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Student Academic Experience Survey 2022

(high % is better)

Comparison of key measures

Low anxiety: 35%, 37%, 18%, 13%, 14%

Happiness: 32%, 33%, 14%, 11%, 16%

Life worthwhile: 32%, 33%, 15%, 12%, 16%

Life satisfaction: 25%, 26%, 11%, 6%, 12%

■ ONS 2020 ■ ONS 2021 ■ SAES 2020 ■ SAES 2021 ■ SAES 2022

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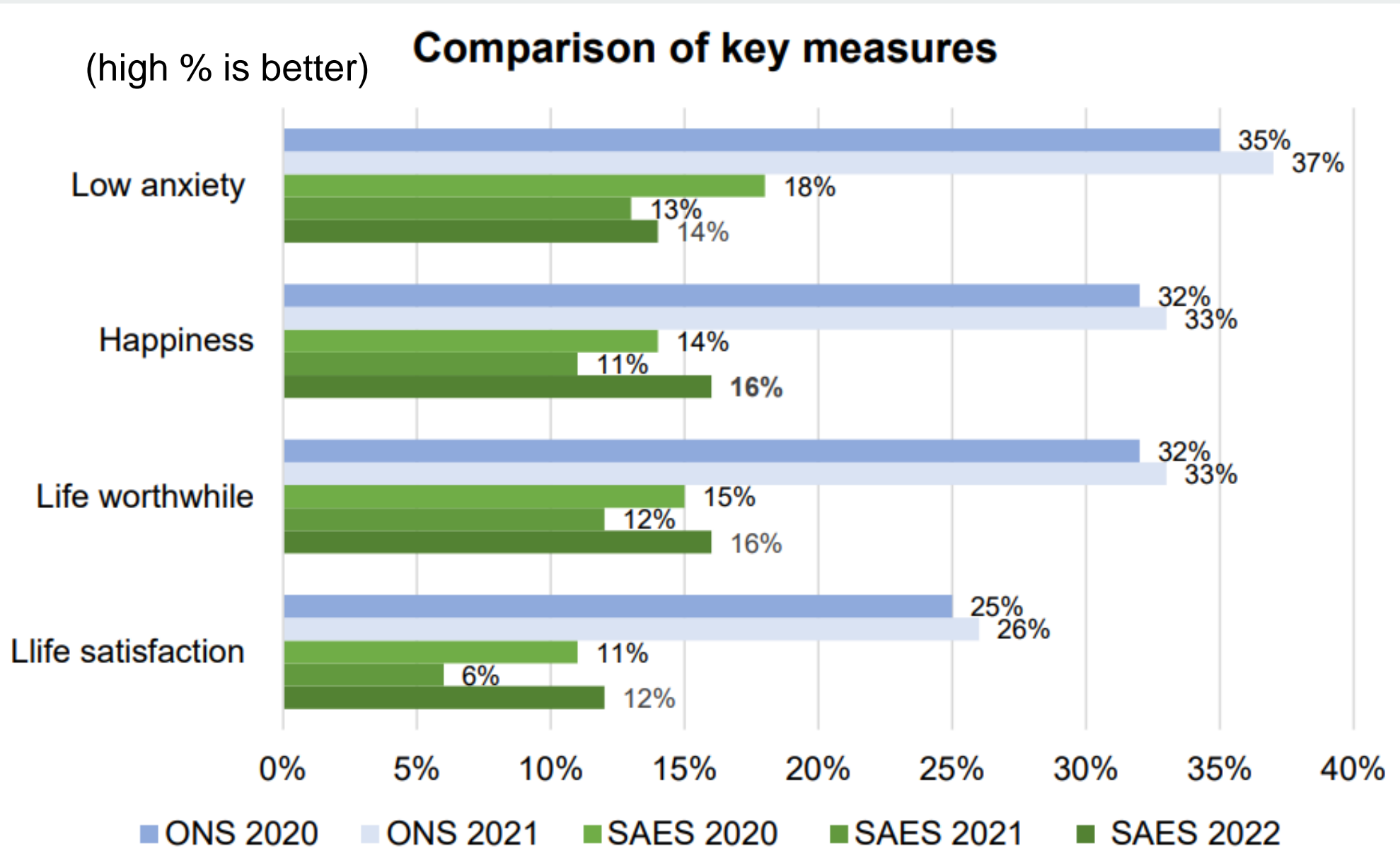
2017 Universities United Kingdom (UUK) #StepChange report:

"Institutions are encouraged to align learning analytics to the mental health agenda to **identify change in students' behaviours** and to **address risks** and **target support**."

https://www.universitiesuk.ac.uk/what-we-do/policy-and-research/publications/stepchange-mentally-healthy-universities

What is Learning Analytics?

