#### Joy & Happiness, or Anger & Disgust? Getting intimate with Blue ML



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#### Experiences with Blue ML

- Overview of Blue ML
  - Discussion do you categorise student comments currently?
- Using Blue ML to analyse National Student Survey (NSS) results
  - See what students value
  - Find differences in what students choose to comment on
  - Provide richer reports to departments
  - Compare to PTES
- Discussion How to make the most of Blue ML
- Conclusion



# Birkbeck, University of London

- Central London.
- Evening university.
- High proportion of mature students.
- Many combine study with f-t work / family commitments
- 11,000 students.
- Even split of bachelor's and graduate students.
- We have used Blue for 3 academic years.





# Blue ML

- Blue ML categorises free text comments to help improve analysis and share useful results
- Potential to save lots of time in reviewing and analysing comments
- Promises deeper and richer analysis that available previously
- We've had access to a trial of Blue ML

#### **Discussion: What do you use free-text comments**

A) Do you manually categorise free-text comments?

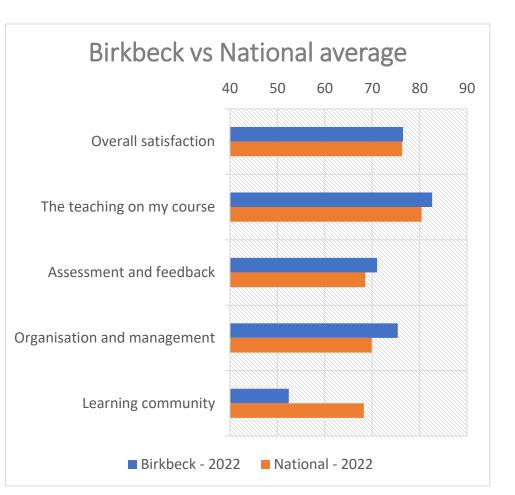
B) Do you analyse the comments, and does it produce useful analysis?

C) Are the comments passed to academic units without analysis, who may or may not analyse the comments



### National Student Survey

- All final-year students in UK invited to complete the NSS.
- Universities are ranked nationally, so NSS has become an important metric for universities.
- Birkbeck does well in some categories; but poorly in others eg Learning Community category.
  - Is it because our students (evening students, combine with f-t work / family commitments) don't care as much about Learning Community?
  - But does Learning Community actually matter to our students?





#### Blue ML

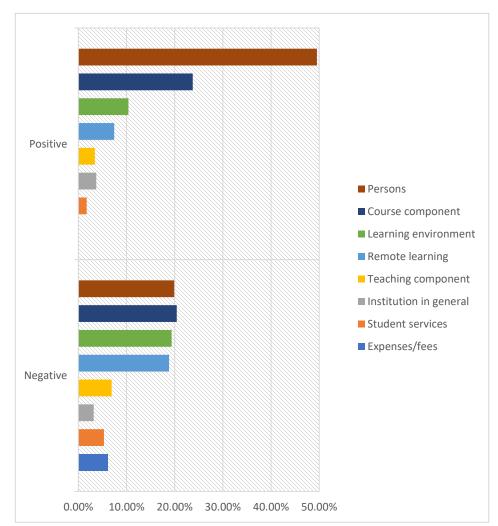
- This year, we ran the comments through Blue ML.
- Initial results are back within a few minutes.
- Some work involved in checking the categorisation, and for categorising the comments that Blue ML didn't capture.
- Full set of categorised comments ready to analyse, and to bring a paper to the final Education Committee of the academic year and circulated to academic departments – would not have been possible without Blue ML.



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# National Student Survey

- By looking at the categories that students choose to state, it becomes very clear what students like about their experiences.
  - High % of students mention 'Persons' when they write a positive statement consistent with the good NSS scores in Teaching
- Negative comments are more dispersed.
  - Learning Community only one of 4 main areas of interest
  - Suggest that Learning Community isn't a particular worry for students, despite doing poorly in the '% agree' results





