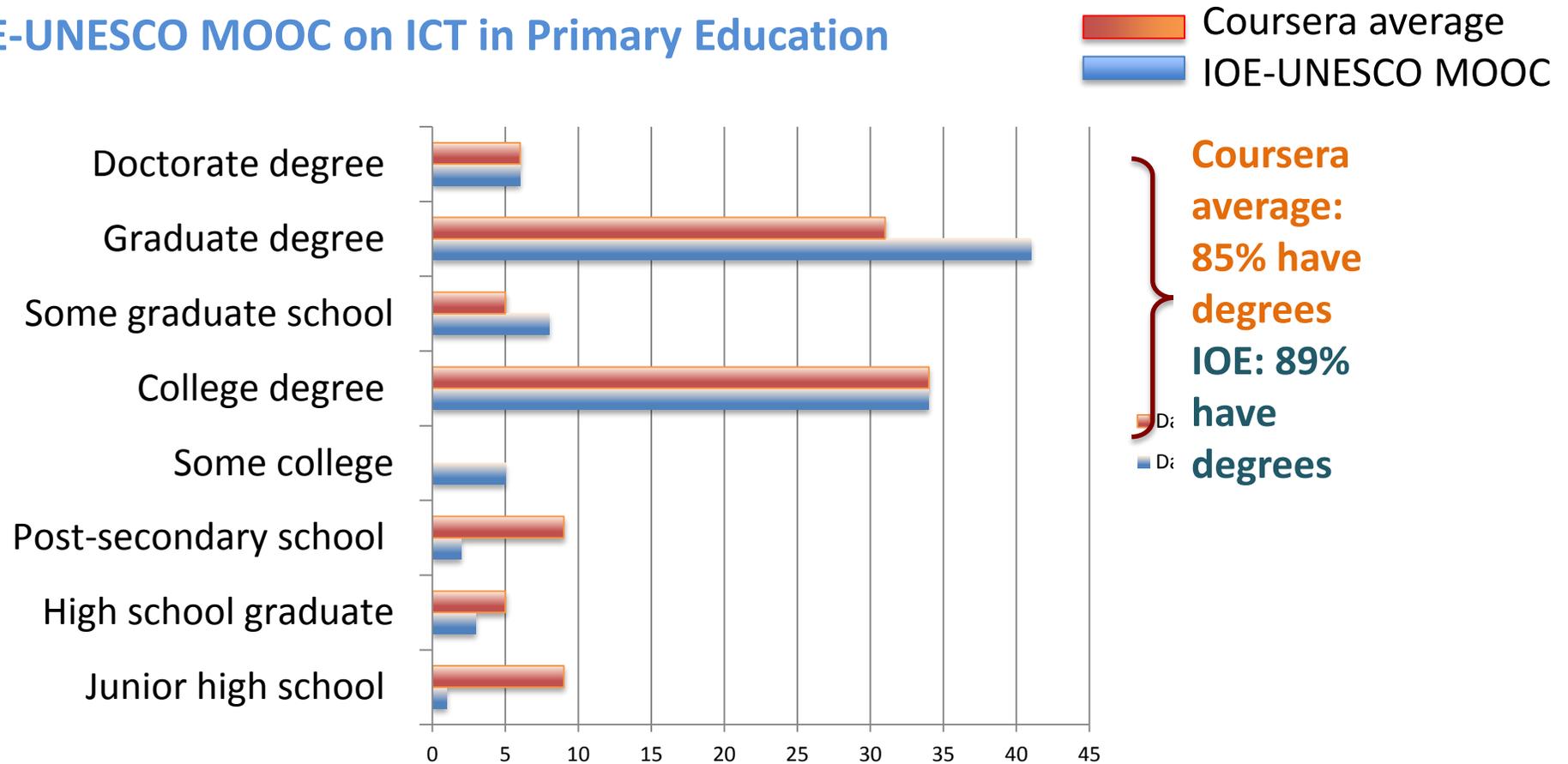
Join for Free

Course at a Glance

>9000 teachers registered, 174 countries

The MOOC as professional development

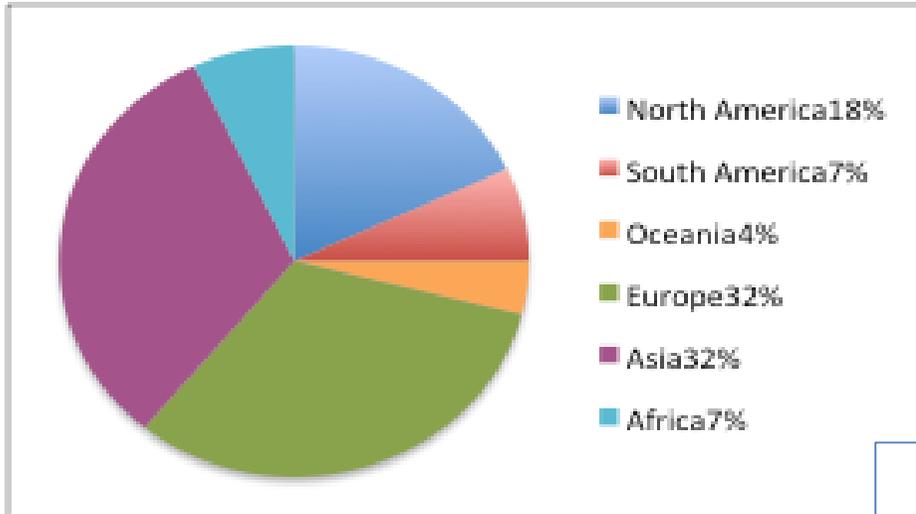
IOE-UNESCO MOOC on ICT in Primary Education



