

Which VLE learning resources do undergraduate students perceive as most valuable and does their usage contribute to student module success?

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# Presentation Plan

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- Context and Literature Review
- Departmental differences
- Student engagement with VLE resources 19/20 & 20/21
- Impact of VLE engagement on results
- Questions, Comments and Suggestions



# Context

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- 2019/2020: no disruption of in-person teaching until the end of term 2
- 2020/2021: Online teaching
- The theory of revealed preference suggests that students will use those resources that they value most highly
- Natural experiment: has the use of VLE resources changed?
- Follow up question: does student use of VLE resources impact on their module performance?
- Comparative analysis: Post 1992 and Pre 1992 university Economics Departments



# Literature Review

- Large literature on the value of VLE resources
- Student revealed preference for lecture capture learning resources:
  - Andrews et al. (2013); Chandra (2007)
  - Elliott and Neal (2016), year 1 UG Economics module
- Impact of lecture capture on Economics student performance:
  - Flores and Savage (2007); Savage (2009)
  - Chen and Lin (2012)
- Impact of VLE use on Economics student performance:
  - Calafiore and Damianov (2011), significant impact of VLE engagement
  - Moffat and Robinson (2015), no significant impact of engaging with VLE quizzes

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## Modules

Economics of International  
Banking (2<sup>nd</sup> year UG)

Industry, Corporations and  
Government (Final year UG)

Data available for 19/20 &  
20/21

	19/20	20/21
Live	2-hour live face-to-face lecture 2-hour live face-to-face seminar	2-hour live online seminar 1-hour online office hour
VLE Features	Lecture recordings Lecture slides Assessment materials Seminar activities with guidance notes Practice questions with solutions.	Lecture recordings Lecture slides Assessment materials Seminar activities with guidance notes Practice questions with solutions. Online quizzes Discussion forums

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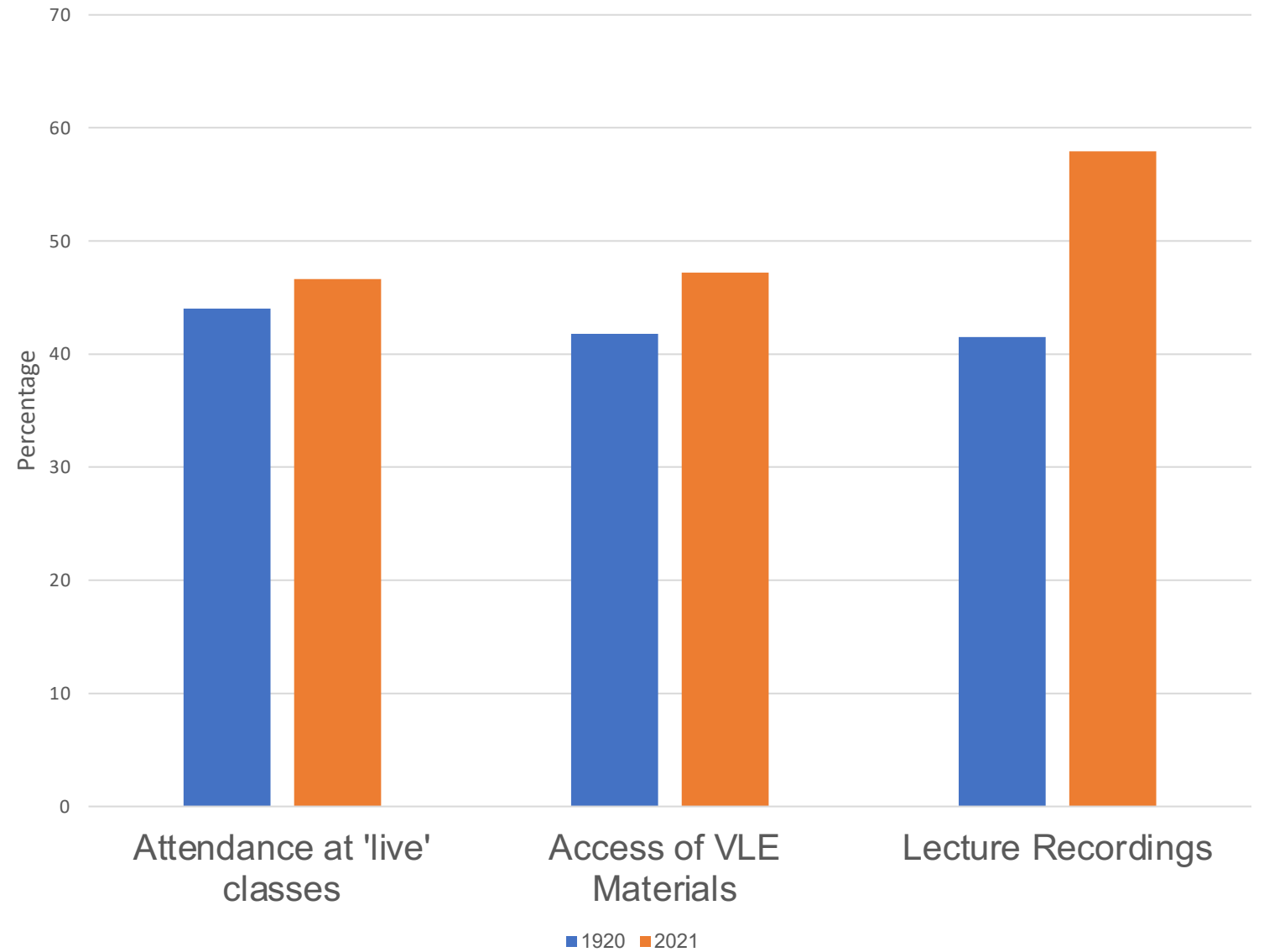
## Module