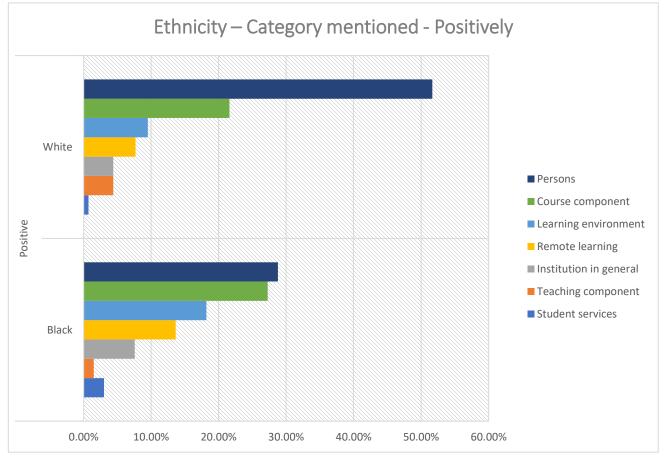
# Different experiences by demographic

Ethnicity:

- White students much more likely to mention Persons positively.
- Black students mention *Learning Environment*.

#### Age:

 30% of young students mention Learning Environment negatively, vs only 16% of mature students





#### Different experiences over time

- Our analysis of module evaluation responses makes it easier to see what matters to students across the academic year.
  - Many comments expressing dissatisfaction with Assessment and Feedback in Autumn term.
  - By Summer term, no comments on Assessment and Feedback.
  - Students get to know how long it takes to receive feedback, and are generally happy once they get used to the cycle.



#### Providing richer reports to departments

Comparing the old reports to departments, where it was difficult to provide specific areas that need work, tend to focus on small changes in satisfaction rates.

e.g. "83% of students in the Department of History expressed satisfaction with Learning Resources. The results are 2% higher than last year, and have achieved the College average."

With the new reports that also incorporate the Blue ML categorisation can be much more actionable:

e.g. "The negative students comments on Learning Resources highlight that the departmental VLE was not updated, and that some lecturers struggled to use the online tools effectively..

Please review the comments below and identify improvements." Student Comment

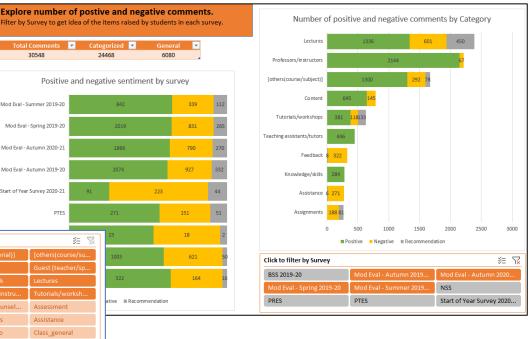
More work needs to be done on how the teachers
uses the online tools e.g., writing materials.
Not easy using Microsoft on iPads.
Some courses could've been managed better. A
couple of times, there were teachers that could not



# Comparing bachelor vs graduate students

We also take part in a similar survey for graduate students. We're now able to compare the categories raised by students in both surveys.

We previously had this information, but didn't have a way of analysing it let alone using it productively.



Explore qualitative comments by Category and Attribute.					ž 1¥			Category		
Choose the surveys to view the comments on. You can then filter the comments acording to the Cateogy and Attribute			Negative F	ositive Ambig	u Recomm	n	[other(mate	erial)]	[others(cours	
that has been assigned to the comment. You can further filter the comments by Positive/Negative/Recommendation. If							Content		Guest (teache	
comments are curtailed, click on Column C and 'Wrap Text'. Click on the Plus/Minus to expand or collapse an Attribute.							In-class worl	k	Lectures	
			BSS 2019-20	Mod Eva	l - Autumn 2	^	Professors/i	instru	Tutorials/wor	
tegory 🔽	Attribute	Number of TResponse comments	Mod Eval - Autu	ımn 2 Mod Eva	l - Spring 201		Advisors/co		Assessment	
[other(material)]	rittingute	2	Mod Eval - Sum	mer 2 NSS			Assignments		Assistance	
[others(course/s ubject)]	= Engagement	All equally as they built up week by week. Very interesting module.	PRES	PTES						
ubject/j		All of the course was interesting to learn about. I have gained knowledge and understanding about how	Start of Year Su	rvey 2		~	Audio_video		Class_general	
		economics influence businesses. 1					Class_partici	ipation	Class_size	
		All the modules were very interesting , engaging and detailed. The aspect of the modules that was most interesting and best was class conflict and its theories.N Plot Area 1	Filter by respons	by response to Overall Satisfaction (Mod ᇶ 🛛 🔀			Concepts/to	pics	Course materi	
		all was new for me but interesting 1	Definitely agree Definitely disagree Mostly agree			^	Course/subj	ject	Discussion	
		Brian made the classes very interesting and the topic a lot more interesting than i ever thought possible. Very encouraging and engaging tutor - thank you					Examples		Exams/quizze	
		Amare was also good - thank you 1					Expectation	s/obj	Explanations	
		Challenging but stimulating. Extremely important to study of geology					Feedback		Field trips	
		Useful across many subjects.	Mostly disagree	tly disagree			Grading		Group project	
		Cyber crime, learning about e-commerce business, the module was interesting coupled with examples,					Instructions		Interactions	
		scenarios. 1					Knowledge/	/ekille	Lab techniciar	
			Attribute		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	$\mathbf{k}$		SKIIIS		
		Dave was really insightful and the course work was really interesting and allowed for a lot of personal preference in terms of sport which was better as I thought it would be a lot of football which Ii¿½m not into 1	Agreeableness	Clarity	Dedication		Labs		Learning atmo	
			Engagement	Extensiveness	Helpfulness		Notes/hand	outs	Online_resou	
		Every class was well structured and very interesting. I liked using practical examples of past cases to					Practical asp	ects	Practical learn	