Enrolled participants

IOE CPD for teachers is a broader group

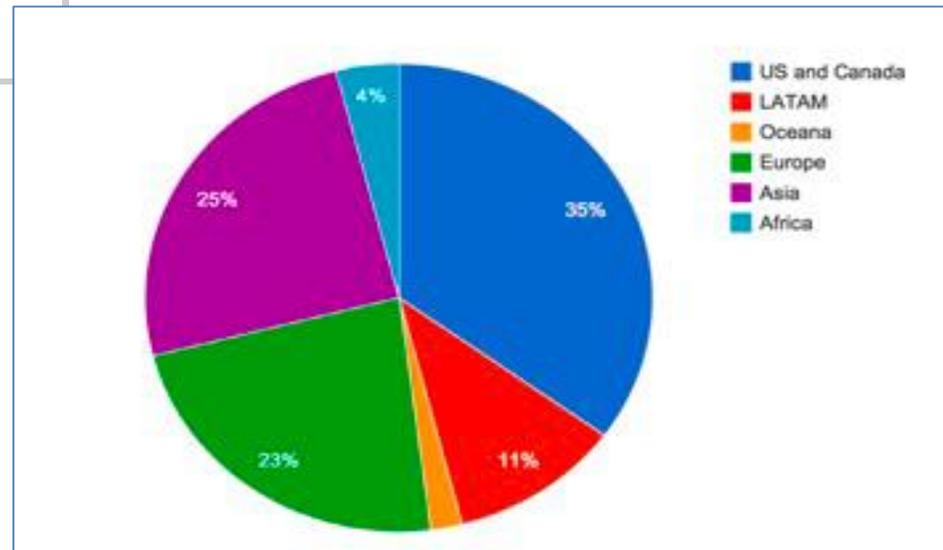
IOE-UNESCO MOOC



US = 18%

Africa = 7%

Coursera average MOOC



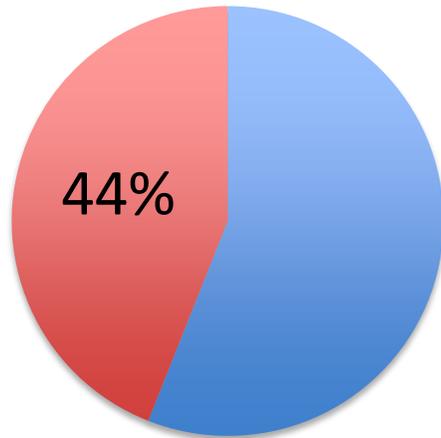
US = 35%

Africa = 4%

Higher proportion from emerging markets

IOE CPD MOOC

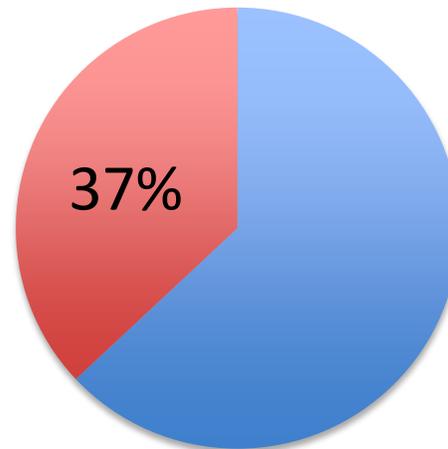
%



■ Non-emerging markets

■ Emerging markets

%



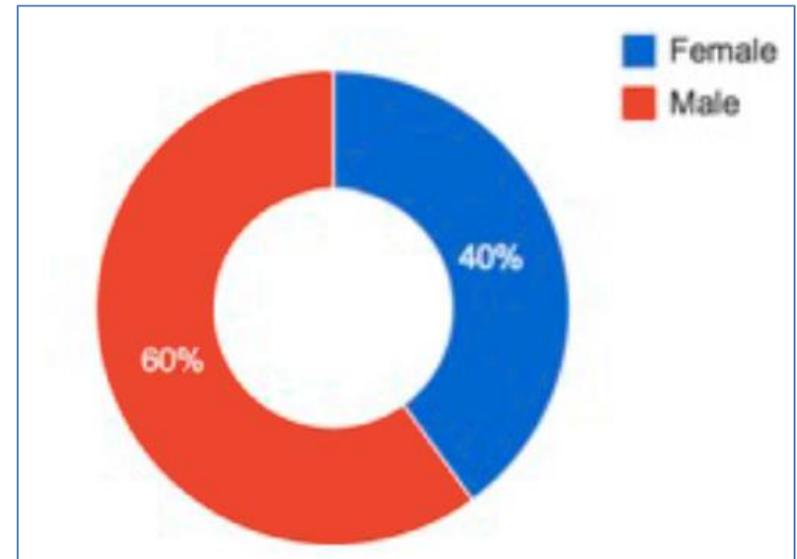
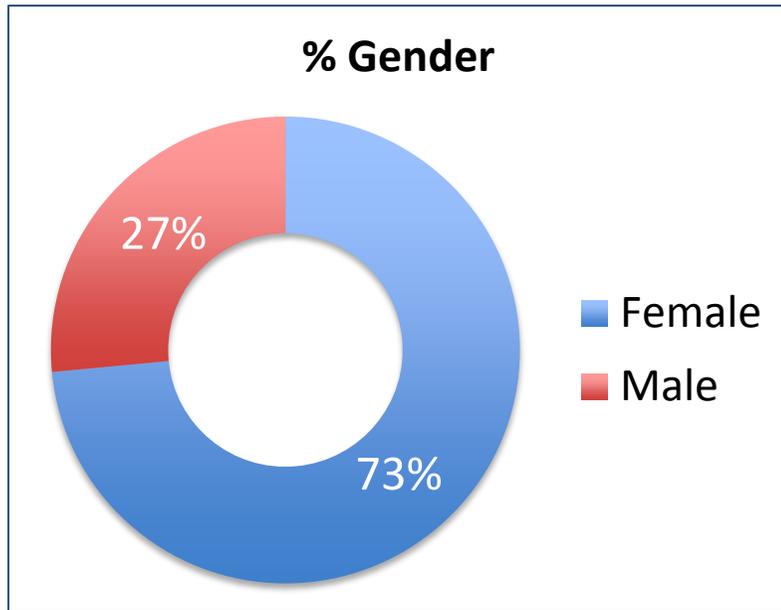
■ Non-emerging markets