"the measurement, collection, analysis and reporting of **data about learners** and their contexts, for purposes of understanding and optimising learning and the environments in which it occurs"

1st International Conference Learning Analytics & Knowledge, 2011

Engagement analytics
- Building access
- Attendance
- VLE
- E-resources
- Library
- Submissions

Wellbeing analytics
- Personal circumstances (eg extenuating circumstance requests)
- Differences from peers (eg younger/older than students on course, English fluency)
- Social deprivation (eg enrolment questions, financial aid questions)
- Accommodation status (enrolment questions on location and who they are living with)
- Change in behaviour (eg VLE engagement)

Reproduced from Jisc, "Student analytics A core specification for engagement and wellbeing analytics"

How can Learning Analytics support wellbeing?

- Studies support that student **engagement** and wellbeing are closely intertwined*

- Detecting potential engagement concerns:
  - Lack of interaction
  - Over-interaction
  - Late work
  - Changes in behaviour patterns

- Early intervention/support to aid wellbeing

*Boulton *et al.* (2019), Ahern (2018), McKeering *et al.* (2021) and other references

Wellbeing and engagement

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[Boulton et al., 2019](#): Weekly survey of campus-based UG

Engagement activities (right) + "Happiness" and "Effort"

- Positive correlations between most activities (and with happiness)

- Suggests engagement correlated with wellbeing

| Learning activity	Description
Work with friends	Work with friends on coursework or revision.
Interact with lecturer	Talk with a lecturer outside of a scheduled teaching session to aid their learning.
Use info app	Using the mobile phone app where students can access timetable, module results, and get emails etc.
Use VLE	Using the university's virtual learning environment.
Attend teaching session	Attend a scheduled lecture, seminar or tutorial.
Access library	Access library resources, either physical books or online.
Use sports facilities	Go to the on-campus gym or play sports (outside of a club).
Use career services	Attend events created by the university to aid in students' future employability.
Use SU facilities	Made use of student union facilities such as the student-run advice helpline.
Use retail facilities	Buy things on campus (a proxy for a student being on campus).
Catering facilities	Specifically buying food on campus (also includes accommodation food).
Use social media for learning	Finding information needed for learning on social media sites.
Use the internet for learning	Otherwise using the internet for learning.
View past exams	Revising for exams by looking at past exam papers provided by the university.
Go to clubs or societies	Attend sports clubs or societies outside of learning.
Talk to year rep.	Talk to an elected student representative who liaises with the university concerning problems
Accessed lecture recordings	Viewed recorded lectures or other teaching sessions for revision or for catching up on missed information.