Econometrics (2<sup>nd</sup> year UG, core for BSc Economics)

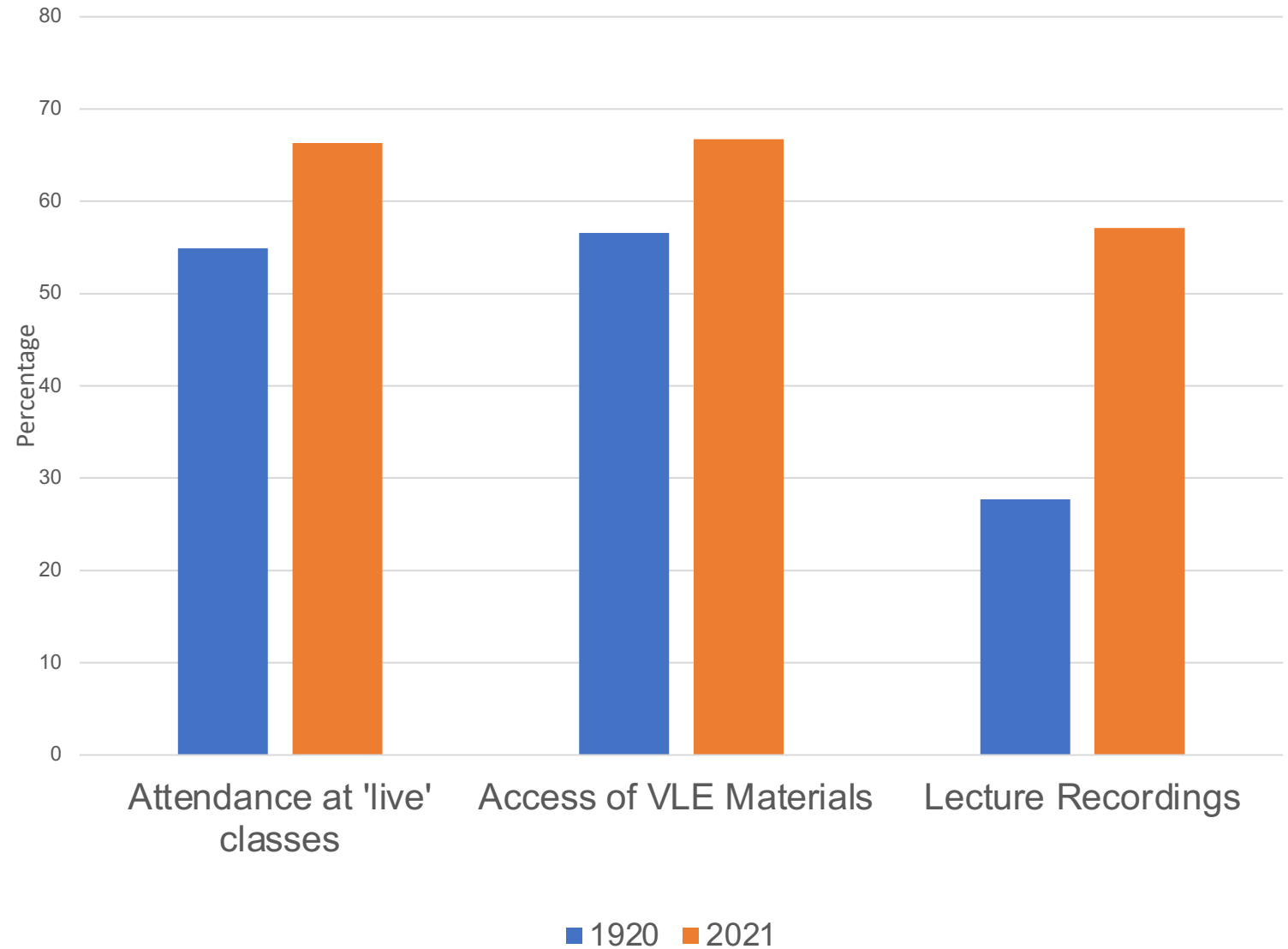
Data available for 20/21

	19/20	20/21
Live	2-hour live face-to-face lecture Face-to-face office hours (lecturer and tutors)	1-hour asynchronous lecture 1-hour live online lecture Online office hours (lecturer and tutors)
VLE Features	Lecture recordings Lecture slides Assessment materials Seminar activities with guidance notes Practice questions with solutions Online quizzes Discussion forums	Lecture recordings Lecture slides Assessment materials Seminar activities with guidance notes Practice questions with solutions Online quizzes * Discussion forums