■ Emerging markets

Coursera average MOOC

A different gender balance

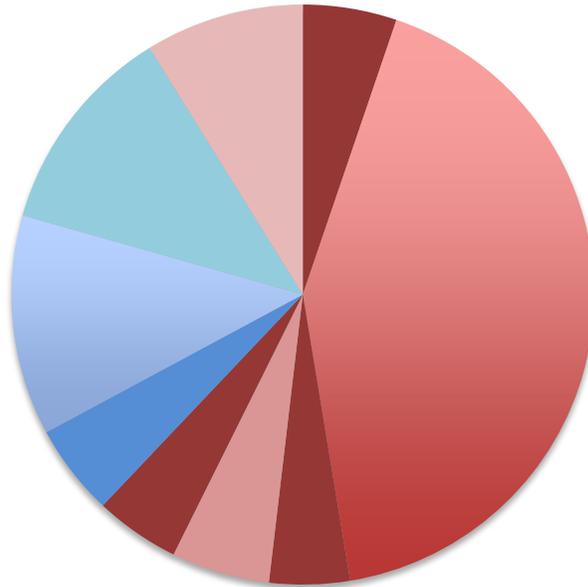
IOE CPD MOOC



Coursera average MOOC

Attracted the target audience

IOE CPD MOOC



- Education policy maker
- Class teacher in a primary school
- Head teacher in a primary school
- Educational manager in a primary school
- Teaching assistant in a primary school
- Further education teacher/lecturer
- Higher education teacher/lecturer
- Researcher
- Private tutor

Course design process

International team of 8 collaborators on study and books

Assigned each week to 1 or 2, with selected book sections

Week 1 set rough model

Team and small group Skype sessions + email

Designers worked on shared Googledoc following Week 1 model

Commenting on each others' designs, not editing

Critical friend from IOE PGCE tested and commented

LT specialist converted to Coursera platform

Designers continued to edit

Support from Coursera and UOL

Coursera/UOL QA process

Standard Coursera format: Collections of resources and forums

Announcements

Week 6 Problem Set Available

The Problem Set for Week 6 [Problem Set](#) is now available. The Problem Set will be open until **Monday, Feb 24th, 12:00pm EST (-5:00 GMT)**.

Don't forget to check your graded [Midterm Exam](#). Do NOT post answers from the Midterm exam in the forums. Please see the [Grading Policy](#) page for more information.

Mon 17 Feb 2014 9:00 AM PST

Week 6

This week we will continue to look at issues of population genetics with this week.

Midterm: Be sure to complete Part 1 and 2 of the Midterm exam before the **Monday, Feb 17, 2014 at 12:00pm, EST (-5:00 GMT)** deadline.

Problem Set: This week is the sixth graded problem set: Population Genetics Problem Set, Week 6. This assignment will **release on Monday, Feb 17, 2014 at 12:00pm EST (-5:00 GMT)** and should be completed at least once before the **Monday, Feb. 24, 2014 12:00pm EST (-5:00 GMT)** deadline. Please read the grading policy (if you haven't already done so) before completing the problem set, to better understand the requirements for the course.

There is also a set of practice problems available. The download links for the problems and their solutions is available to the right of lecture #7 in week 6. These problems are not graded nor are they required for understanding the assigned problem set. They are purely for the benefit of students that wish to have additional material to work through and check their understanding of the class topics.

Upcoming Quizzes

Population Genetics
Week 6
Mon 24 Feb 2014 9:00 AM PST

New Lectures

- Week 6 - 1 (S) Natural Selection Fundamentals (17:45)
- Week 6 - 2 (S) Types at Single Loci (22:24)
- Week 6 - 3 (S) Types Acting on Traits (10:37)
- Week 6 - 4 (S) Genetic Drift and Sampling Error (11:33)
- Week 6 - 5 (S) Sampling Error over Many Generations (14:04)
- Week 6 - 6 (S) Rate of Neutral Molecular Evolution (12:22)
- Week 6 - General Resources

Recent Discussions

- [Inbreeding - A personal note](#)
Last post by Anonymous (7 minutes ago)
- [Question over Underdominance](#)
Last post by OmarN. Jdja (7 minutes ago)

COURSE INFORMATION

- [Start Here!](#)

COURSE CONTENT

- [Announcements](#)
- [Lectures](#)
- [Problem Sets](#)
- [Exams](#)
- [Discussion Forums](#)

RESOURCES

- [Optional Supplementary Text Readings](#)
- [Genetics and Evolution App \(iOS\)](#)

COMMUNITY

- [Facebook Page](#)
- [Google+ Page](#)

Announcements describe the schedule of work

Resources and forums available

FutureLearn format: Sequencing the resources and activities for general interest studies

- 4.1 WELCOME VIDEO
- 4.2 SUMMARY OF LAST WEEK ARTICLE
-  Our survey
Examining our latest survey results
- 4.3 RESULTS OF WEEK THREE PARTICIPANTS' SURVEY ARTICLE
- 4.4 WEEK FOUR PARTICIPANTS' SURVEY ARTICLE
- 4.5 DISCUSSING OUR RESULTS VIDEO

Sequencing of resources and activities

Discussion is linked to a video

-  Scottish Public Opinion
Here we examine Scottish public opinion.
- 4.6 AILSA HENDERSON ON PUBLIC OPINION VIDEO

Curating and orchestrating the resources and activities for teacher professional development

COURSE

- Announcements
- Syllabus
- Assessment and Grading

WEEKLY STUDY GUIDES

- 1: The 21st Century Primary School
- 2: How does ICT make a difference?
- 3: Pedagogical changes achievable through ICT
- 4: Technology opportunities
- 5: Inspiring examples and implementation concerns
- 6: Making ICT work (from 29th June)

RESOURCES

- Video Lectures
- Discussion Forums
- Quizzes

4.1 Orientation to the week

4.2 Choosing the technology

Activity 4.2.1 (Core) - What do other schools do?

Schools may have different criteria and preferences when choosing new technology to be integrated into their teaching and learning activities.

Watch the [audio-slide presentation](#) that introduces several issues reported by schools in this context.



ICT in Primary Education
week 4: Technology opportunities
Choosing technology

Many factors should be respected

- expectations at the school level
- experience and potential of the school
- teaching and learning goals
- safety standards, ergonomics issues, appropriateness...

Note: The presentation will open in a new browser window, make sure you come back to this page after you watch it.

Activity 4.2.2 (Core) - Choosing appropriate technology 🕒 60 mins

In the introductory presentation to Section 4.2 we mentioned the concept of the **developmental appropriateness** of an ICT tool. Here we look further at the set of criteria for considering whether a tool (software or hardware) is developmentally appropriate or not. These criteria come from the Early Childhood Education context, and are published in the UNESCO book 'Recognizing the potential of ICT in early childhood education' (UNESCO IITE 2010). However, we believe that they are also relevant for primary education.

Download the [UNESCO book 'Recognizing the potential of ICT in early childhood education'](#).



