What are the expectations of disabled learners when participating in MOOCs

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The Open University

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United States Reaches Settlement with Provider of Massive Open Online Courses to Make its Content Accessible to the Disabled

Berkeley Will Delete Online Content

Starting March 15, the university will begin removing more than 20,000 video and audio lectures from public view as a result of a Justice Department accessibility order.

INTRODUCTION AND RELATED WORK

- **MOOC Learning, benefits such as:**
  - Openness
  - Low cost
  - Ubiquity (Time, place and pace)
  - Acquiring knowledge
  - Social learning: Connectivism
  - Achieving new competences
  - Develop professionally
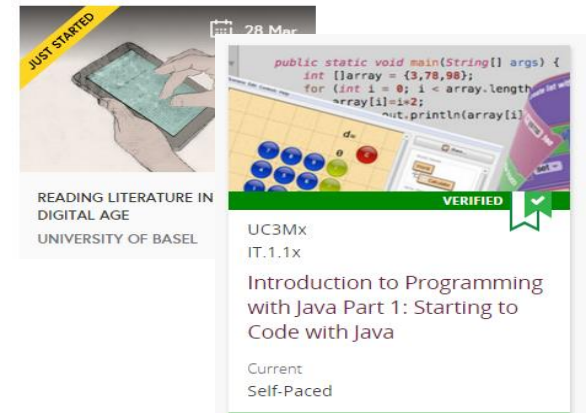
RESEARCH QUESTIONS AND METHODOLOGY
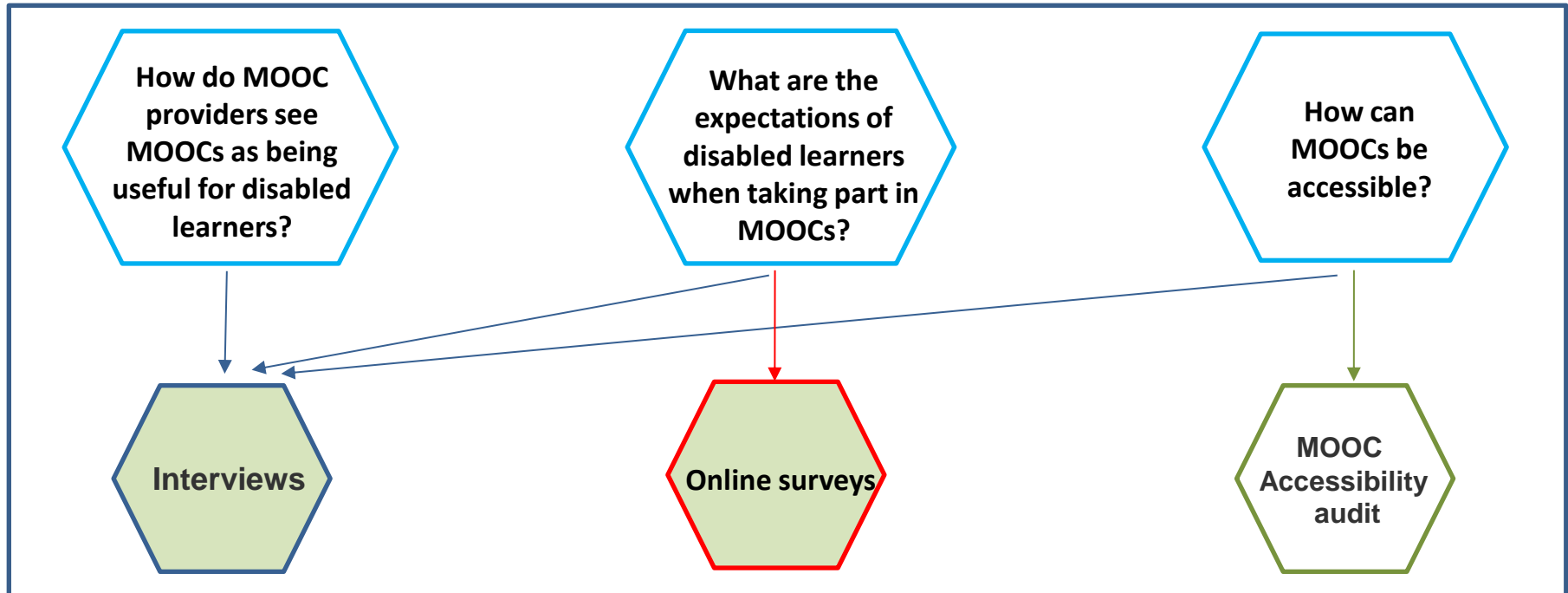
ONLINE SURVEYS AND INTERVIEWS