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Correlation of online learning activities
(undergraduate first year core modules)
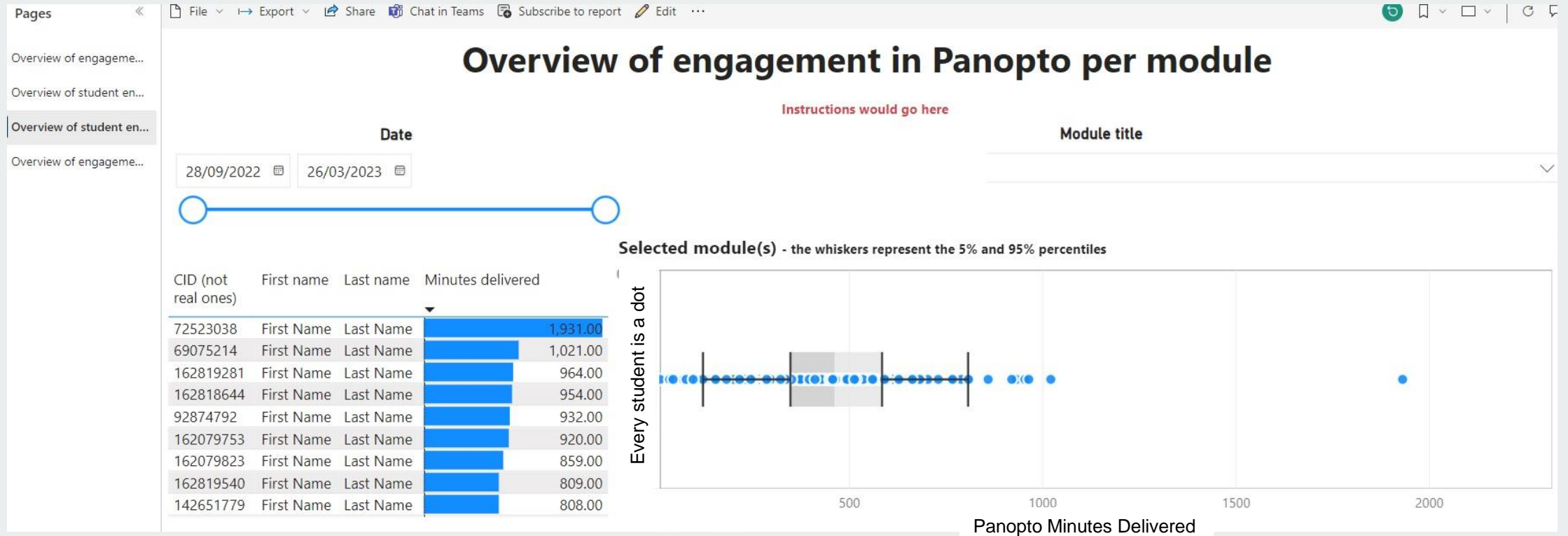
