



The Wisdom of Students: Monitoring Quality via Social Media and Student Reviews

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We are the Quality Assurance Agency for Higher Education (QAA): the independent body entrusted with monitoring, and advising on, standards and quality in UK higher education.

What's the problem?

- Move to a more risk-based, data-driven, student-focused and low-burden oversight model.
- Data must be timely, robust, meaningful and accurate.
- Existing data collections have their limitations, including:
 - cost
 - purpose
 - organisational focus.
- Little appetite for new, burdensome data collections.

What can be done?

- Significant volume of student feedback available from non-central sources.
- ‘Wisdom of Crowds’ -
 - even if the majority of people within a group are not especially well-informed or rational, under the right circumstances, groups can be remarkably insightful.
- Griffiths & Leaver (2018) have shown patient feedback is an effective predictor of quality inspections of hospitals.
- Is the same true in higher education?

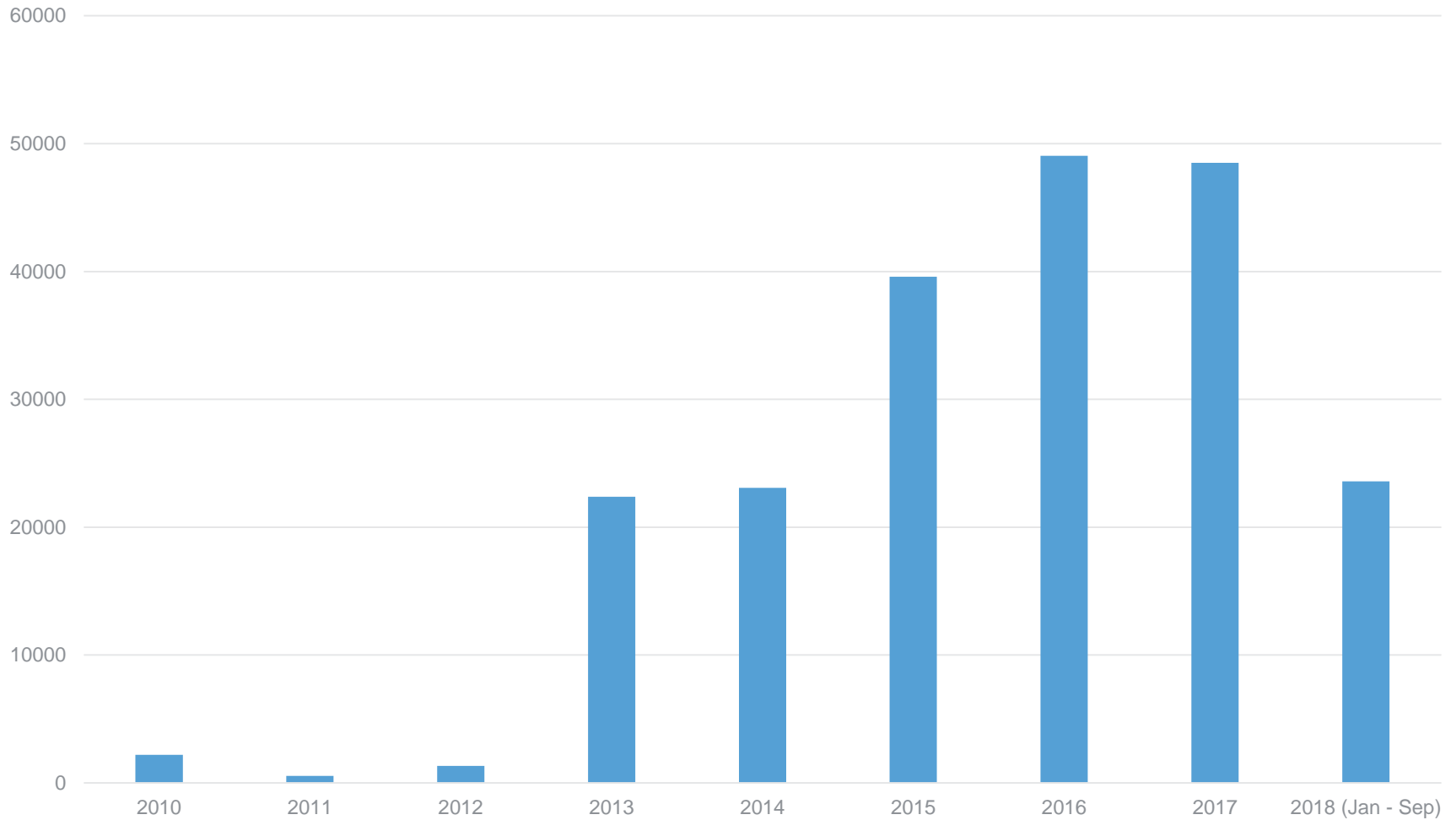
Data sources

Reviews on a scale of 1* (worst) to 5* (best)

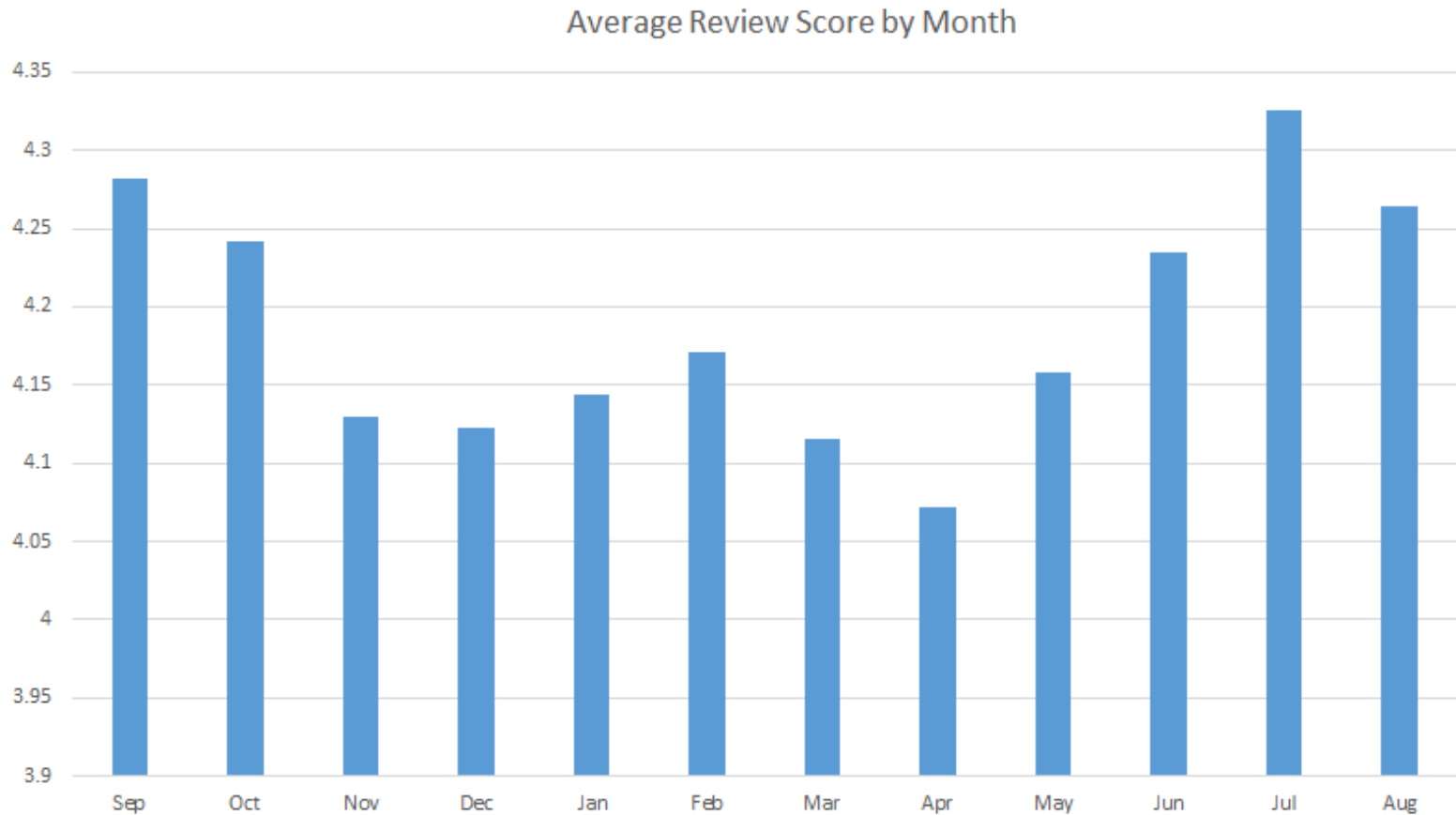
- **Whatuni** - c.120k reviews, 79 FECs and 8 APs
Average review score 4.11.
- **Facebook** - c.75k reviews, 158 FECs and 7 APs
Average review score 4.33. Comments needed cleaning.
- **StudentCrowd** - c.14k reviews, 2 FECs and 2 APs
Average review score 4.08.
- **Google** - c.22k reviews, 190 FECs and 11 APs
Average review score of 4.13.
- **Twitter** - ongoing development of machine-learning models to identify and score relevant tweets.