# Economics of International Banking

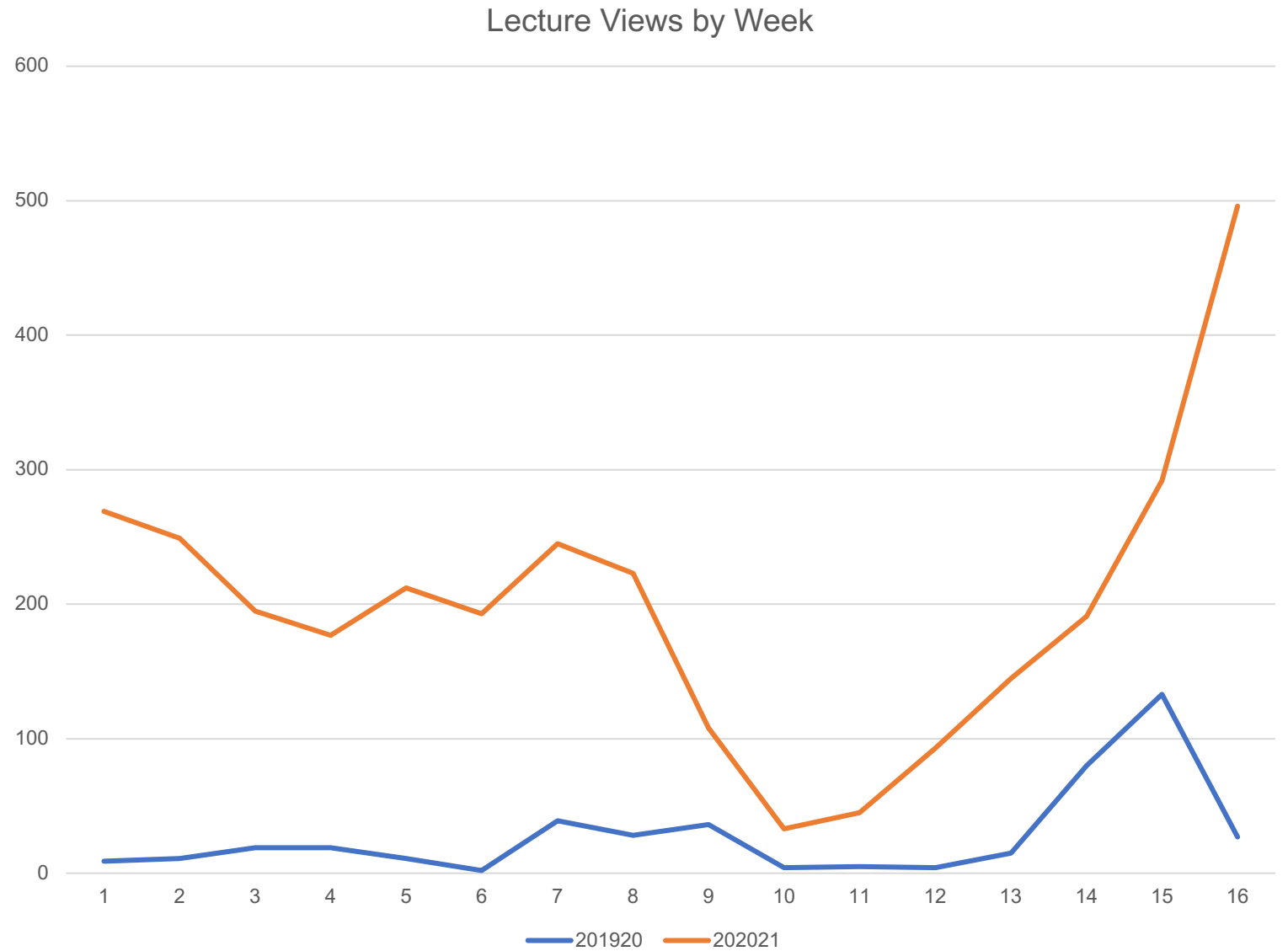


# Industry, Corporations and Government



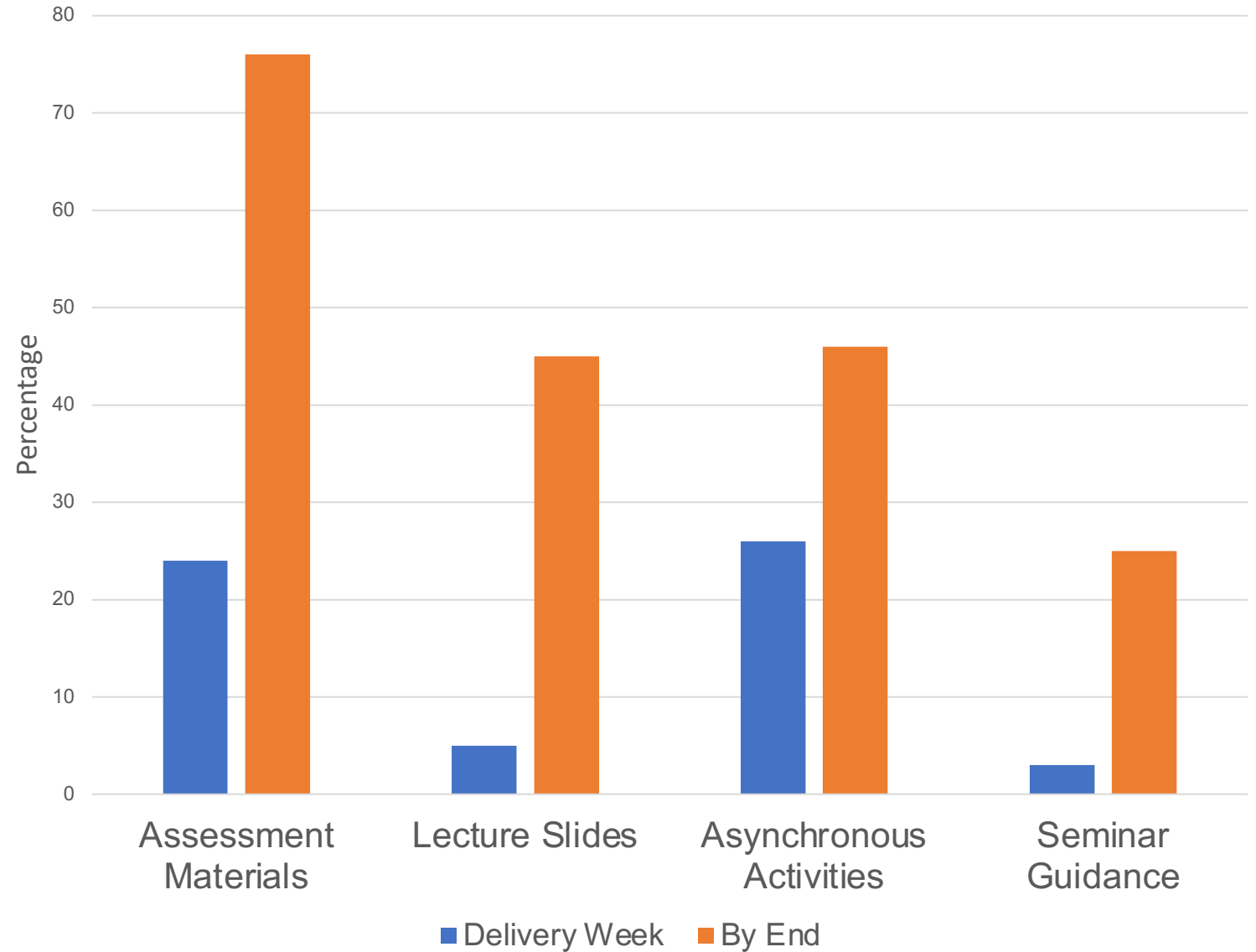


# Economics of International Banking



# Economics of International Banking

## Access rates for Online Resources (20/21)



# Correlation Matrices

Economics of International Banking 2019/20

	Attendance	Content	Recording
Mark	0.251	0.496	0.388
Attendance		0.160	0.223
Content			0.265

Economics of International Banking 2020/21

	Attendance	Content	Recording
Mark	0.494	0.432	0.528
Attendance		0.380	0.255
Content			0.387

# Correlation Matrices

Industry, Corporations and Government 2019/20

	Attendance	Content	Recording
Mark	0.564	0.461	0.360
Attendance		0.375	0.506
Content			0.347