Chemistry
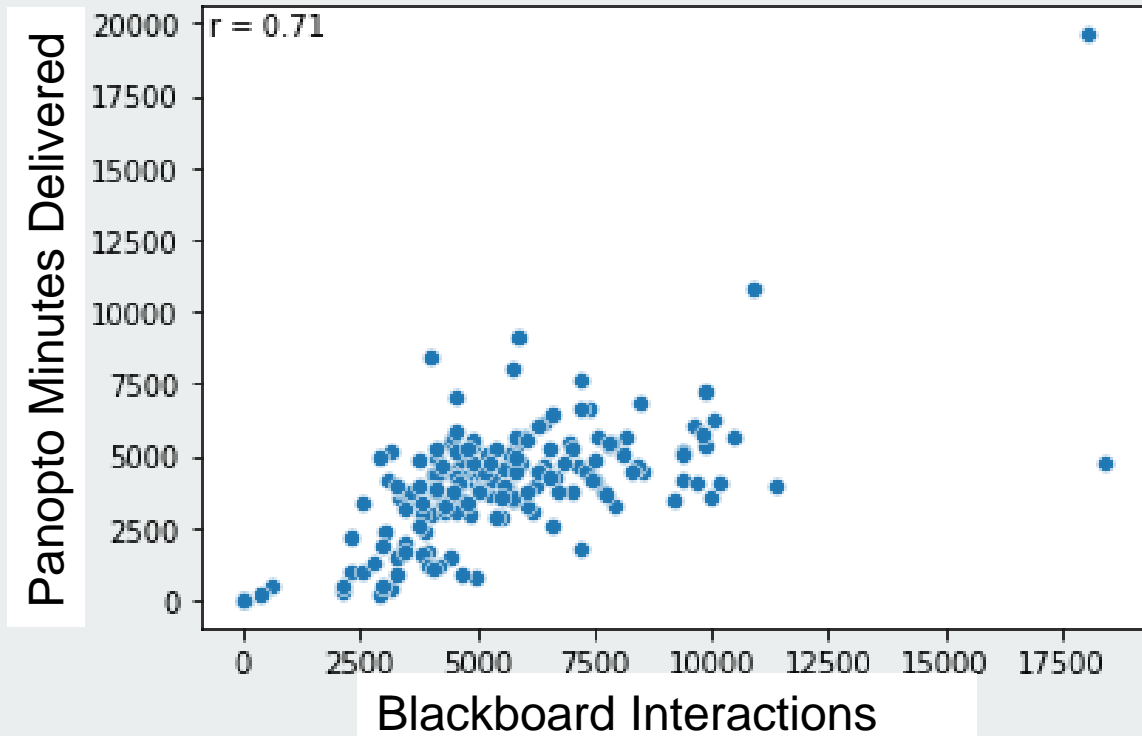
Mathematics
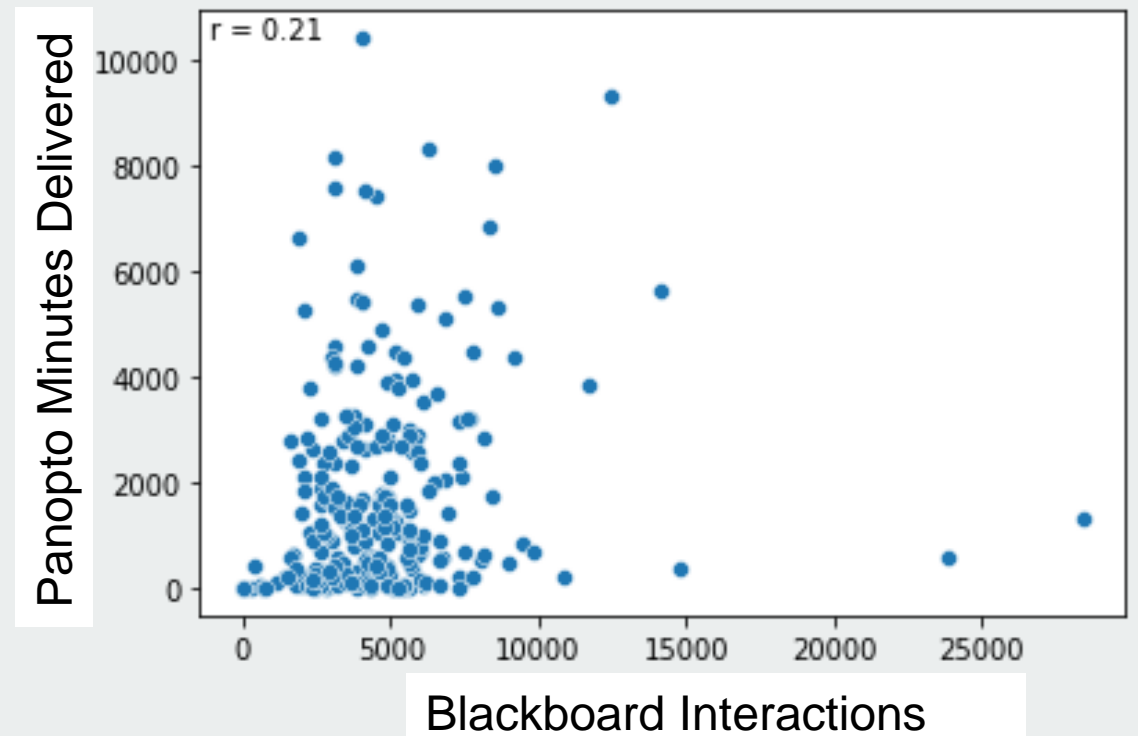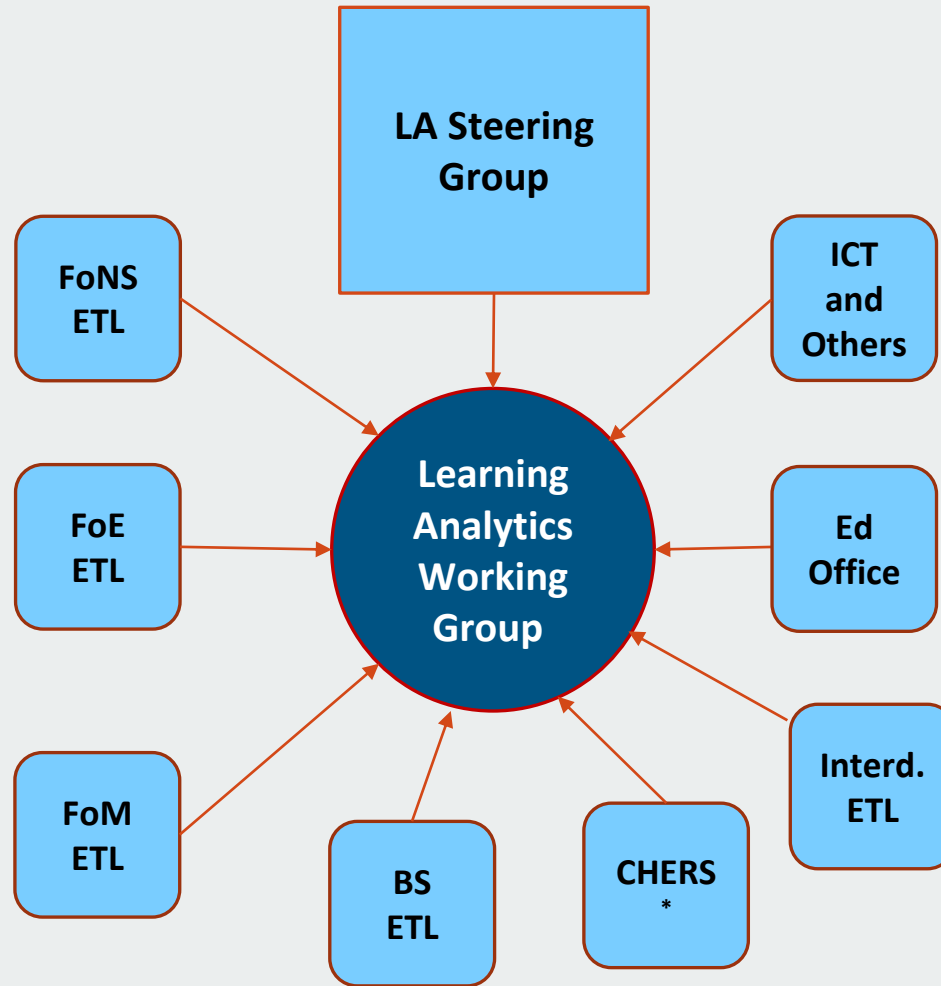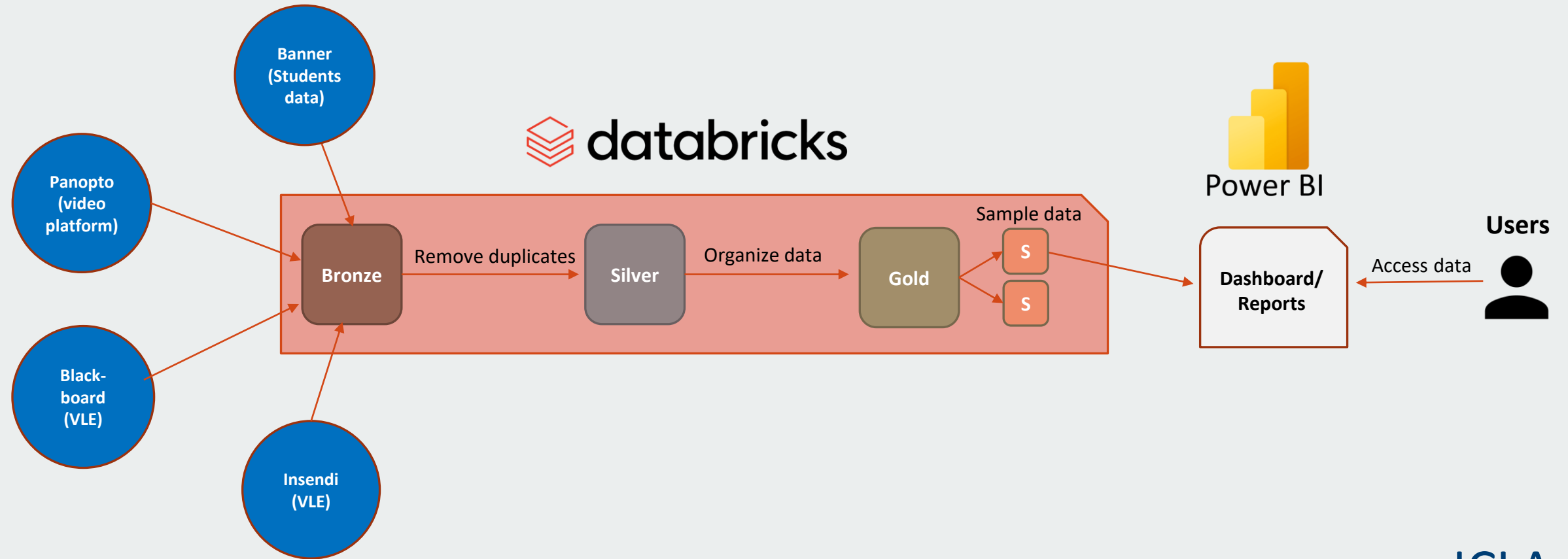