Study guide sequences and orchestrates work with resources and tools linked to forums

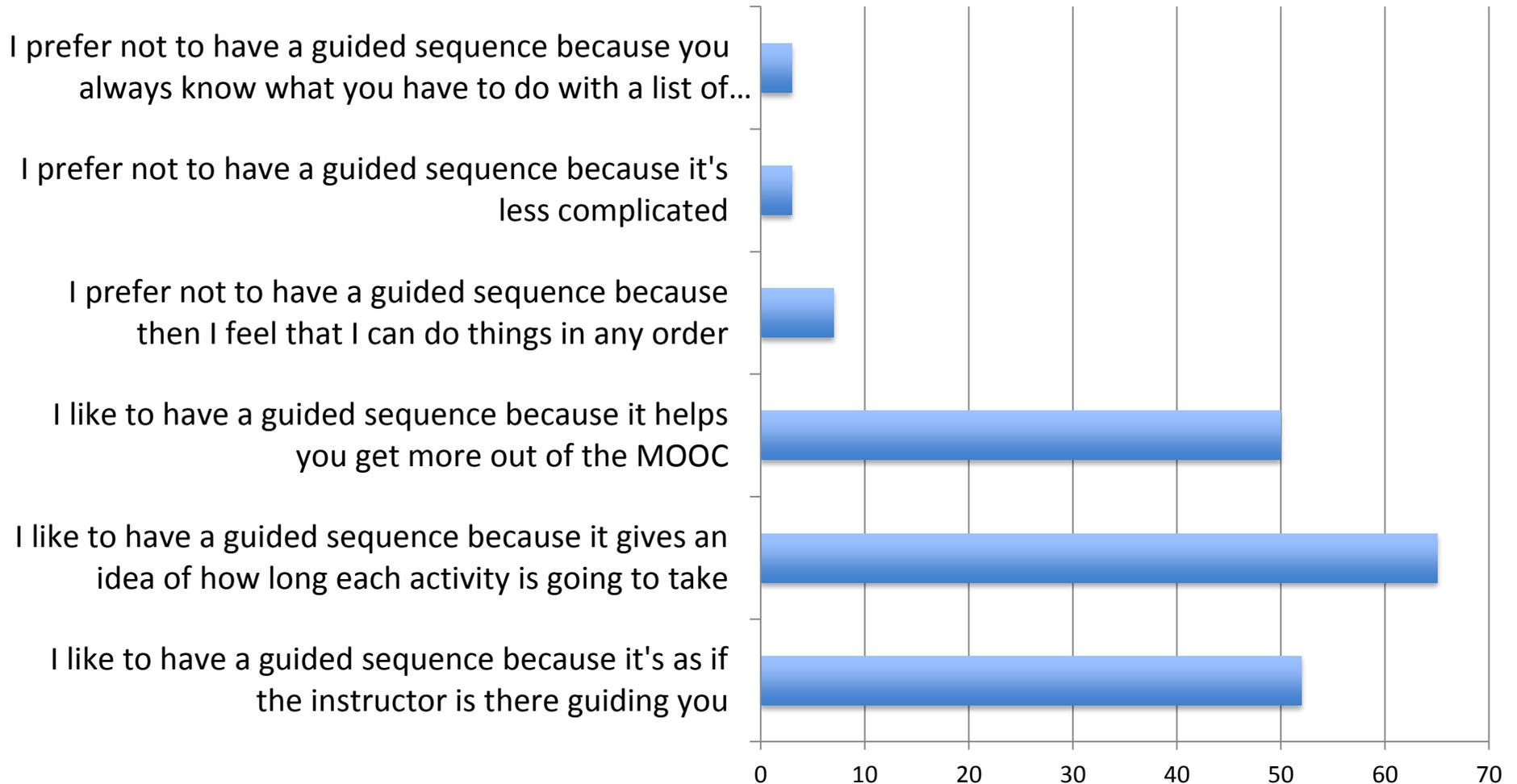
Study guide defines activities as Core or Optional and duration

Building a personal portfolio in their Course Journal

[Admin Help](#)

On this MOOC, each week had a sequence of timed activities to guide you through the work.

Please indicate which statements you agree with below:



Diigo: >300 shared resources and tools

<https://groups.diigo.com/group/ict-in-primary-education>

The screenshot shows the Diigo group page for "ICT in Primary Education". At the top, there is a navigation bar with the Diigo logo, "What's New", "Go Premium", and a user profile for "Diana Laurillard" with a dropdown menu containing options like "Message", "Friends", "Settings", "Tools", "Help", "Feedback", and "Sign Out". Below the navigation bar, the group name "ICT in Primary Education" is displayed with a small image of two children. A detailed description follows, explaining the group's purpose as part of a MOOC and providing instructions on how to share resources. The main content area shows a post titled "Educational Technology Is Making Achievement Gaps Even Bigger" with a link to a Slate article. The post includes tags for "ICT", "Education", "learning", and "gap", and a comment from Marta Turcsanyi-Szabo. Below this, another post titled "Inspiring computing booklets | Teaching London Computing" is visible, with tags for "teaching", "ICT", "technology", "Education", "learning", and "teacher", and a comment from Sheona Smith. On the right side, there are sections for "Most Active Members" (a grid of 16 placeholder icons) and "Top 10 Tags" (a list of tags with their respective counts).

ICT in Primary Education

This is a diigo group created as part of the MOOC "ICT in Primary Education: Transforming children's learning across the curriculum" (<https://www.coursera.org/course/ictinprimary>). You are encouraged to contribute, sharing additional resources (web pages, links to publications, ...). You need to (i) Join Diigo and (ii) Add new bookmarks clicking on "Bookmark", adding a url, then click "Next" (and fill in the details for Title, Comment, Tags) and finally click "Post".

Post: [Bookmark](#) [Topic](#) [RSS](#) [Group Settings](#) [Invite people](#)

Sort By: **Most Recent** | Popular Filter: **All** | [Bookmarks](#) | [Topics](#) | [Images](#)

Educational Technology Is Making Achievement Gaps Even Bigger - 0 views
www.slate.com/..._worsens_achievement_gaps.html
ICT Education learning gap
shared by [Marta Turcsanyi-Szabo](#) about 8 hours ago - Comment - Like - No Cached - More ▾

[Marta Turcsanyi-Szabo](#) about 8 hours ago
"The very tool designed to level the playing field is, in fact, un-leveling it," they wrote in a 2012 book based on their Philadelphia library study. With the spread of educational technology, they predicted, "the not-so-small disparities in skills for children of affluence and children of poverty are about to get even larger."