Data: Volume of reviews

Count of Reviews by Year



Data: Average review score by month

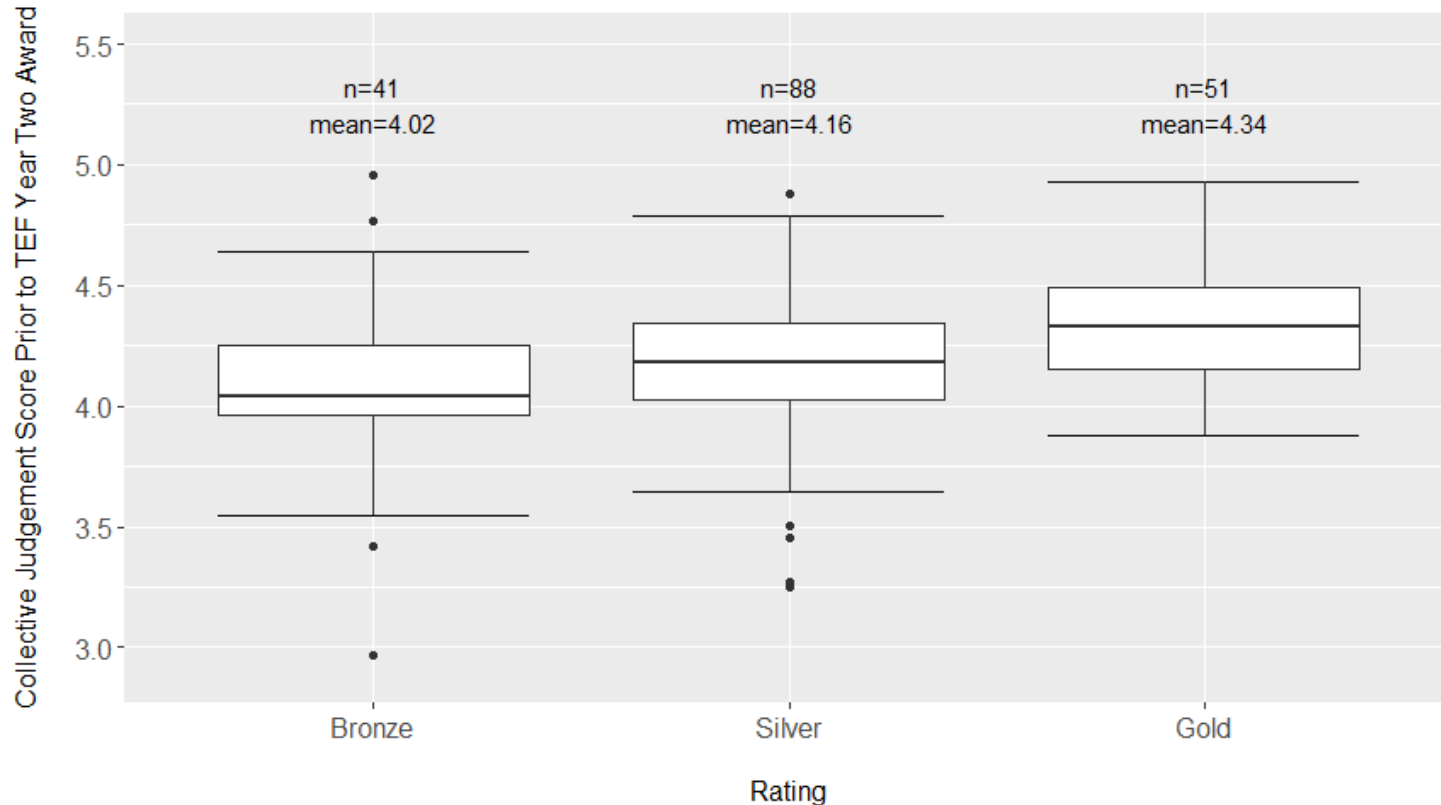


What did we do with the data?

- A daily 365-day moving average score calculated for each provider from each data source.