What data can we use as indicators of wellbeing?
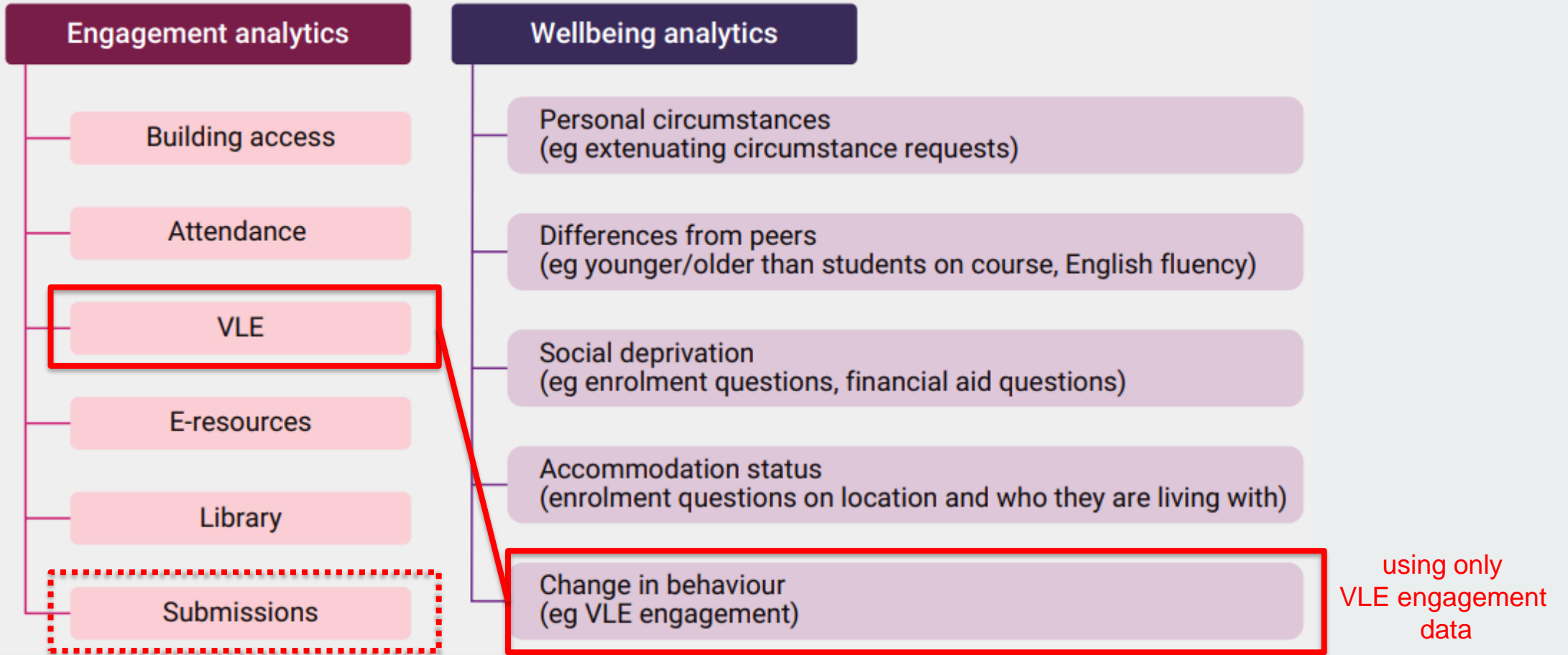
Reproduced from Jisc, "Student analytics A core specification for engagement and wellbeing analytics"