- Analyse pre and post course survey data from 14 Open University MOOCs at FutureLearn (2013-2015)

|	Profile
Pre-Course survey	· Areas of interest and expectations (interest in the course, subject areas interested in online courses and MOOC platforms) · Demographic information (gender, age, mother tongue, employment status, disabilities)
Post Course survey	· Learning outcomes (previous knowledge and knowledge acquired) · Completion · Devices used and location · MOOC structure and interactivity (clarity and activities) · Learning experience · Educators (feedback and support) · Evaluation (rating the experience)

ONLINE SURVEYS (1)

OU MOOCs in FutureLearn	Pre-Course Survey		Post-Course Survey	
Subject	Total	%DL*	Total	% DL
Medicine & dentistry	2812	10.5%	702	11.9%
Physical sciences	655	12.7%	175	10.5%
Computer sciences	3454	8.8%	158	7.6%
Architecture, building & planning	1020	5.0%	137	2.9%
Business & administrative studies	977	8.3%	240	9.6%
Historical & philosophical studies	1427	13.5%	116	7.3%
Creative arts & design	1631	12.8%	435	14.0
Education	1668	15.2%	280	15.7%
Total	13644	10.75%	2259	11.28%

Iniesto, F., McAndrew P., Minocha S. & Coughlan T. (2017). *What are the expectations of disabled learners when participating in a MOOC? L @S 2017: Fourth (2017) ACM Conference on Learning* http://oro.open.ac.uk/48666/
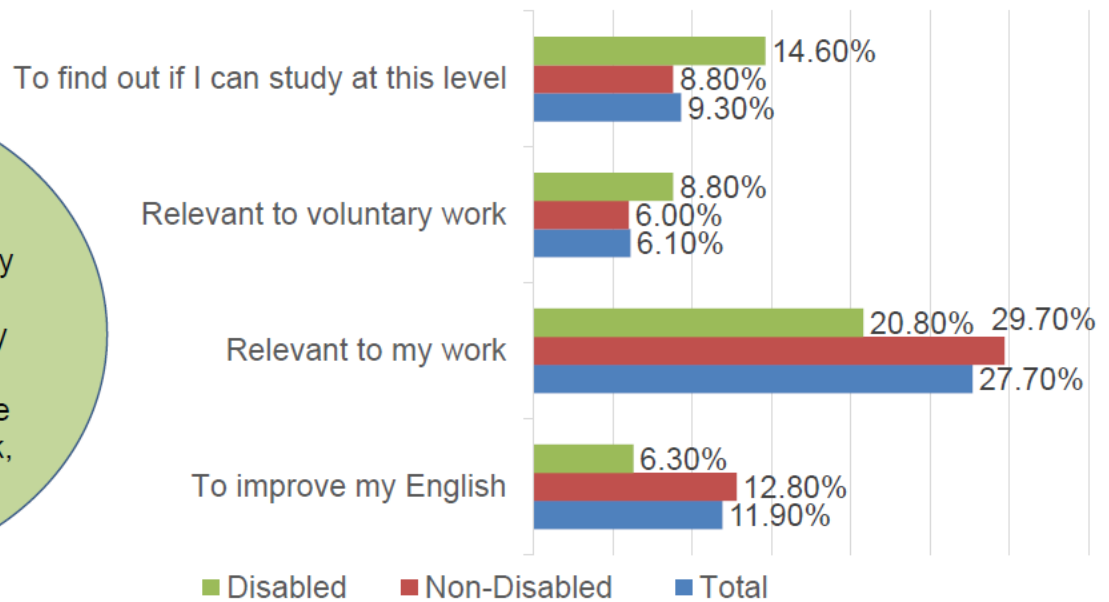
ONLINE SURVEYS (2)

1

The proportions of disabled learners taking up MOOCs and responding to these surveys are lower than the disabled population in general, and also below current proportions found in OU registered students and in the OER repository OpenLearn

MOOCs
10.80%
89.20%

Open University
16.40%
83.60%

Open Learn
19%
81%

World
15%
85%
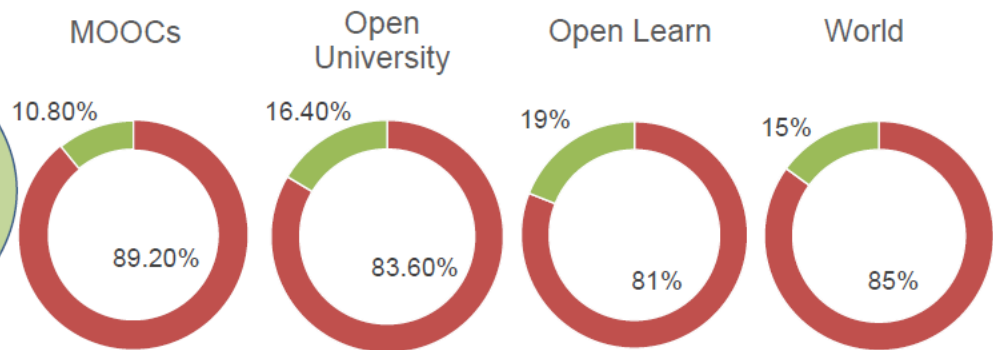
2

Disabled learners are particularly interested in taking up MOOCs to determine if they can study at a higher educational level or to link to voluntary work. They are less interested in the relevance of the MOOC to their work, or in using MOOCs to improve their English