- A daily 365-day 'collective-judgement' score calculated for each provider combining the data sources.
- Moving averages and collective-judgement score compared to existing measures of (or proxies for) quality.

Results: TEF year two

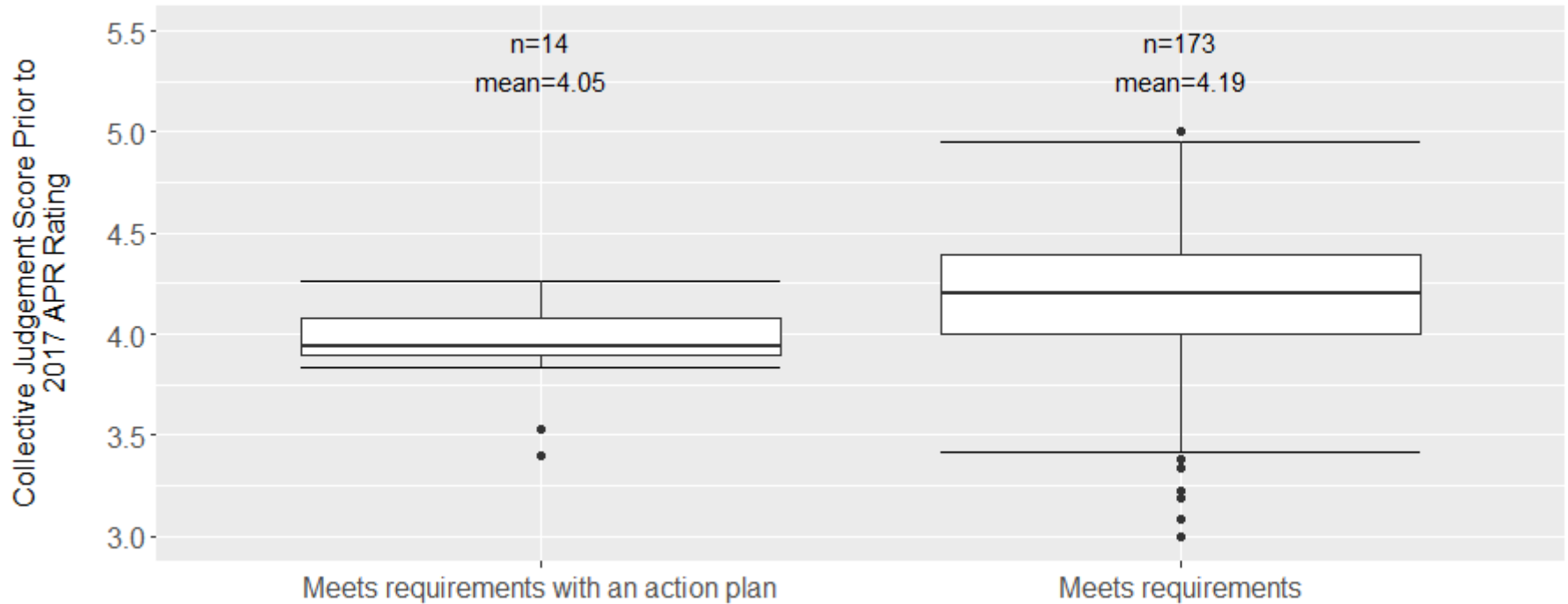
Distribution of Collective-Judgement Score for TEF Ratings