Inspiring computing booklets | Teaching London Computing - 0 views
teachinglondoncomputing.org/...inspiring-computing-stories
teaching ICT technology Education learning teacher
shared by [Sheona Smith](#) about 9 hours ago - Comment - Like - No Cached - More ▾

[Sheona Smith](#) about 9 hours ago
This looks like it could be interesting for Unit 5 of the ICT in Primary Education course, if you have the time!

Most Active Members [View All](#)

Top 10 Tags [View All](#)

ICT	182
Education	163
Primary	104

Teachers sharing ideas to build their own plans

COURSE

[Announcements](#)

[Syllabus](#)

[Assessment and Grading](#)

WEEKLY STUDY GUIDES

[1: The 21st Century Primary School](#)

[2: How does ICT make a difference?](#)

[3: Pedagogical changes achievable through ICT](#)

[4: Technology opportunities](#)

[5: Inspiring examples and implementation concerns](#)

[6: Making ICT work \(from 29th June\)](#)

RESOURCES

[Video Lectures](#)

[Discussion Forums](#)



Vanessa Ribeiro Signature Track · 22 days ago



As we have been encouraged to create a blog in this course so we could keep track about all the information and activities we are obtaining from this course. We could ale us it with the kids, ask them to create a blog to register their unit of study, it is a very good choice that allow them to practice what they learned, and also develop their writing skills.

0 · flag



Maria Fournier Signature Track · 22 days ago



A class blog is also a wonderful ongoing project. Students can work through the editing process and styles of writing before posting. And, if interested in creating a class blog which would also serve as keeping in touch with parents there are a number that are password protected.

0 · flag

[+ Comment](#)



Jacqueline Samuels Signature Track · 22 days ago



I totally agree that teachers should be encouraged to create blogs as a means of allowing students to express themselves freely. The teacher can also use blogs to keep parents up to date on what happens in the classroom so they can see the progress of their child/children.