11/00/2022



#### Desired enhancements to Blue ML

- Would like Blue ML to present me with uncategorised comments, or those where the machine has less confidence in its categorisation, to manually enter a category.
- Make it easier to change categories of comments.
- Being able to compare results with other institutions
  - Explorance to work with NSS to undertake the categorisation for the sector nationally



#### Discussion: How to make the most of Blue ML

A) Could Blue ML lead to different types / focus of surveys?

B) Is it better to ask for comments on specific areas, or to have very open questions?

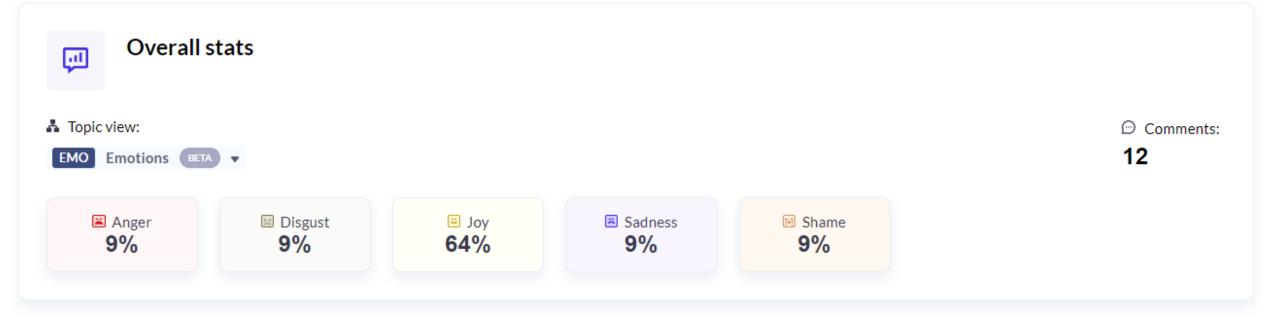
C) To what extent should we direct students before asking them to write the free-text comments?

D) Will we need to have positive and negative focussed questions, or just ask students for any comment?

E) If increase focus on student comments, take longer to complete, how best to persuade students of the benefit of spending that time to provide meaningful comments.



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#### Joy & Happiness, or Anger and Disgust?

- Blue ML has great potential and what it trying to achieve.
- Requires more development on categorising the topics and sentiment correctly
- New tool = new possibilities
- Possibilities for exploring new format for surveys, focused more on student comments.



#### Joy & Happiness, or Anger and Disgust?

#### New tool = new possibilities

17/08/2022

- 1. New ways for collecting feedback:
  - Possibility of running one-question free-text survey for students to provide feedback at any time during the year, and use Blue ML to track topic / sentiment over time (eg at what point does exam stress kick in, what are particular issues most relevant to students at different points of the year).
- 2. Use after a focus group or interviews.
  - Possibility for machine transcribing of students' comments, separate into sentences, then run that through Blue ML.