Beyond MOOCS – A Catalyst for Change

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About The MOOC Survey

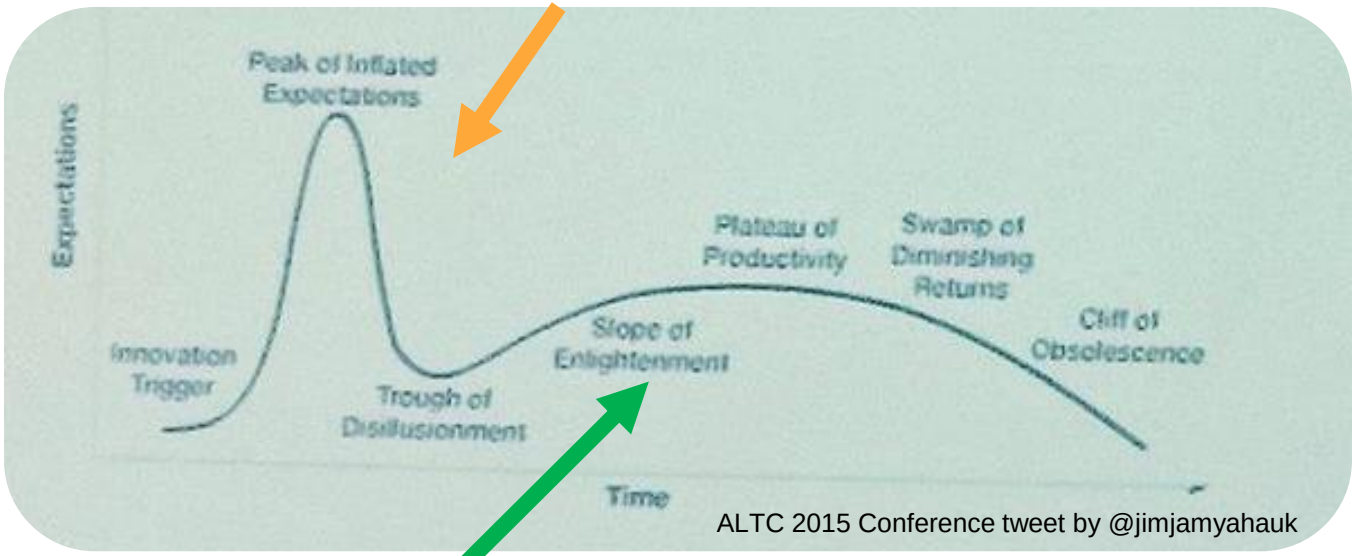
Session Overview

- Study Background
- Study Design
- High Level Results
- Deep dive into two themes:
  - Pedagogical impact
  - A catalyst for change

About The MOOC Survey

Study Background

- Started M.Ed in Teaching and Learning in Higher Education in 2011
- Area of MOOCs picked in **2013** – still during hype cycle



ALTC 2015 Conference tweet by @jimjamyahauk

- Haggard, S. et al., 2013. The Maturing of the MOOC was an eye-opener
- Continued into **2015** – conversation had started to move onto… blended/online/digital
- BUT MOOCs had not gone away

About The MOOC Survey

Study Background

- As MOOC research was still an emergent area and potentially touched on a wide range of pedagogical and institutional areas, the dissertation proceeded in an inductive, thematic and evolving way.
- This uniquely enabled it to keep up with the pace of change and also examine the arena of MOOCs holistically.

State of 2015 Research and Initial Direction

- Lots of doing, producing and talking from MOOC and Higher Education providers
- Numerous small-level studies / anecdotal observations
- Focused on the learner experience and design
- Gap in understanding holistic approach to understand the impacts that running MOOCs were having upon institutions.
- 2 broader studies existed:

1. USA Survey – Grade Level: Tracking Online Education in the United States
   Small Survey as part of a wider look at online education. Ran 2012, 2013, 2014 and 2015 www.onlinelearning**survey**.com/reports/**gradelevel**.pdf

2. International MOOC Strategies In Europe – The HOME Project
   *Looking at the differences between USA and EU MOOCs and focusing on the strategic drivers. Ran 2014 and 2015. www.***home**.eadtu.**eu**/

Study Start & Aims

A comprehensive literature review of research papers, personal knowledge and conference outputs and 2 existing surveys, enabled **3 themes of MOOC impact** to be defined:

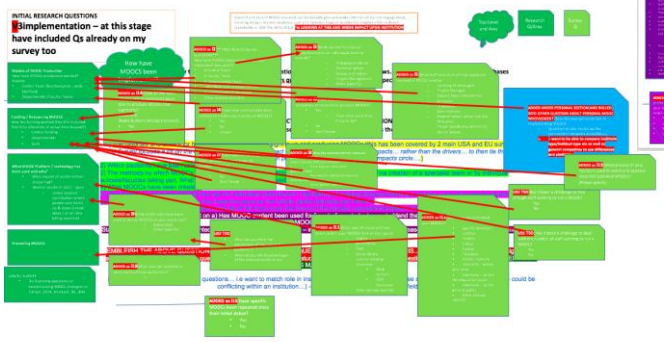
1. Drivers and rationale for producing MOOCS
2. The process of how MOOCs are being implemented
3. Impacts that production of MOOCs are having within institutions

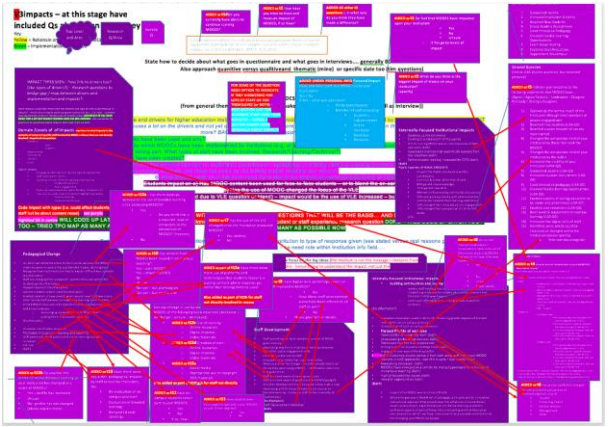
Existing 2 surveys mapped revealed a focus only on **drivers.**

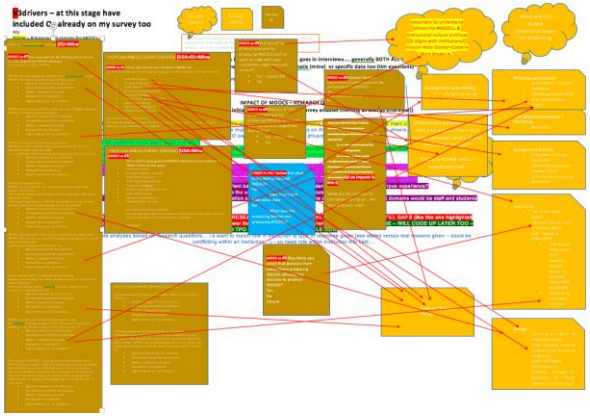
Study Design

The 3 main themes informed the generation of further research questions through an innovative process of cutting-edge literature and conference outputs combined with iterative mapping of potential research questions and themes.

Finding out and exploring can be messy!