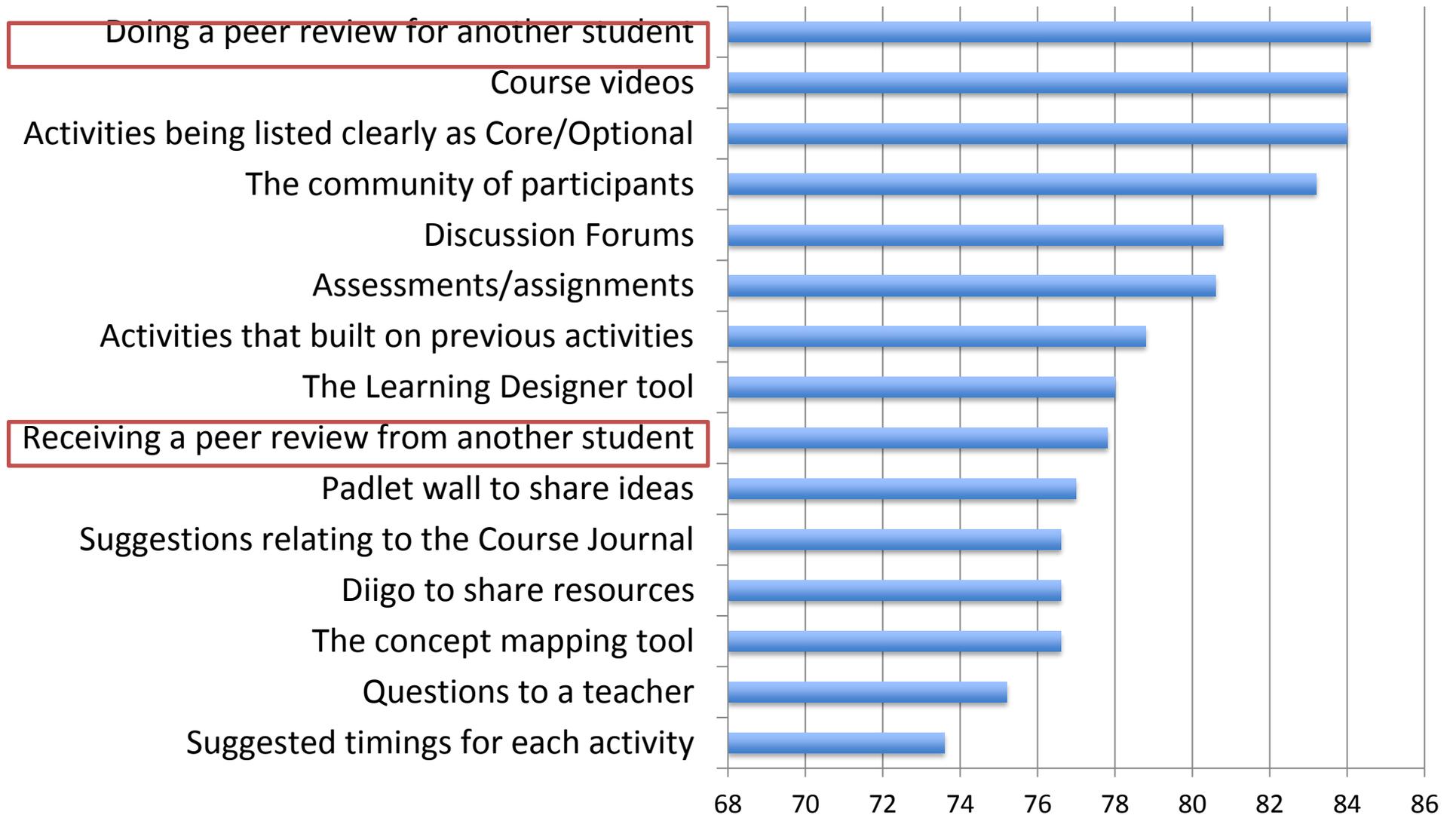
1 · flag

Anonymous · 5 days ago

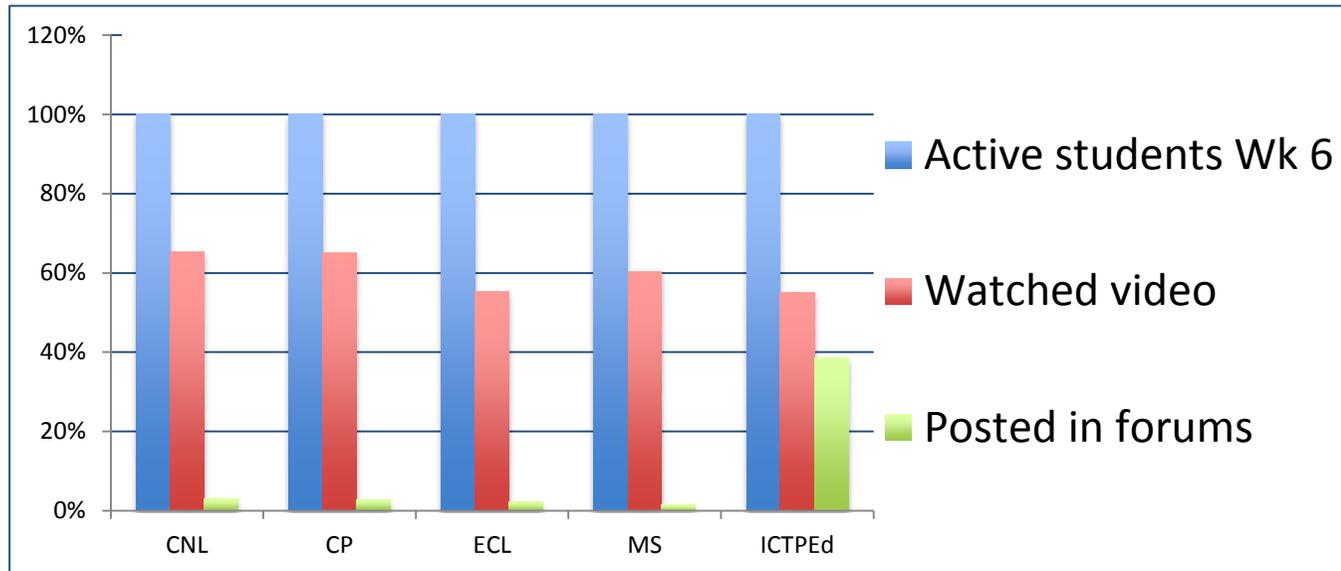


I feel creating a personal blog is very helpful to share your work and ideas among people in the teaching profession.A class blog keeps parents updated and students are delighted to see their work up there. A gives you an opportunity to reflect and see whats worked and what could be better.

How useful were the following elements of the course material?



Comparison with ULIA MOOCs



Broke the mould for level of engagement in forums, due to nature of

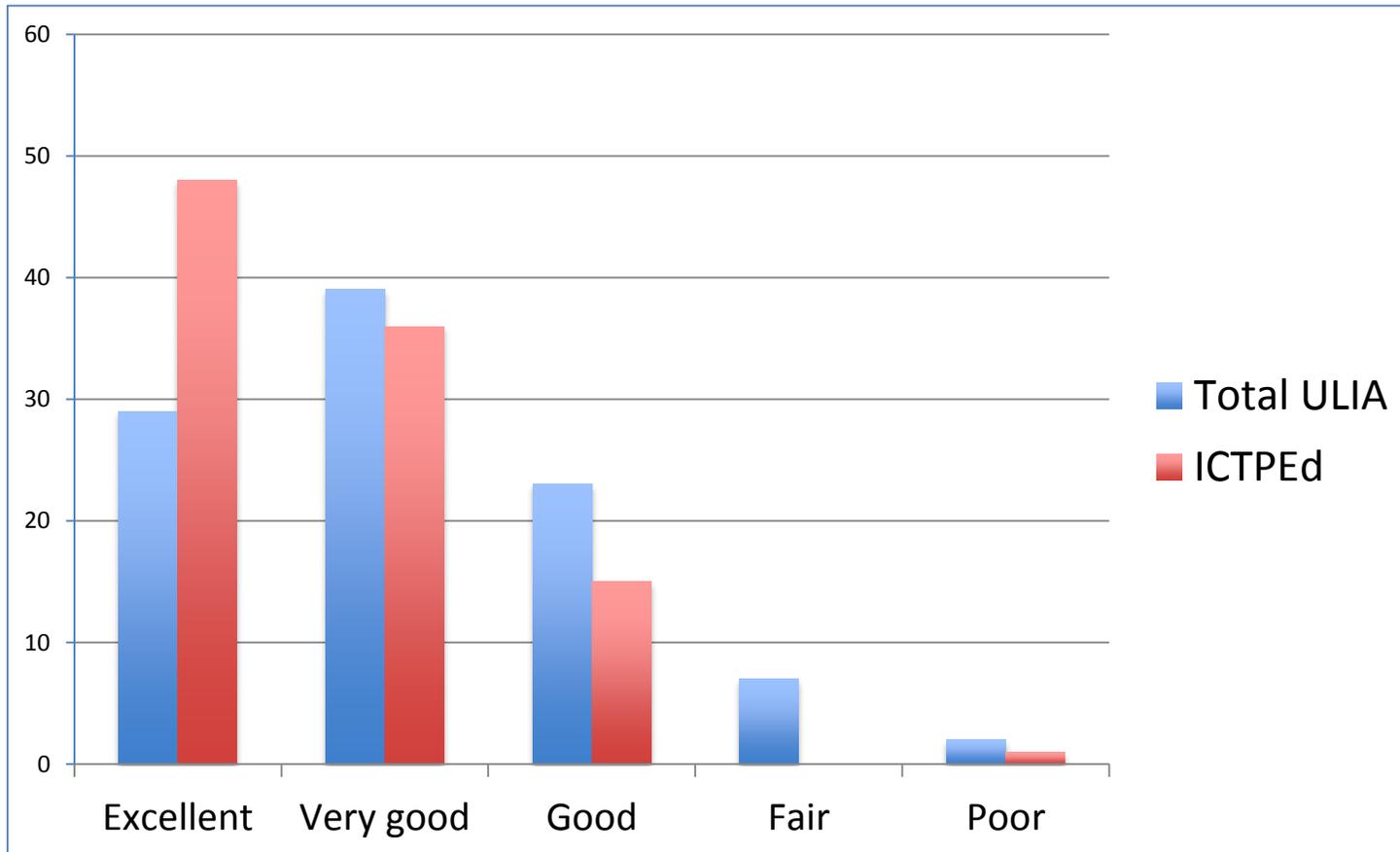
- cohort?
- study guide?