TEF Outcome	Collective Judgement		Whatuni		Facebook		StudentCrowd		Google	
	Count	Average Score	Count	Average Score	Count	Average Score	Count	Average Score	Count	Average Score
Gold	51	4.34	33	4.19	43	4.59	22	3.91	35	4.38
Silver	88	4.16	61	4.03	79	4.43	30	3.61	52	4.31
Bronze	41	4.02	18	3.99	35	4.41	9	3.57	20	4.18

Results: Annual provider review

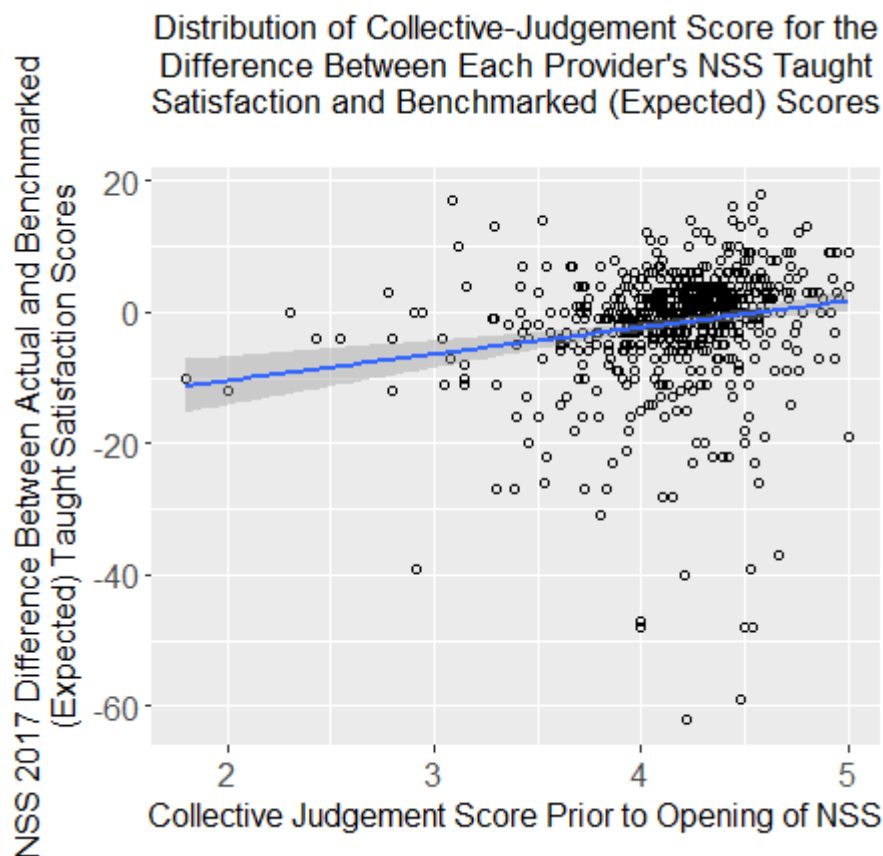
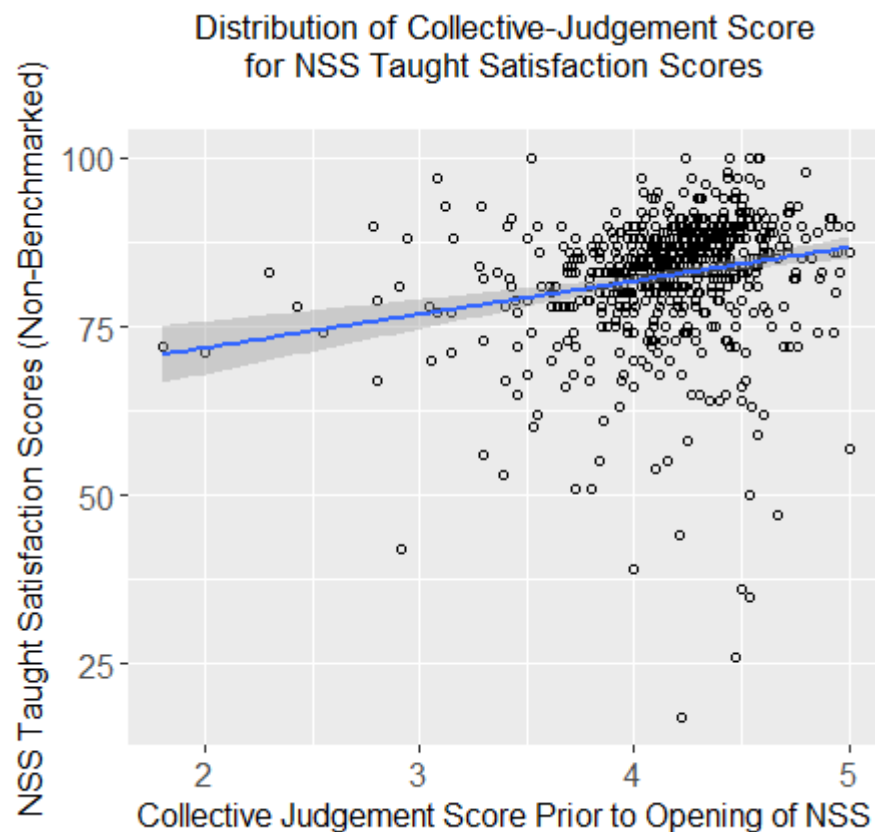
Distribution of Collective-Judgement Score for APR Ratings



