Student-produced videos as a form of assessment in Economics

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Background

• Effective assessment in technical subjects presents a challenge (Walstad 2001; Allgood et al. 2015; Dinagsao 2017)

- Depth of knowledge and understanding
- Pandemic ⇒ Online delivery
- Proposed method: Short video

Video Assessment

- 3-5 minute video where the student explains their solution
- Provides a good impression of students' abilities, level of understanding and nuance (Dinagsao 2017)
- Quick to grade (esp. for large modules)
- Provides the opportunity for detailed and individualised feedback (also audio)
- Opportunity for students to develop other skills (communication, time-management, planning) (Hawlay and Allen 2018)

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• Collusion, cheating, Al

Implementation

- Good cooperation with King's Academy, administrative- and IT staff
- Optional practice session during reading week
- Any device or software with which students felt comfortable
- Detailed instructions (technical and substantive), example video, several mentions during lectures and tutorials, marking criteria

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Implementation

- January 2021, 2022, 2023
- Two large technical modules at KBS (Mathematics for Economists, \sim 930 and Mathematics for Accounting and Finance, \sim 560)
- Alongside a take home, open book, timed, written exam

Normal distribution for all videos

Average at around 60



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- Students reported that preparation, solution, recording and uploading took 120-150 minutes (median=120, n=44)
- Students used a variety of available devices and software (tablets, phones, laptops)
- Some students got creative and added high production value

Good students do well

	Video	Video	Video
	[Econ]	[A&F]	[Full]
Written	0.3206***	0.2100***	0.2861***
	(0.1084)	(0.0412)	(0.0729)
Cohort	Yes	Yes	Yes
Obs.	833	526	1,359

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Insight: Qualitative comments

- Students find that it helped them thinking deeper into the problem in order to be able to explain
- Time management and conveying a message within limited time
- "I respect math lecturers who can explain and write math out at the same time, even more"

	Video	Video	Video
	[2021]	[2022]	[2023]
Written	0.4356***	0.2189***	0.1624***
	(0.0496)	(0.0445)	(0.0373)
Cohort	Yes	Yes	Yes
Obs.	433	638	288

	Video	Video	Video
	[Econ '21]	[A&F '21]	[Econ '22]
Written	0.5017***	0.2788***	0.2554***
	(0.0550)	(0.0797)	(0.0602)
Obs.	262	171	384

	Video	Video	Video
	[A&F '22]	[Econ '23]	[A&F '23]
Written	0.1551***	0.1487***	0.2000**
	(0.0611)	(0.0350)	(0.0997)
Obs.	254	187	101