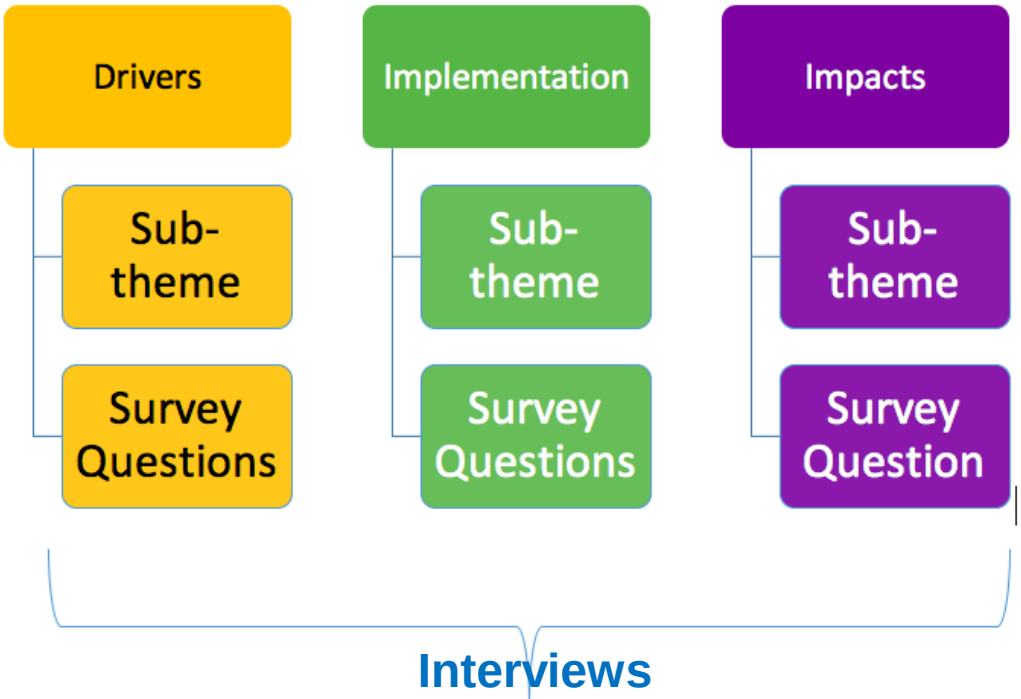


Study Design for Data Collection

These were all then expressed as quantitative survey questions:

- 3-section survey to generate 140 sets of quantative data

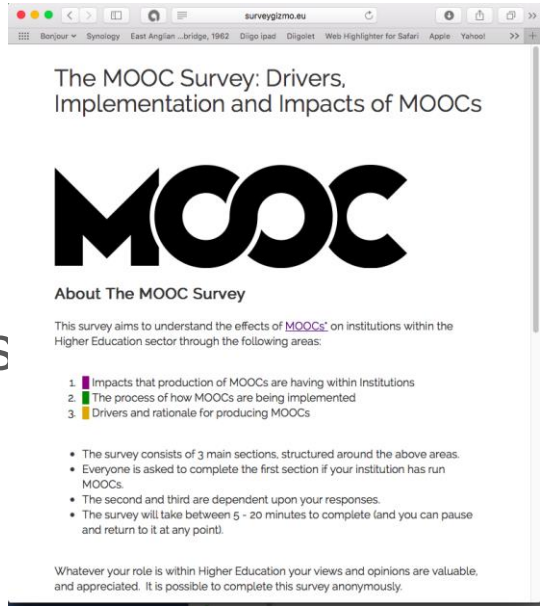
and contextual detail.



The MOOC Survey

Approaches:

- Unique in looking at the **implementation** and **impacts** in addition to **drivers**
- Targeting of roles at all levels of institutions as well as external contributors and private business.



www.moocsurvey.org

Collaboration:

- USA and EU HOME survey key questions repeated to increase sample size and add to existing knowledge
- 2 survey questions included in EU HOME 2015 Survey

Study Design

- Overall this wide approach enabled potential for emergent and hidden themes to come to the fore.
- This thematic and holistic approach of data-gathering is a strength of the study as it enabled a snapshot of the thinking and actual impact of MOOCs at multiple levels of institutions.
- Rich context - mixed methods of data types, collection and in analysis.

Results – Survey Stats

- Survey launched 14 October 2015 and closed 31 May 2016
- 572 responses (217 complete, 355 partial)
- 28 countries
- 96 unique institutions
- Majority of responses from the UK (270, 78%), Australia (16, 4.64%) and the USA (8, 2.32%). ‘Other’ areas of the world all had much lower responses per country, but in total provided 17.11% (59) of the overall results.

Results – Interview Stats

- 148 (n=572) of survey responses indicated they wanted to be interviewed.
- 10 interviews took place between November and December 2015.
- Selected to ensure a holistic sample representation from across the UK and World and within and outside the higher education sector:
- 3 countries, 7 individual higher education institutions and 3 private companies.

Results – Making sense of the data

- The research methodology meant when the survey and interviews were created it was clear there would be too much data to analyse and interpret it all within the space of one dissertation.
- A tension between letting key results of the survey and interviews emerge versus trying to analyse each result within a tight thematic area.
- A way into themes in survey: Ranking a question which had been asked in different ways - MOOC objectives versus actual impacts reported.

Primary MOOC Objectives

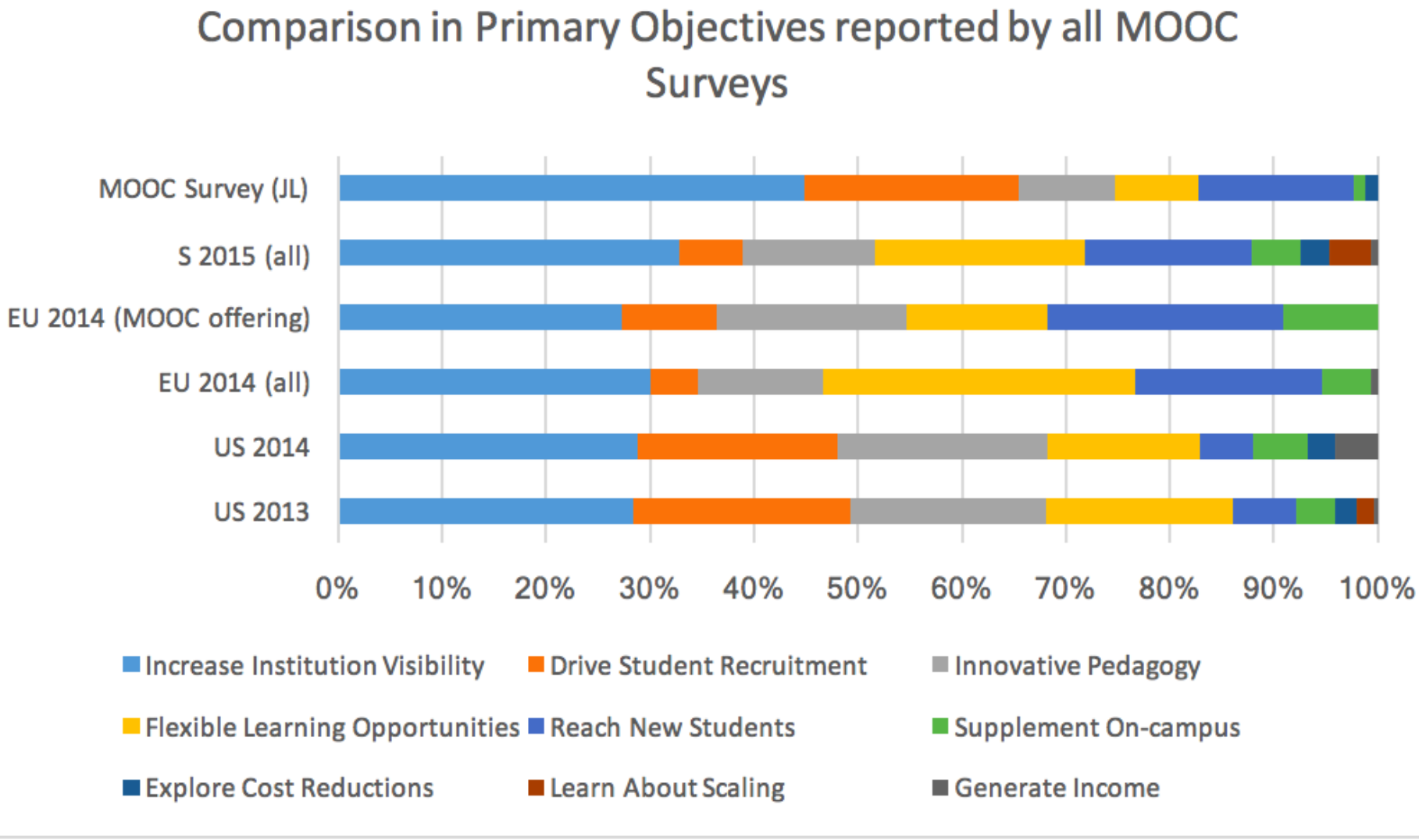
d2. What do you think is the primary objective for your institution's MOOCs?