Rating

APR Outcome	Collective Judgement		Whatuni		Facebook		StudentCrowd	
	Count	Average Score	Count	Average Score	Count	Average Score	Count	Average Score
Meets requirements	210	4.14	91	4.19	154	4.36	42	4.09
Meets requirements with an action plan	15	3.83	6	4.13	14	4.23	4	3.08

Results: NSS (2015-17)



Year	Collective Judgement			Whatuni			Facebook			StudentCrowd			Google		
	n	Corr (non bmrk)	Corr (bmrk)	n	Corr (non bmrk)	Corr (bmrk)	n	Corr (non bmrk)	Corr (bmrk)	n	Corr (non bmrk)	Corr (bmrk)	n	Corr (non bmrk)	Corr (bmrk)
2015-17	682	0.21	0.18	327	0.46	0.41	563	0.21	0.18	164	0.41	0.28	225	0.40	0.31

Oversight and QA tool

Benefits:

- agreement with existing quality measures
- ongoing, near real-time feedback, focusing on what the student body finds important
- no additional burden
- providers not involved in the collection of the data
- can explore regional or sector-wide issues
- can monitor sudden changes in quality or track improvements.

Oversight and QA tool

Provider Comparison

- Select provider(s):
- 10000718 - Bedford College
 - 10000654 - Berkshire College of Agric...
 - 10000712 - University College Birming...
 - 10000720 - Bishop Auckland College
 - 10000747 - Blackburn College
 - 10000754 - Blackpool and the Fylde Co...
 - 10000794 - Bolton College
 - 10000812 - Boston College
 - 10000824 - Bournemouth University
 - 10000825 - Bournville College of FE
 - 10000840 - Bradford College
 - 10000878 - Bridgwater and Taunton Co...
 - 10000886 - University of Brighton
 - 10000944 - Brockenhurst College
 - 10000950 - Brooklands College