Industry, Corporations and Government 2020/21

	Attendance	Content	Recording
Mark	0.325	0.415	0.323
Attendance		0.247	0.306
Content			0.325

# Warwick 20/21 VLE Student Engagement

- VLE engagement greatest in terms 1 & 2 quiz/test weeks and then increases before final exam
- Discussion forum popular (similar pattern of VLE engagement)
- Synchronous online lecture attendance 60% down to 20%, average 40.28% (average total attendance 48.5%)
- Synchronous online lecture viewings per lecture 200-800, average 458.5 viewings
- Asynchronous online lecture viewings, average 77.8 per student
- MCQ quizzes in weeks 3, 5, 7, 9, 11 (week 1, term 2)
- Announcement re random follow up tests after test 2

# Correlations: VLE engagement and result

MCQ Test	Correlation
<b>Week 3</b>	0.030
<b>Week 5</b>	0.062
<b>Week 7</b>	0.236
<b>Week 9</b>	0.194
<b>Week 11</b>	0.146

# Impact of VLE Resources Use on Performance

Type of Resource	Home Students	All Students
Total engagement	0.0008**	0.0008*
Discussion forum	-0.0003	0.0030**
Notes	0.0039**	0.0051***
Quizzes	0.0022**	0.0013
Exercise sheets	0.0075	0.0084**
Past exam materials	0.0131	0.0243
N	140	280

- High correlations between some of the engagement variables
- Include controls for age; entry points; PPE; gender; disability; WP; ethnicity; school type (home); home/EU/international (all)

\*\*\*, \*\*, \* indicates significantly different from zero at the 1%, 5% and 10% levels respectively.

*Thank you*

*Any questions /  
comments?*

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