(Select one)

Value	Percent	Count
Increase Institution Visibility	36.11%	39
Drive Student Recruitment	16.67%	18
Other (please specify):	15.74%	17
Reach New Students	12.04%	13
Innovative Pedagogy	7.41%	8
Flexible Learning Opportunities	6.48%	7
Generate Income	3.70%	4
Explore Cost Reductions	0.93%	1
Supplement On-campus	0.93%	1
Learn About Scaling	0.00%	0
	Total n=	108

Table 5.4 - Responses to survey question d2 ordered by highest to lowest responses

Primary MOOC Objectives Across Surveys



Actual Impact Areas followed a similar order

i6.What is your opinion on the following statements: 'MOOCs at my Institution have actually...¦Select one of the options for each item

	Agree	Undecided	Disagree
Total			
Created flexible learning opportunities (USA-Q6)	76.97%	18.42%	4.61%
Reached a wider breadth of society than normal	74.50%	20.13%	5.37%
Increased the visibility of your Institution (USA-Q2)	69.13%	23.49%	7.38%
Opened up the normal reach of the Institution through sheer numbers of people engaged	66.00%	28%	6%
Reached new students (USA-Q3)	64.67%	29.33%	6%
Increased the digital skills of staff	61.33%	30%	8.67%
Used innovative pedagogy (USA-Q5)	58.28%	29.80%	11.92%
Enabled aspects of scaling education to be learnt and understood (USA-Q7)	52.70%	41.22%	6.08%
Been used to supplement on-campus learning (USA-Q9)	40.94%	36.24%	22.82%
Changed the perspective held of your institution by those that took the MOOCs	40.67%	49.33%	10%
Identified areas which could be improved or changed within the institution (please specify)	32.89%	50.34%	16.78%
Changed the perspective held of your institution by the public	32.67%	52.67%	14.67%
Increased student recruitment (USA-Q4)	22.30%	58.11%	19.59%
Generated income (USA-Q1)	12.67%	41.33%	46%
Enabled cost reductions (USA-Q8)	6.71%	32.89%	60.40%
Average%	47.55%	36.05%	16.40%

Table 5.6 - Responses to survey question i6 - What impacts have occurred? Ordered by highest percentage of agreement.

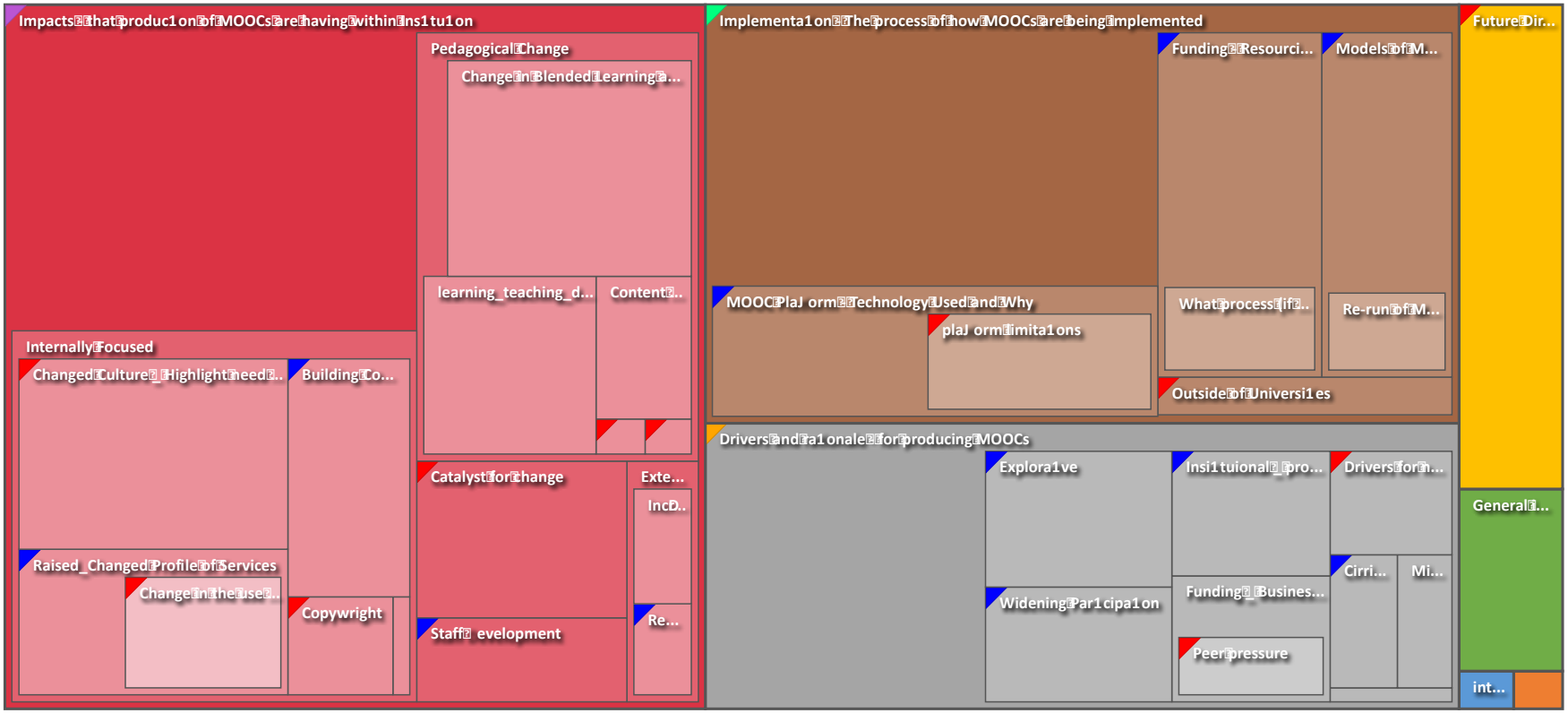
Results – Survey Headlines

These results show 3 things:

1. **Institutions appear to have a strong rationale** about why they produced MOOCs
2. **The actual impacts upon institutions appears to be across these rationale topics**
3. The data collected demonstrates a **consistency** of response and this demonstrates **high internal reliability** of the data.

Results – Making sense of the interviews

- Transcripts were coded to the survey themes
- Thematic analysis mapped back to survey questions and emergent areas and ranked frequency of themes.



Results – Making sense of the interviews.

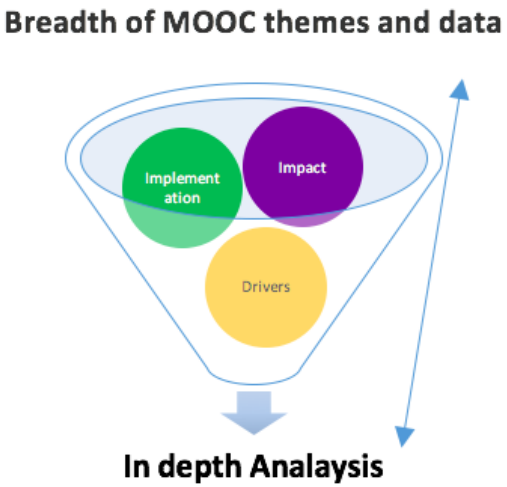
Drivers	Implementation	Impact
• Widening Participation • Use for marketing • Institutional Promotion	• How MOOCS are funded • Has use of the platform selected for MOOCs limited the choice / pedagogical options	Emergent Theme: - A catalyst for change Staff Development Pedagogical Changes – • Learning &Change in use and perceptions of blended and distance learning • Teaching Strategy • Content from MOOCs reused on-campus • VLE Impact Institutional – Internal Focused: • Highlighting needs for change • Building Communities and Collaboration

Making Sense of the data

Following these processes revealed areas of the survey and of the interviews which provided strongest reoccurring themes

These were:

- Pedagogical impact
- Widening participation
- Change



Study Design – Further Analysis

- The **breadth of responses** from all levels of institutions and those outside the sector made this study unique and able to, **conversely**, **be selective in narrowing the focus of analysis.**
- Deeper analysis remained holistic as multiple points of survey and interview data were pulled together and could represent the interrelationships.
- Correlation back up to wider trends and themes

Theme 1 - Pedagogical Change

- Over 58% (n=151) of survey responses agreed MOOCs run by institutions used innovative pedagogy
- An unexpected impact, as survey respondents only ranked innovative pedagogy a being a primary institutional driver for MOOCs in just over 7% (n=108)
- The context for pedagogy coming to the fore can be understood by:
- When ranked as a secondary drivers over 45% (n=97) of responses indicated innovative pedagogy was highly relevant for their institution
- Emergent impact rather than planned

Theme 1 - Pedagogical Change

- Emergent due to experimentation

"*the first couple of MOOCs we developed were basically… finding out about the space*."