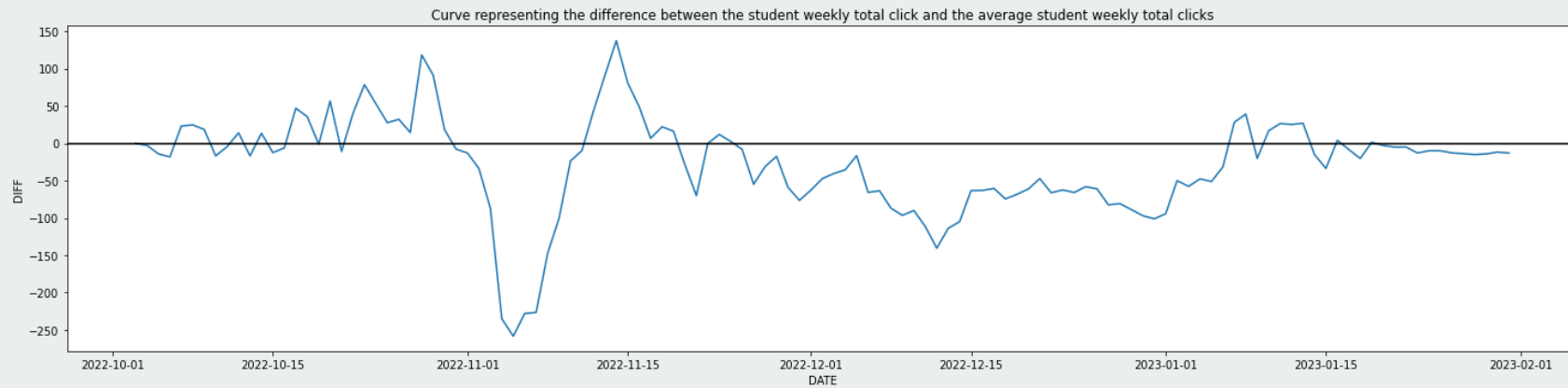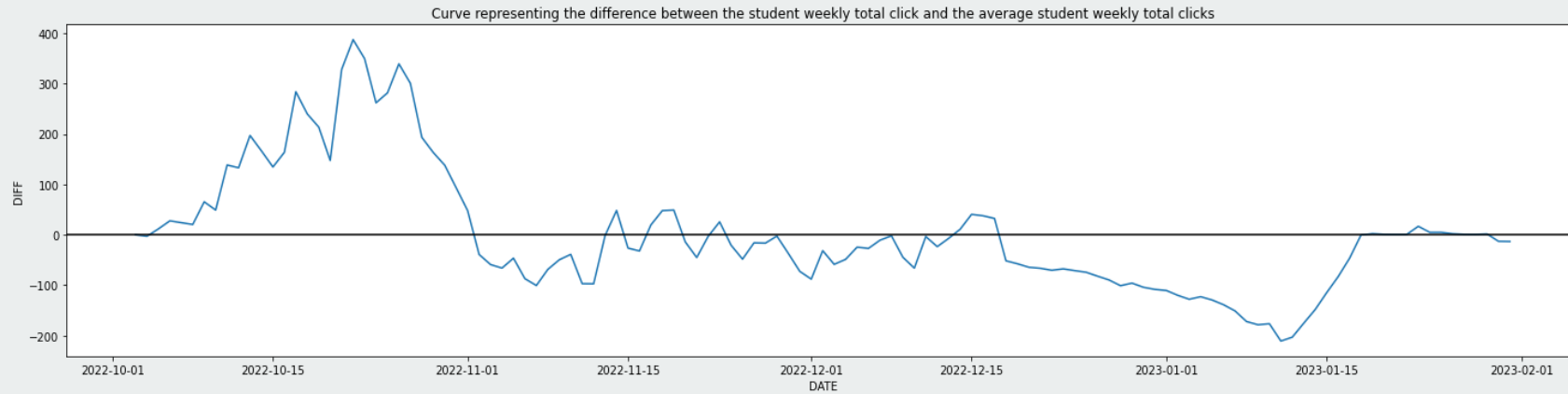
Wellbeing potential indicators I
Difference from peers in the engagement with VLE