To find out if I can study at this level
- 14.60%
- 8.80%
- 9.30%

Relevant to voluntary work
- 8.80%
- 6.00%
- 6.10%

Relevant to my work
- 20.80% 29.70%
- 27.70%

To improve my English
- 6.30%
- 12.80%
- 11.90%

■ Disabled ■ Non-Disabled ■ Total

ONLINE SURVEYS (3)

3

Disabled learners appear to be more interested in these subject areas: Society, History, Arts, Nature and Environment. Languages seem to be of least interest
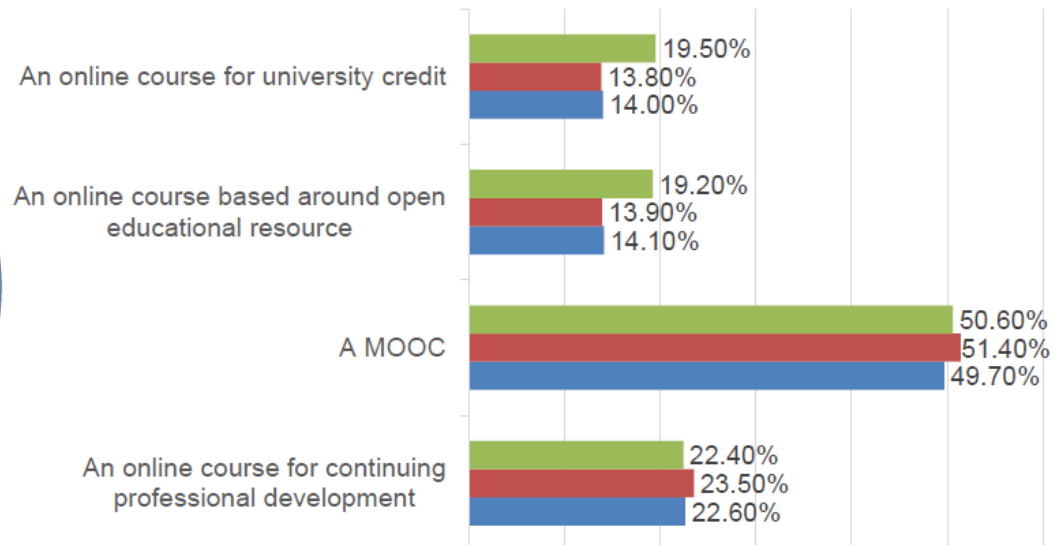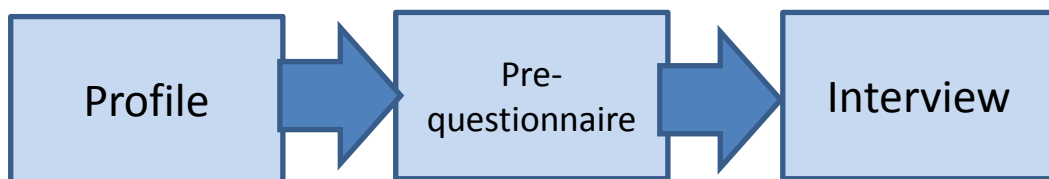
	Society	History and the Arts	Nature and Environment	Languages
Blue	31.10%	40.60%	40.70%	33.70%
Red	31.10%	40.60%	41.30%	35.30%
Green	39.40%	51.20%	48.50%	29.60%
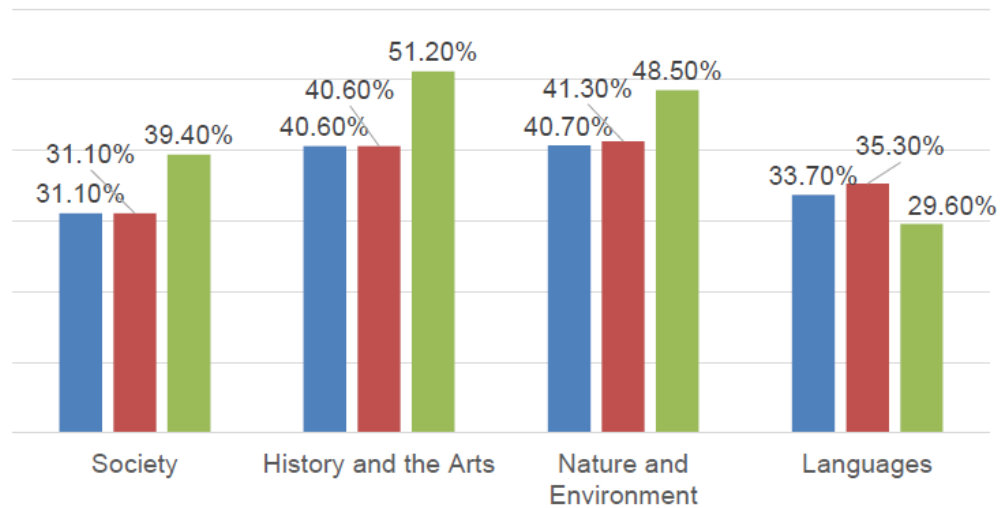
4