"*for each MOOC… there was a brief trying things out*"

"*because other people were doing it we wanted to be there.*"

BUT

"our thinking has changed somewhat and I think it's become a lot more strategic now"

About The MOOC Survey

Theme 1 - Pedagogical Change

- **What does pedagogical change look like?**

'*the effects of scaling can be explored in relation to pedagogy*' (Ferguson & Sharples 2014, p99)

- Over 52% (n=148) agreed MOOCs had enabled learning at scale to be better understood
- Glance et al. 2013 suggests the packaging of resource types within MOOCs is the key to understand their pedagogical appeal:

Table 1: Characteristics of MOOCs and their related pedagogical benefits.

MOOC characteristic	Pedagogical benefits
Online mode of delivery	Efficacy of online learning
Online quizzes and assessments	Retrieval learning
Short videos and quizzes	Mastery learning
Peer and self–assessment	Enhanced learning through this assessment
Short videos	Enhanced attention and focus
Online forums	Peer assistance, out–of–band learning

Theme 1 - Pedagogical Change

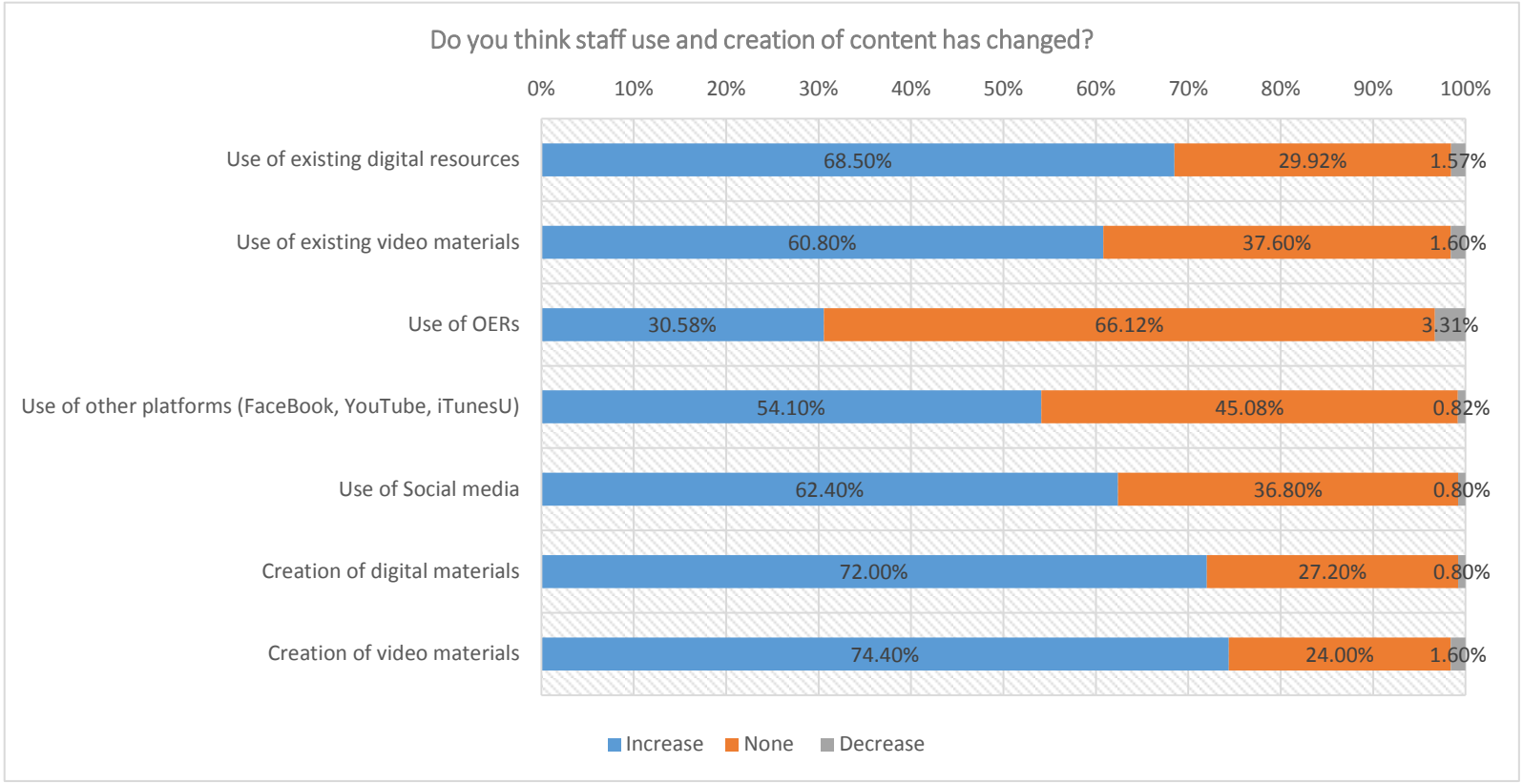
- The survey reported that Video resources (97%) along with images (96%), text (93%) and discussion boards (88%) are high up the most used content types
- What about the wider use of digital resources?

n11. What type of resources have been used in your MOOCs? (Select all that apply)	
Content Type	Percent checked
Videos	97.40%
Images	96.50%
Text	93.90%
Discussion boards	88.60%
Audio	78.90%
Assessments	73.70%
Web content	69.30%
Social Media	65.80%
Animations	59.60%
Peer review	53.50%
OER resources	33.30%
Other (please specify):	12.30%
I'm not sure	2.60%

Table 0.12 - Resources types used in MOOCs, ranked by most to least used

Theme 1 - Pedagogical Change

- Staff use and creation of digital resources is increasing



- But is this occurring anyway or due to MOOCS?....

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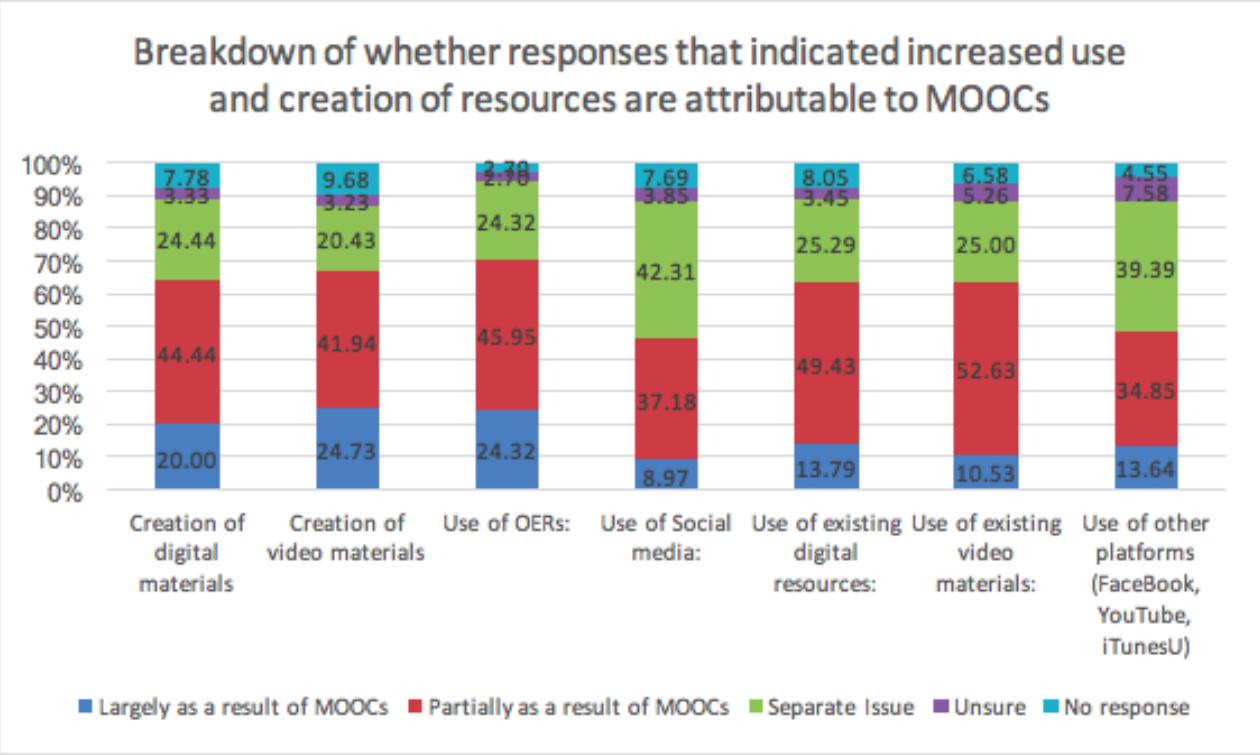
Theme 1 - Pedagogical Change