Data: Panopto data for one module

ICLA

Wellbeing potential indicators II
Change in behaviour in the engagement with VLE

Curve representing the difference between the student weekly total click and the average student weekly total clicks

Curve representing the difference between the student weekly total click and the average student weekly total clicks

Data: Blackboard data for 4 first year core modules in Chemistry

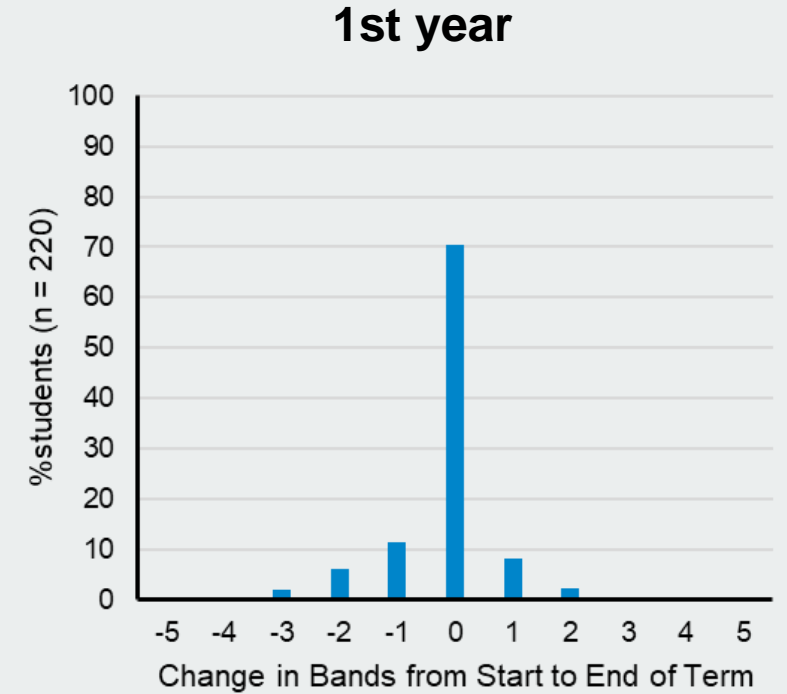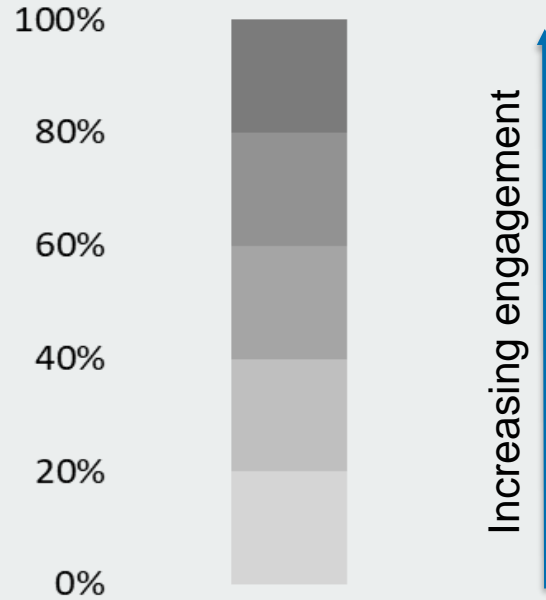Imperial College London