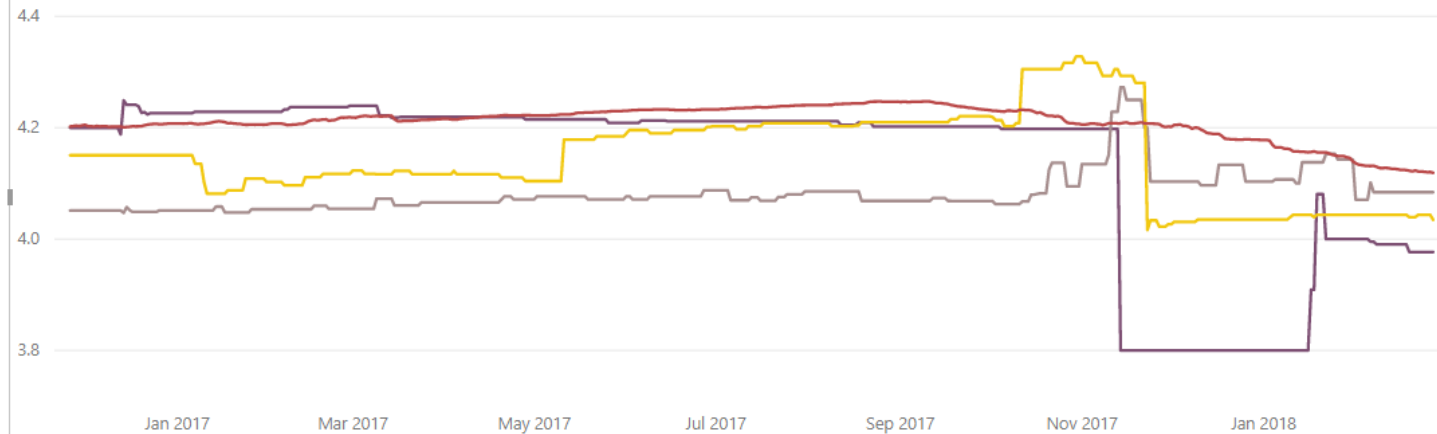
Limit provider selection to a specific provider type:

All

Limit provider selection to a specific country:

All

The Collective-Judgement Score by Provider Over Time



26/11/2016 27/02/2018

A breakdown of the collective-judgement scores (combinedMovAvg) for each chosen provider over the selected time period:

filterName	postedDate	wuRatingCount	wuRatingSum	fbRatingCount	fbRatingSum	scRatingCount	scRatingSum	combinedMovAvg	change60
	27/02/2018	206	825	8	27	2	7	3.98	0.18
	27/02/2018	156	627	15	68	7	32	4.08	-0.02
	27/02/2018	202	793	27	133	1	2	4.03	0.00
	27/02/2018	34464	140235	12207	52999	2007	7276	4.12	-0.06
	26/02/2018	206	825	8	27	2	7	3.98	0.18
	26/02/2018	156	627	15	68	7	32	4.08	-0.02
	26/02/2018	202	793	27	133	0	0	4.04	0.01
	26/02/2018	34672	141120	12213	53058	2005	7272	4.12	-0.06

Wider issues and future research

- Defining what is relevant to 'quality'
- Are we replicating flawed measures?
- Goodhart's law
- Ethical and privacy concerns
- Perception/acceptance by students, staff and providers
- Additional data sources
- More granular quality measures.

Any questions?

Feedback examples

‘Excellent college with professional and competent staff. The International Office is very specialist and available with student. Very good experience. Thank you!!’

‘My overall uni experience is an bad one, I thought I would really enjoy uni and [provider redacted] really stood out and was bigged up to me but since being there, it's been awful! Not one good thing I could say about the place!’

‘Terrible. Really, don't go to [provider redacted], don't do it! You are wasting so much money just for being in a nice building. ‘Nice’ until you find that having class in an open space along with 2 other courses is a hell. No skilled people, no real teaching, low level of competence. Don't do that! Just go on the website and think why there are no details about the courses: it's because they don't have a structure!’

Feedback examples

‘... Teachers are not skilled, and I wonder how the uni is allowed to provide MSc title. They shouldn't as I (undergrad) have more tech skills than the tutors. Really: don't do that. Unless you are a very beginner, do not expect any serious quality of things in that place. Your application will be accepted regardless of your background: the result is that no-one in my course has any experience in this field other than me and I'm basically doing nothing while they discover the basics of the field....’

‘The last year I was there I loved it with great staff and fun in the courses but this year it's fallen because since staff have left the new staff just expect students to get on when they don't even know what they're doing, plus the courses mostly have exams now too, whereas before it was just done on work and talent.’



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