Disabled learners have previous experience in online courses that allows them to get university credit. They have less experience of participating in online courses for continuing professional development. They have more previous experience using OERs than MOOCs

	Blue	Red	Green
An online course for university credit	14.00%	13.80%	19.50%
An online course based around open educational resource	14.10%	13.90%	19.20%
A MOOC	49.70%	51.40%	50.60%
An online course for continuing professional development	22.60%	23.50%	22.40%

INTERVIEWS

ID	Disabilities	MOOC	Contacted	Remind	Agreed	Declined	Date of the pre-questionnaire	Date of the interview	Taken by
	BPS, LD, MHD, UD	The Science of Nutrition	Yes	No	Detected as SPAM				
FL5	BPS, RM, RMS, FP, UD	Elements of Renewable Energy	Yes	Yes	Yes		25/05/2017		skype
FL1	DHH	Get Started with online learning	Yes	No	Yes		14/05/2017	05/05/2017	survey
FL3	RM	The Science of Nutrition	Yes	Yes	Yes				
	RM, FP	Smart Cities	Yes	Yes					
FL4	MHD	Get Started with online learning	Yes	No	Yes		14/05/2017	18/05/2017	skype
	RM, LD, FP	The Business of Film	Yes	Yes					
FL2	RM, RMH, FP, UD	Get Started with online learning	Yes	No	Yes	Yes			
	RM, RMS, MHD , PCS, FP	Understanding Musical Scores	Yes	Yes					
	LD, UD	The Science of Nutrition	Yes	Yes					
FL10	RM, RMS, UD	Understanding Musical Scores	Yes	Yes					
	RM, RMS, FP	Understanding Musical Scores	Yes	Yes					
	RM, UD	The Science of Nutrition	Yes	Yes					
FL6	DHH	Get Started with online learning	Yes		Yes		02/06/2017	05/05/2017	survey
	RMS, MH, FP, UD	Get Started with online learning	Yes	Yes					
FL7	BPS, DHH,	The Science of Nutrition	Yes	Yes	Yes		02/06/2017		skype
	DHH	The Science of Nutrition	Yes	Yes					
FL9	MH, FP	The Science of Nutrition	Yes	Yes	Yes				skype
	FP	Get Started with online learning	Yes	Yes					
	MH	Understanding Musical Scores	Yes	Yes					
FL8	RMS, LD, FP, UD	Learn to code for data analysis	Yes		Yes		02/06/2017		written chat
	MH	Elements of Renewable Energy	Yes	No	Email not in use				
	RM, RMS, MH, FP, UD	The Science of Nutrition	Yes	Yes					
	FP, UD	Elements of Renewable Energy	Yes	Yes					
	RM, FP	Understanding Musical Scores	Yes	Yes					
	MH	Learn to code for data analysis	Yes						
	MH, FP, UD	Get Started with online learning	Yes						
	RM, FP	Get Started with online learning	Yes						
	Chronic Back Pain	Get Started with online learning	Yes						
	RM, MH, FP	Elements of Renewable Energy	Yes						

Blind or partially sighted	BPS
Deaf or hard of hearing	DHH
Restricted mobility	RM
Restricted manual skills	RMS
Dyslexia or other specific learning difficulties	LD
Personal Care Support	PCS
Mental health difficulties	MHD
Fatigue or pain	FP
Unseen disabilities	UD

Profile → Pre-questionnaire → Interview

	Pre Questionnaire filled in
	Interview completed
	Dropped out after agreeing
	Agreed and pending of the pre questionnaire

FUTURE WORK

The next steps are:

- To include related data in the analysis, such as demographics, completion rate and satisfaction

- Including categories of disability will provide greater insight into differences within the population of disabled learners

- Extensions to the analysis approach to include clustering of responses, and identification of correlations

- Increase the sample to more MOOCs and their survey data to form a more comprehensive picture. Look to introduce and utilise comparable survey approaches across platforms

- Analyse further sources of data that describe the activity of learners inside the MOOC

- Continue with the qualitative interview study to capture learners' experiences with MOOCs in depth

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