- MOOCs are feeding in to an overall increased change of creation and use of digital content, and may be contributing to this increase
  – but they are not the sole driver.

About The MOOC Survey

Theme 1 - Pedagogical Change

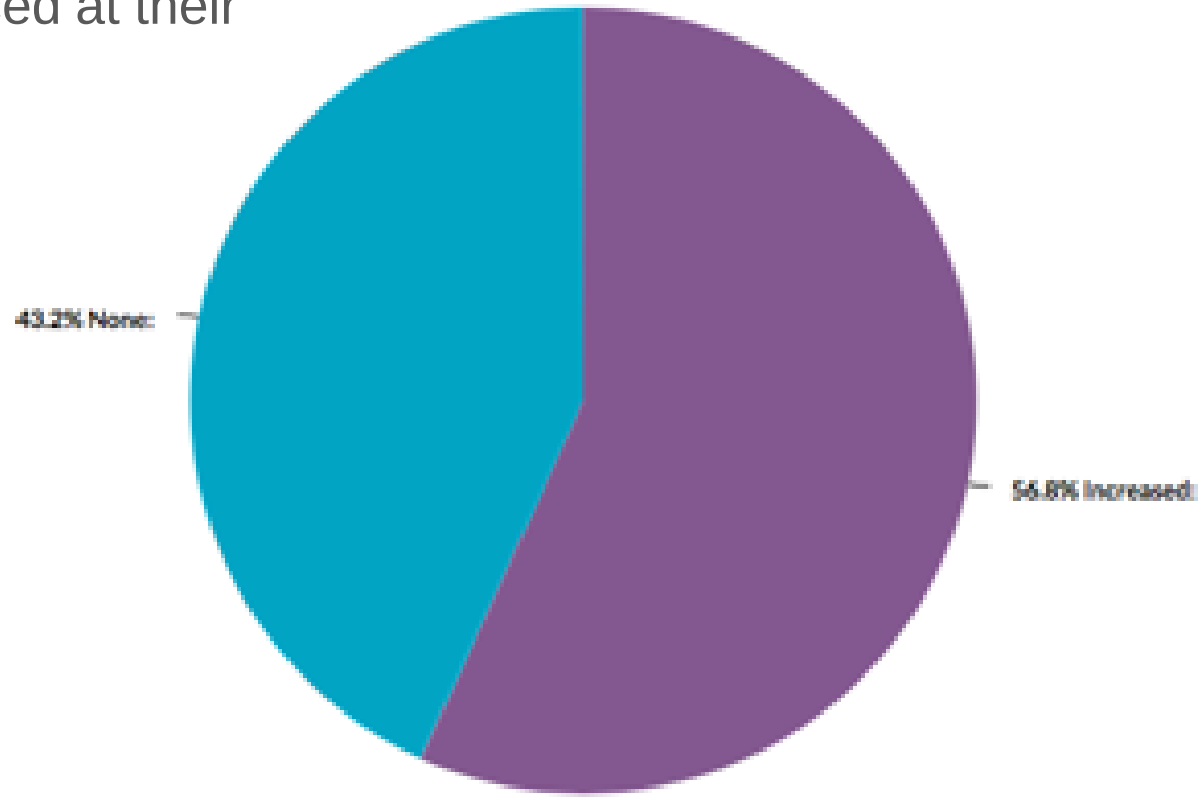
- **BUT digital content doesn't mean innovative pedagogy!**
- '*MOOCs are delivery methods – not changes in curriculum. If we want to change education we have to change how we think about teaching and content*' (Downes 2016) cited in (Weldon 2016).
- Digital resources use → groundwork for the ability of blended and flipped learning?

Theme 1 - Pedagogical Change

- **Change in blended learning**

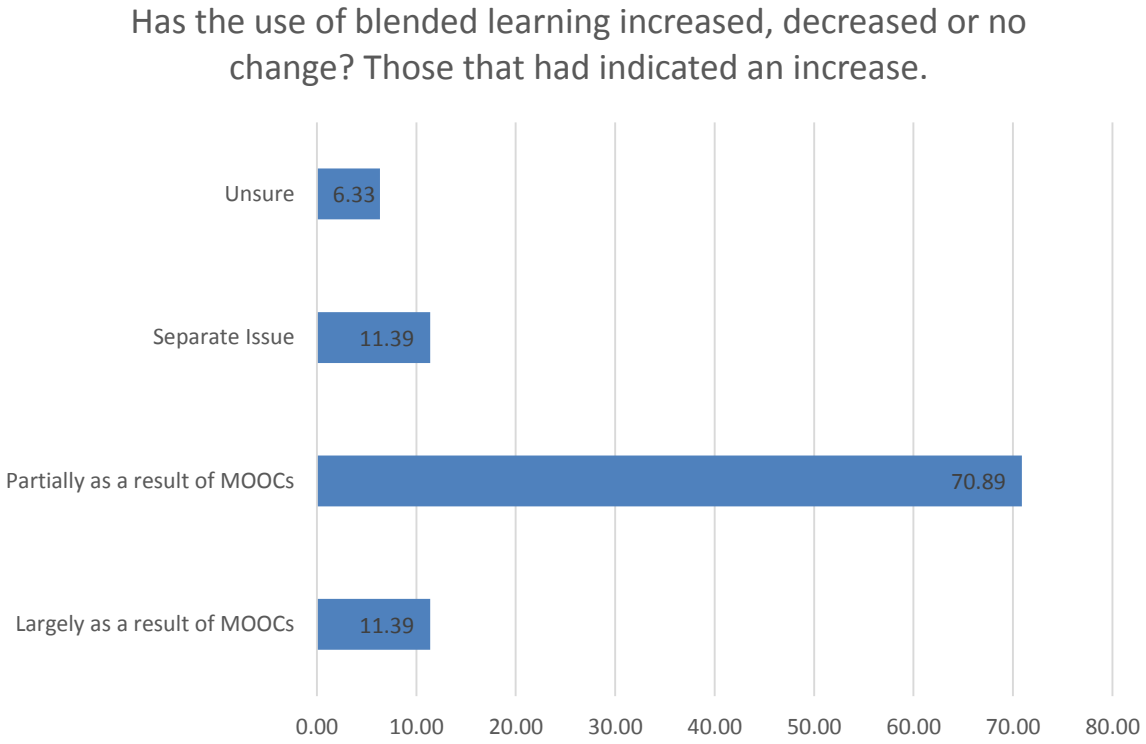
56.83% (n=139) stated the use of blended learning approaches had increased since MOOCs were produced at their institution.