	History	Cr Prog	C Law	Mal S-w	ICTPEd
Registrations	48648	80127	41715	41620	5891
Active Week 1	23051	36268	14207	20966	3321
Conversion rate	47%	45%	34%	50%	56%
Active % Wk6 of Wk1	22%	25%	45%	31%	31%

ULIA courses

History
Creative programming
Common Law
Malicious software

How good was it?



So did not suffer from low production values

What business model does this represent?

Low fixed costs:

- Used existing books as reading resources
- Used audio over ppt for videos
- Used Team's own videos of classrooms and students
- One professional video (5 mins) for PR
- Designers paid @£350 per day for total 30 hours
- Support staff paid @£150 per day for total 24 hours

Low support costs:

- Allowed 6 hrs per week each for TA + Designer in Forums
- Used peer evaluation of assignments (30% total score)
- Ass't based also on number of contributions, peer reviews and forum posts
- High levels of peer engagement

Course Resource Appraisal Model for CPD MOOC

<http://web.lkldev.ioe.ac.uk/cram/index.html>

Module Data

Module Name:

Details

Tutor Group Size:

Credit Hours:

Number of Weeks:

Runs

	Run 1	Run 2	Run 3
Number of Home Students	<input type="text" value="200"/>	<input type="text" value="400"/>	<input type="text" value="800"/>
Home Income for Teaching (per Student)*	<input type="text" value="16"/>	<input type="text" value="16"/>	<input type="text" value="16"/>
Number of Overseas Students	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Overseas Income for Teaching (per Student)*	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="20"/>
	<input type="text" value="150"/>	<input type="text" value="150"/>	<input type="text" value="150"/>
	<input type="text" value="350"/>	<input type="text" value="350"/>	<input type="text" value="350"/>

	Weekly Learner Hours	Non-Weekly Learner Hours	Total Learner Hours
	6	1	6.25
	6	2	12.0
	6	1	6.0
	4	3	12.0
	4	1	4.0
	6	2	12.0
	0	0	7.75
			7.8

200 signed up for Signature Track

Assume fee = £16

Define learner time and teacher time needed for each type of activity:

- Video lecture
- Peer discussion
- Exploring and exchanging resources
- Assignments
- Peer reviews
- Tutor-supported forums

Steps

1. Create Teaching & Learning Activity
2. **Select Existing Activity**
3. Activity Details

Select Existing Activity (2 of 3)

Browse Existing Teaching & Learning Activities

Student Interaction

- Tutor Present
- Online
- Location-Specific
- Time-Specific

Student Feedback

- Tutor
- Peer
- Computer-based
- None

Pre-defined Activities

- Digital simulation**
- Exploring interactive resource
- Game
- Quiz

Your Activities

Pie chart shows proportion of learning types in the selected activity



- Acquisition
- Collaboration
- Discussion
- Inquiry
- Practice
- Production

Social (size: 10), Online, Computer-based feedback

< Back

Next >

Finish

Cancel

Estimate hours of preparation and teaching for 1st, 2nd, 3rd runs

1. Create Teaching & Learning Activity
2. Select Existing Activity
3. Activity Details

Teaching & Learning Activity Name

Learner' Total Hours
 No. of Weeks: of hours Non-weekly:

Teaching Preparation Hours

	Hours per Week	Non-Weekly Hours	Higher Cost Staff	Lower Cost Staff
Run 1:	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0%"/>	<input type="text" value="100%"/>
Run 2:	<input type="text" value="0"/>	<input type="text" value="3"/>	<input type="text" value="0%"/>	<input type="text" value="100%"/>
Run 3:	<input type="text" value="0"/>	<input type="text" value="1"/>	<input type="text" value="0%"/>	<input type="text" value="100%"/>

Teacher support hours per group/student

	Hours per Week	Non-Weekly Hours	Higher Cost Staff	Lower Cost Staff
Run 1:	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0%"/>	<input type="text" value="100%"/>
Run 2:	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0%"/>	<input type="text" value="100%"/>
Run 3:	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0%"/>	<input type="text" value="100%"/>

Social (size: 10). Online. Computer-based feedback

How many hours per week?

How long to prepare?