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Our context

ICL Student Experience Survey

Q: Overall, I am satisfied that the staff within my department are interested in my wellbeing
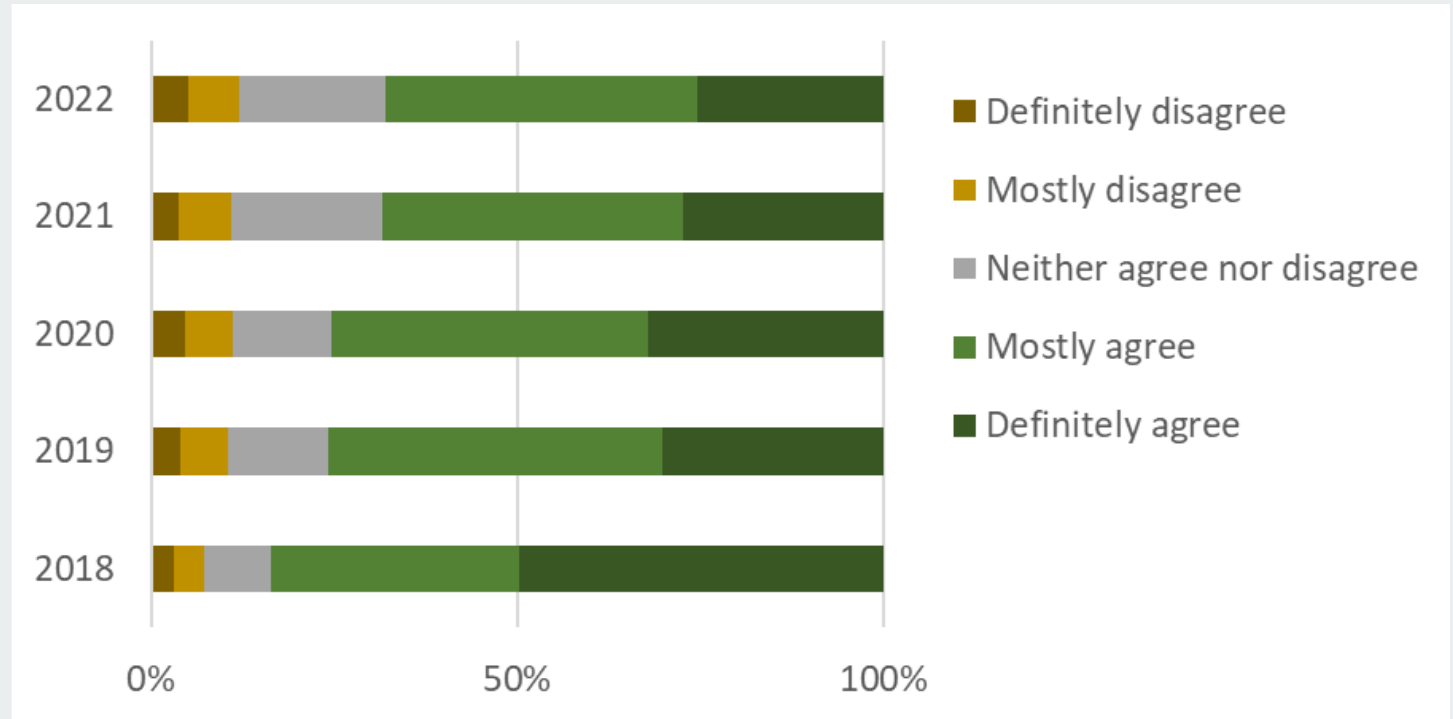
➤ Proportion in agreement has reduced over time

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Our context

1st year

Dept. Chemistry engagement monitoring

Case for

Looking for changes in behaviour

Identification at start of Autumn term

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Ethical considerations

Transparency and trust
(Roberts et al. 2016; Jones et al. 2020)

Student access
(Sclater & Bailey 2015, updated 2018)

Enabling positive interventions and minimising adverse impacts
(Harvey & Keyes 2020)

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Limitations

Proxies > signs
(Selwyn & Gasevic, 2020)

Easy to make incorrect inferences and patterns may not indicate a problem
(Sarsfield & Conway, 2018)

Socio-technical interactions > outcomes
(Olney et al. 2021)

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Final thoughts

- Imperial College has a duty of care to its students

- Learning analytics can provide a limited, but valuable part of the picture

- Ethical issues to navigate in partnership with students

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Questions?

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Moira Sarsfield, Director of the FoNS EdTech Lab

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ICLA colleagues

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