Over 70% (n=79) strongly indicated they felt it was partially as a result of MOOCs



Theme 1 - Pedagogical Change

- Change in blended learning a result of MOOCs?



over 26% (n=79) thought it was only confined to those staff directly involved in MOOCs, but over 53% thought it applied to staff wider than those who had directly taken part in MOOCs

- results show for those that thought there had been an increase is blended learning activity, MOOCs had been a partial factor in this

About The MOOC Survey

Theme 1 - Pedagogical Change

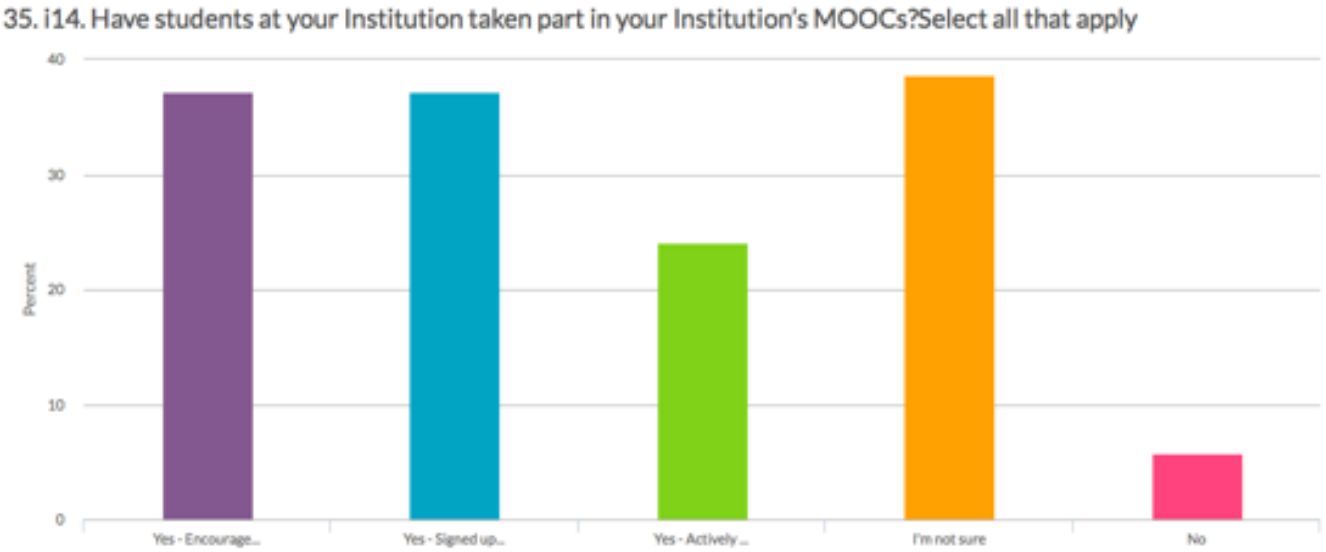
Interview quotes:

“*I think it's really helped push the idea of blended learning*”

“*[it can] funnel people towards a mixture of online and campus experiences*”

Theme 1 - Pedagogical Change

- On-campus Student Participation in MOOCS



"a lot of the students were dipping in and out of MOOCs as the kind of supplementary material for the courses they were taking"

About The MOOC Survey

Theme 1 - Pedagogical Change

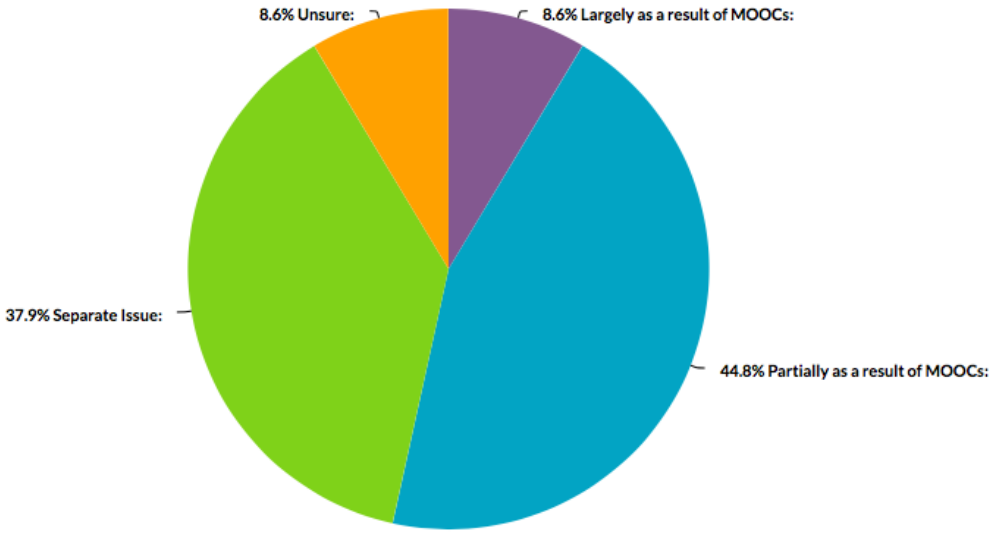
“*We're starting to look at to other terms to actually describe these MOOCs, the ones that become part of mainstream. We're starting to think about using terms like BOOCs. BOOCs stand for Blended Open On-campus courses*”

“*What MOOCs have done, they've raised the profile of the requirements, the functionalities… the pedagogy of online course delivery across the university*”

Theme 1 - Pedagogical Change

- **On-campus and Blended Educational Provision – Policy Insight**

Do you think this is a separate issue or connected to the production of MOOCs? - Evaluation of blended learning



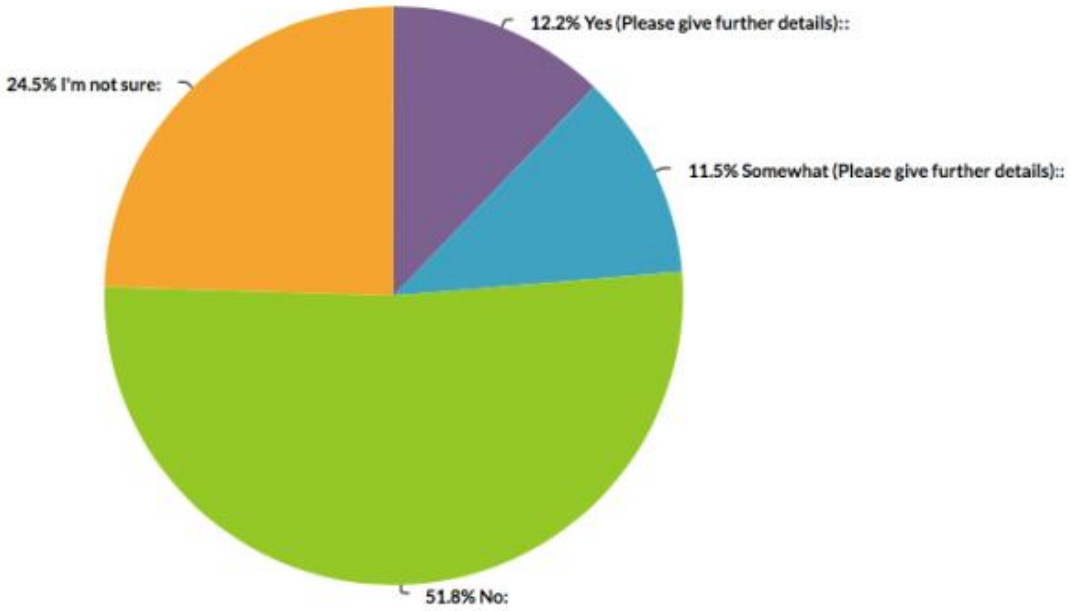
Value	Percent	Count
Largely as a result of MOOCs	8.6%	5
Partially as a result of MOOCs	44.8%	26
Separate Issue	37.9%	22
Unsure	8.6%	5
	Total	58

C Survey

Theme 1 - Pedagogical Change

The Blended VLE?

32. i11. Do you feel use of the VLE has changed since the Institution produced MOOCs?Select one



"at the simplest level there are materials made that can be reused in on-campus teaching, I think that's quite easy. Lists have been drawn up of those materials and how they used and where and a lot of them going to the VLE"

Overall there has not been major impact on staff perceptions of how it is could be used to deliver pedagogically innovative learning. Over 50% (n=139) indicated in Figure 5.16 there had been no change in their use of the VLE since MOOC production.