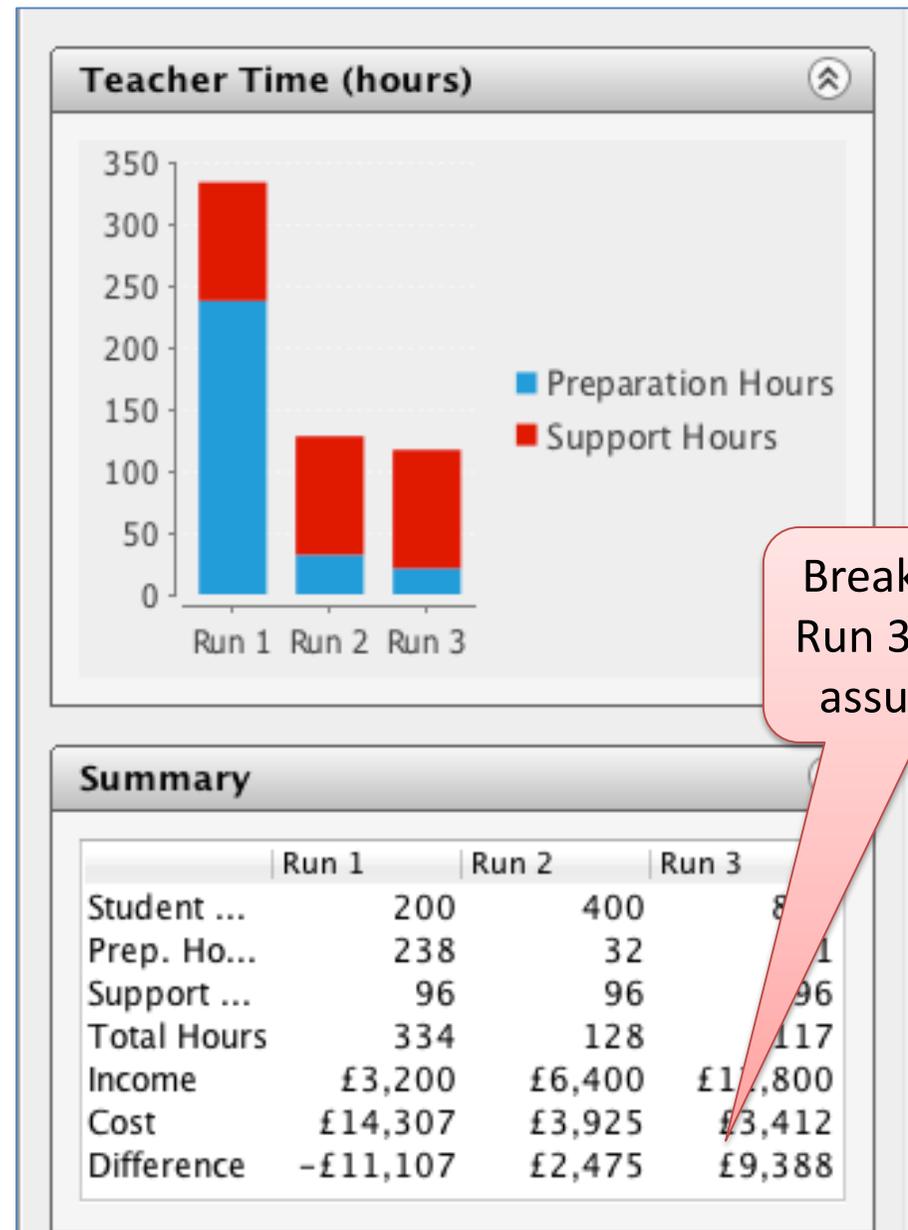
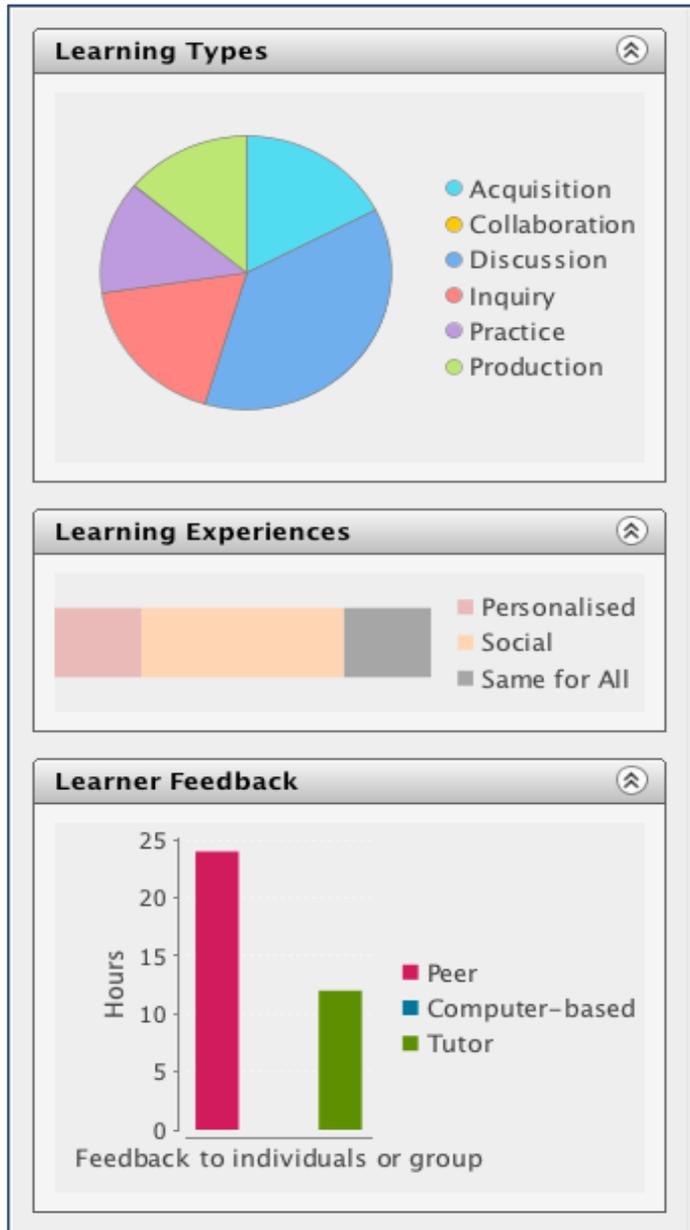
Does it all have to be done by the higher cost staff?

How long to teach?



- Acquisition
- Collaboration
- Discussion
- Inquiry
- Practice
- Production

Learning experience and... Teaching costs for the ICT in PEd MOOC



Break-even by Run 3 on these assumptions

Course Resource Appraisal Model for CPD MOOC

<http://web.lkldev.ioe.ac.uk/cram/index.html>

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Overseas Income for Teaching (per Student)*	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="20"/>
Day rate for lower cost staff*	<input type="text" value="150"/>	<input type="text" value="150"/>	<input type="text" value="150"/>
Day rate for higher cost staff*	<input type="text" value="350"/>	<input type="text" value="350"/>	<input type="text" value="350"/>

200 signed up for Signature Track

Break-even price, over 3 runs = £16

Actual per-student income from ULIA = **£2.25**

Student Hours

Activity	Number of Weeks	Weekly Learner Hours	Non-Weekly Learner Hours	Total Learner Hours
Video lecture	6	1	0.25	6.2
Peer discussion	6	2	0	12.0
Exploring and exchanging re...	6	1	0	6.0
Assignments	4	3	0	12.0
Peer reviews	4	1	0	4.0
Tutor-supported forums	6	2	0	12.0
Self-regulated Learning	0	0	7.75	7.8

Analysis of a CPD MOOC

Positive

Coursera platform:

- **Reach** to emerging economies
- **Robust** for large-scale

CPD model of **collaborative learning works well**

Fixed costs can be low through:

- Video shot in the wild
- Audio over ppt with good material for lectures

Variable cost can be low through:

- Low cost support staff
- Focused forums with expert support
- Peer evaluation for some assessment

Professionals accept peer assessment

Negative

Coursera platform:

- Required too much study time
- Academics cannot design on platform
- No student grouping
- Student collaboration and sharing must be external to platform
- Automated assessment is trivial

Number taking Signature Track low:

- Poor technology support
- Decision to sign up is at start

Per-student income to institution too low

Quality of assessment is not good enough for academic certification

The MOOC business model conundrum

Why do universities invest so much in free courses for highly qualified professionals, when undergraduates are paying such high fees?

A proposal

Use MOOC-style courses for

high quality online CPD

for fee-paying teaching professionals

using collaborative learning, user-created content, peer evaluation

with minimal accreditation

Use the income, resources and experience to

invest in online teaching and assessment innovation

for higher quality and lower cost undergraduate courses, and

for open, free courses for schools and the wider public