About The MOOC Survey

2017 Update!

It is clear MOOC activity has fed into conversation about blended learning approaches and this is now coming out as large blended projects have been launched off the back of MOOC activity prevalent across multiple institutions.

The Rise of **S**mall **P**rivate **O**nline **C**ourses

- UoL Discovery Themes
- UoS Achieve More L2 & Fly Mental Wellbeing Course
- BOCS at an Australian University

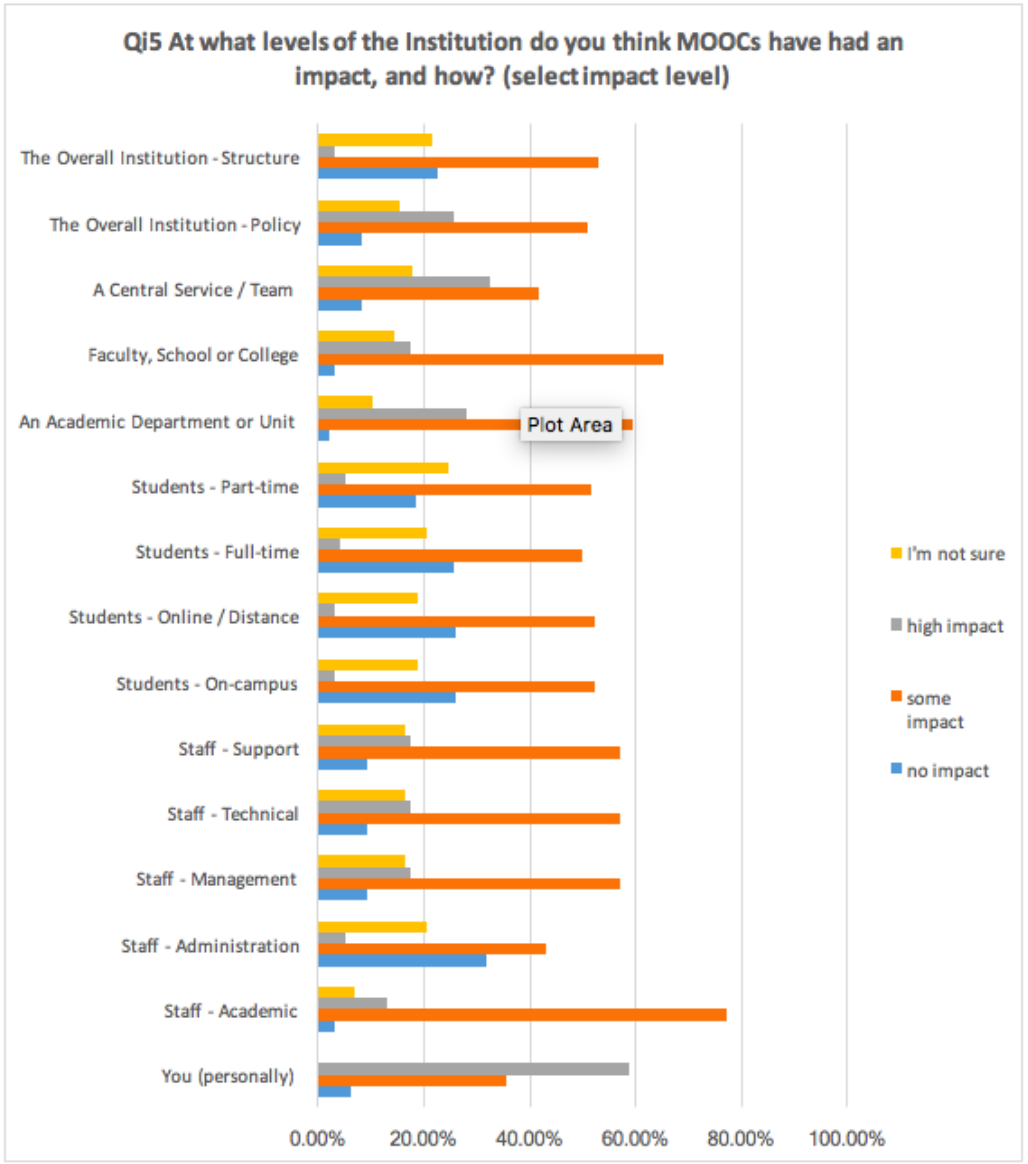
Re-evaluation of the ”default pedagogical behavior” of VLE use

About The MOOC Survey

Theme 2 - Highlighting Need for Change / A Catalyst for Change’

- 65.8% (n=158) felt MOOCs had had an impact upon their institution
- 47.5% (n=101) had measured the impacts upon their institution

Theme 2 - Highlighting Need for Change / A Catalyst for Change



- 'Some impact' was strongly reported at all levels of the institution
- High impact slightly reported across the institution but similar to 'no impact'

About The MOOC Survey

Theme 2 - Highlighting Need for Change / A Catalyst for Change

- **What are the actual, real, impacts?**
- **Production of MOOCS** It is clear for those institutions that have embarked upon producing MOOCs this has been an experimental journey of discovery.
- **Formation of central teams and drawing upon existing staff** Producing MOOCs has encouraged new models of generating content and collaboration with new centralised time and roles created.
- 46% (n=112) indicated creation of new roles
- Specific funding had been set aside in 62% (n=110) of cases to produce MOOCs but funding models seem to be based around cyclical short project funds or direct from Vice-Chancellor's

About The MOOC Survey

Theme 2 - Highlighting Need for Change / A Catalyst for Change

- **Roles** involved in the creation of MOOCs (wide)

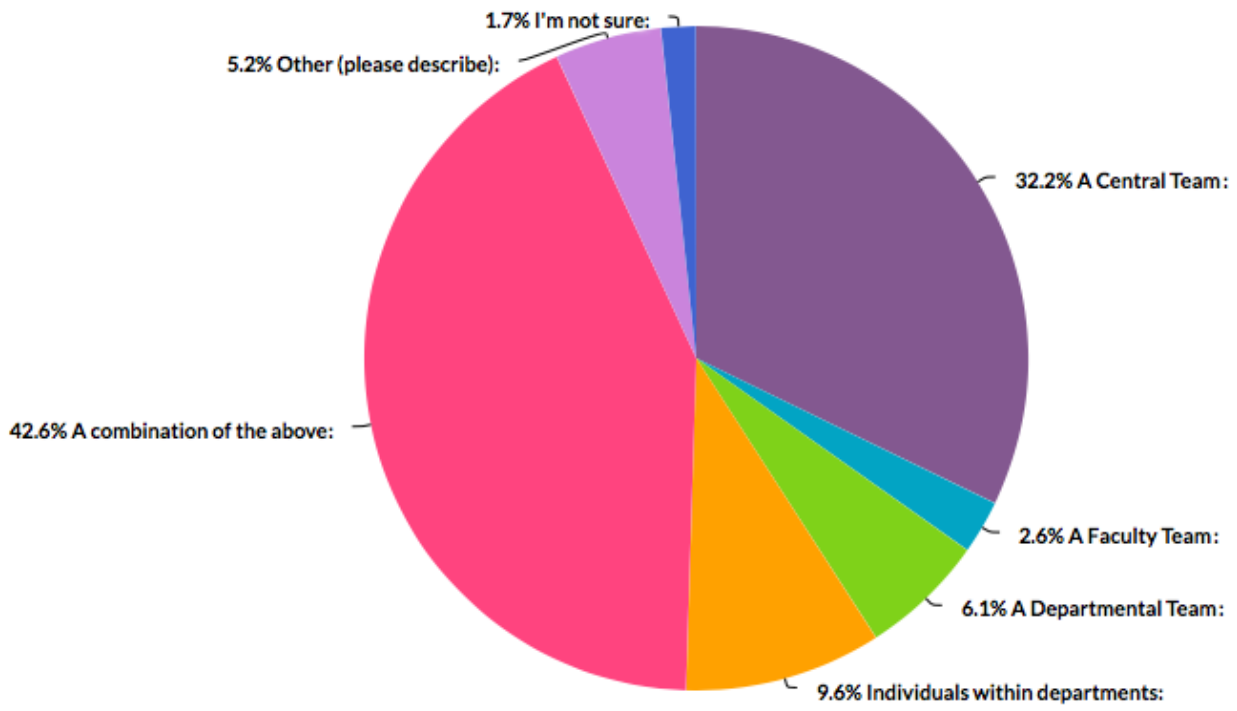
Learning Technologist	73.0%		81
Project Manager	73.0%		81
Subject Expert (Academic)	78.4%		87
Animator	27.9%		31
IT Services	42.3%		47
Administrator	36.0%		40
Students (what role did they play): (click to view)	41.4%		46
Other (please specify): (click to view)	30.6%		34
I'm not sure	8.1%		9

About The MOOC Survey

Theme 2 - Highlighting Need for Change / A Catalyst for Change

- A combination of roles from all across the institution (42.6% n=115) – with the most common single of method being a centralised production team (32.2%)

39. n2. How have MOOCs been produced at your Institution?Select one



Theme 2 - Highlighting Need for Change / A Catalyst for Change

- **Increased collaboration between levels of the institution has occurred.**

  “*in terms of changing practice is that it's drawing attention to the importance of the team rather than the individual academic in developing courses*”

Theme 2 - Highlighting Need for Change / A Catalyst for Change

Highlighting rigidness of existing processes

- If you've been directly involved and then want to blend or flip your teaching to implement innovative pedagogy you may have to sidestep or ignore existing processes or try and shoehorn in what you want to achieve.
- However, if you're unaware of these options the existing processes stifle not support innovation, as they are geared for traditional methods

Theme 2 - Highlighting Need for Change / A Catalyst for Change

- **Policy and Direction for Change?**

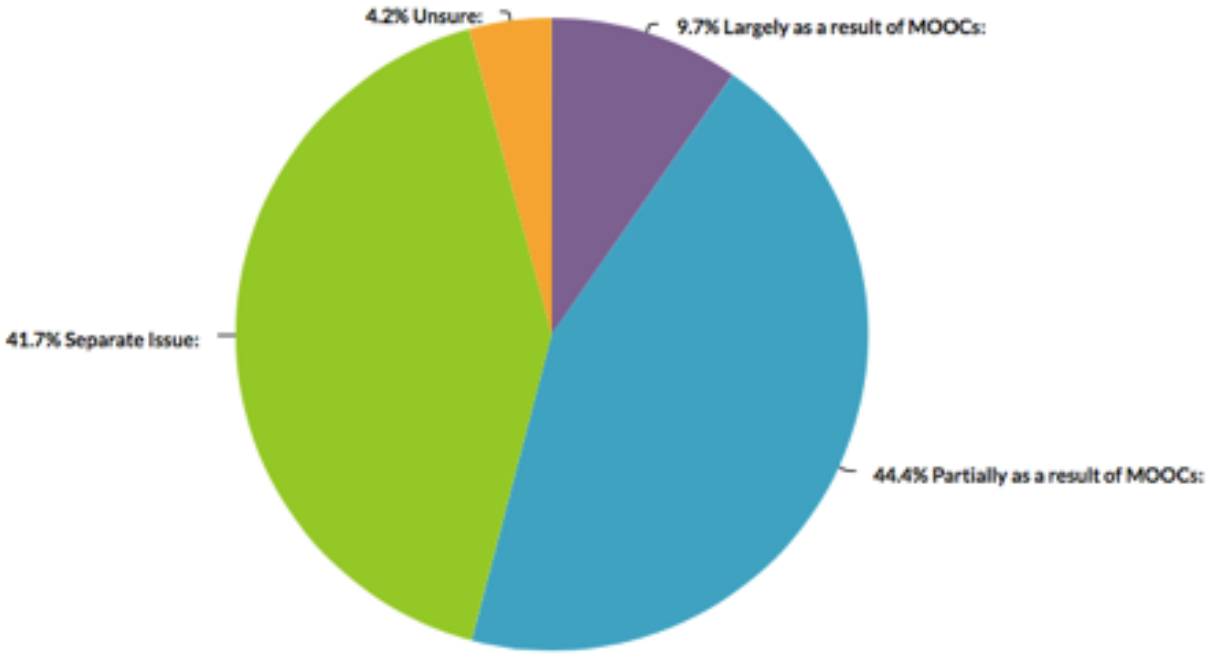
  "*it's building some level of discussion perhaps, more than collaboration… There is a* ***dialogue starting across the university****. A lot of that has come out of the MOOC activity***"**

  "*I think it is hugely helped the university. I think it's* ***starting to change culture****… I don't think people would think of a university without digital whereas two years ago what was digital***"**

  "*everyone's getting switched on to the idea that* ***blended and digital learning is here to stay*** *and how can it be used across the university and in what different ways***"**

Theme 2 - Highlighting Need for Change / A Catalyst for Change

- Is a renewed educational technology/digital strategy connected to the production of MOOCs or separate



44% of respondents thought MOOCs were partially behind this re-evaluation

Theme 2 - Summary

- MOOCs have consistently been referred to as **catalysts of change** within the interview and survey results.
- However, the current state in is still one of **overall inertia** in terms of what is practised widely – but there are signs MOOCs have been catalysts to start a process of new direction.
- Informing revaluation of and impact upon existing practices on-campus, online.

Theme 2 - Summary

- The production of MOOCs appears to have **contributed to wider shifts already occurring within institutions** such as increased blended learning and revaluation of institutional learning and teaching policies, as well as highlighting the need to review processes and facilities.

Theme 2 - Summary

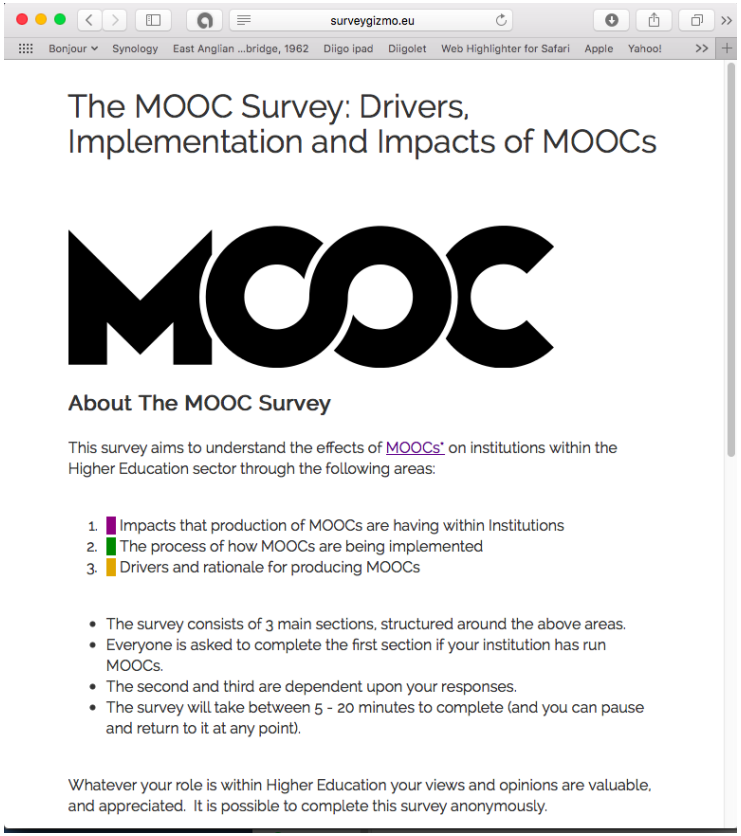
- **MOOCs have created ripples of change** outwards at all levels of the institution.
- The direction of these seem to be going in two different way - **one is bringing on more xMooc-style blended activity on-campus** through content, assessment and integration of activities, the other being the **increase in the often siloed areas of online learning.**

What Next…

- Final dissertation available with extended analysis and themes.
- LOTS of raw data still for analysis (too much data for a masters dissertation – or even multiple PhDs!)
- Share data / shared future projects?
- Feeding into other reports?
- Unpack even more subtleties of survey data – matching linked questions, matching responses across institutions and professional roles and through interview analysis

Thank You

- Full survey results available at www.moocsurvey.org
- Full raw data available on request.
- Final dissertation available with extended references and analysis



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MOOC

About The MOOC Survey

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Survey quotes are anonymised for this presentation

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