

Realise *Ambitions*

At Dublin Business School

A cross-discipline systematic investigation into the potential causes and contributing factors to cases of Academic Impropriety (AI) across QQI validated programmes: First stages.

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The Project Introduction

3rd Level challenges of the last few years

Movement to online exams

Data analysis

Qualitative analysis

This project will impact the teaching and quality of Dublin Business School as well as the wider HEIs across Ireland. These impacts will be seen in the effectiveness of assessment and examination as well as robust evidence-based research to be shared across the Irish and international education sectors through research outputs and direct CPD opportunities within DBS and across the Irish educational sector.

Aims & Objectives

Aims:

To identify trends and underlying causes which affect the issue of Academic Impropriety over a period of time at DBS in comparison to wider sectoral trends.

Objectives:

Increase the quality standards around assessment and ensure effective communications of those standards to staff and across the sector.

Perform a quantitative and qualitative analysis of components which directly or indirectly influence Academic Impropriety across disciplines.

Redevelop a culture of academically acceptable ethical behaviour whilst broadening the understanding of components that can adversely affect Academic Impropriety.

Provide robust CPD opportunities for staff in the area.

Partners and Possibilities

In-house research project that we hope will resonate with the wider sector.

Cross discipline in analysis and structure.

We do hope to utilise wider connections within the HECA colleges to provide opportunities for the cross-fertilization of ideas as well as offer wider CPD opportunities.

We hope to be able to compare our data to other wider data and research in the area.

Deliverables: what are we trying to do?

Evidence-based approach towards the revision of exam-design training materials.

A significant revision of the Online Exams policy utilised within our organisation with the expectation of allowing it to be mirrored in other QQI dependent colleges and universities.

The development of new approaches to programme design across the various departments within our college, and finally an assessment strategy for programme validations and re-validations moving forward.

Publications: A peer-reviewed publication.

Conference presentations: PARC 23 (done!), Academic and Research Integrity Conference Ireland 2023, University of Galway Oct 4th-6th 2023 (done!), HECA Research Conference, Nov 14th 2023 (at DBS this year!...and...done!), Aiming for: PARC 24 (TBC)

Staff CPD, wider asynchronous offerings to partner HEIs.

Internal reports for staff and management.

We hope that this project will produce evidence-based contributions to both the National Academic Integrity Network (NAIN) and the Global Academic Integrity Network (GAIN) projects.

Root Cause Analysis of Academic Impropriety on Academic Programmes: A Project Overview

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A Quick Overview

The last several years have provided particular challenges to third level institutions around the area of assessment. Incidents of academic impropriety have long been a concern for the sector, but the move to online exams has highlighted this further. This study aims to explore data collected on cases of academic impropriety over a several-year period at Dublin Business School. This data will be trawled using machine learning techniques in order to expose any peculiar data trends. A series of focus groups will then be carried out using students and staff as subjects with the hope of drawing further conclusions and relationships with the data.



Aims

We hope to produce an evidence-based approach towards the revision of exam-design training materials through a careful analysis of the processes at our institution compared to wider data across other HEAs. We also intend to produce a significant revision of the Online Exams policy utilized within our organization with the expectation of allowing it to be mirrored in other QQI dependent colleges and universities. We envision that this research will lead to the development of new approaches to programme design across the various departments within our college, and finally an assessment strategy for programme validations and re-validations moving forward.

The emergence of dishonesty/misconduct continually appears as one of the major challenges (Elsalem, et al 2020) since adopting hybrid and hyflex learning.

QQI has stated “while it can occur in a written examination, plagiarism arises more obviously in coursework and project work” (QQI 2022) the prevalence of online examination though means this is no longer the case...

A Few Points



Earlier concepts of written exams before the response to COVID-19 would have been in light of the traditional exam-hall style, the deployment of online-style exams has complicated the picture and thus, in some ways taken on the vulnerabilities of coursework to misconduct.

Institutional and student reputations affected by plagiarism and cheating are best addressed through a multi-pronged approach at a programme and institutional level (National Forum 2017).

But, some current research suggests the replacement of exams with alternative methods was far more preferable to online and especially proctored exams (Elsalem, et al 2020).

Thus, more questions than answers and the need for this research!

Work Packets

Work Packet 1:

Global analysis of data and research..

Work Packet 2:

Quantitative analysis of existing DBS data will begin by utilising existing metrics for AI and cases across programmes, disciplines, intakes and semesters to identify trends, or potential high risk content.

An overview will subsequently be derived to identify programmes and modules of higher instances of academic impropriety.

Studies of learner engagement will be captured with appropriate metrics, as well as supplemented with Emotion classification using NRC Lexicon in Python.

Work Packet 3:

Qualitative analysis, in targeted focus groups and lecturer feedback sessions, is designed to glean insights from the quantitative data previously derived. In parallel, anonymised feedback sessions will be undertaken with lecturers to qualify their personalised view of AI.

Work Packet 4:

Analysis and synthesis will be undertaken throughout the process, with a goal to identify parallels or challenges between the cases, and understanding of learners and lecturers.

Work Packet 5:

Outputs: The researchers intend to deliver a series of both live and online seminars highlighting the results but also actioning the outputs of the project.

References:

-L. Elsalem, N. Al-Azzam, A. A. Jum'ah, and N. Obeidat, "Remote E-exams during Covid-19 pandemic: A cross-sectional study of students' preferences and academic dishonesty in faculties of medical sciences," *Ann. Med. Surg.*, vol. 62, no. December 2020, pp. 326–333, 2021.

-Quality and Qualifications Ireland, Assessment and Standards, Revised 2022. 2022.

-National Forum for the Enhancement of Teaching and Learning in Higher Education,

"Enhancing Programme Approaches to Assessment and Feedback in Irish Higher Education:

Case Studies, Commentaries and Tools," *Natl. Forum Enhanc. Teach. Learn. High. Educ.*, 2017.

Next Steps

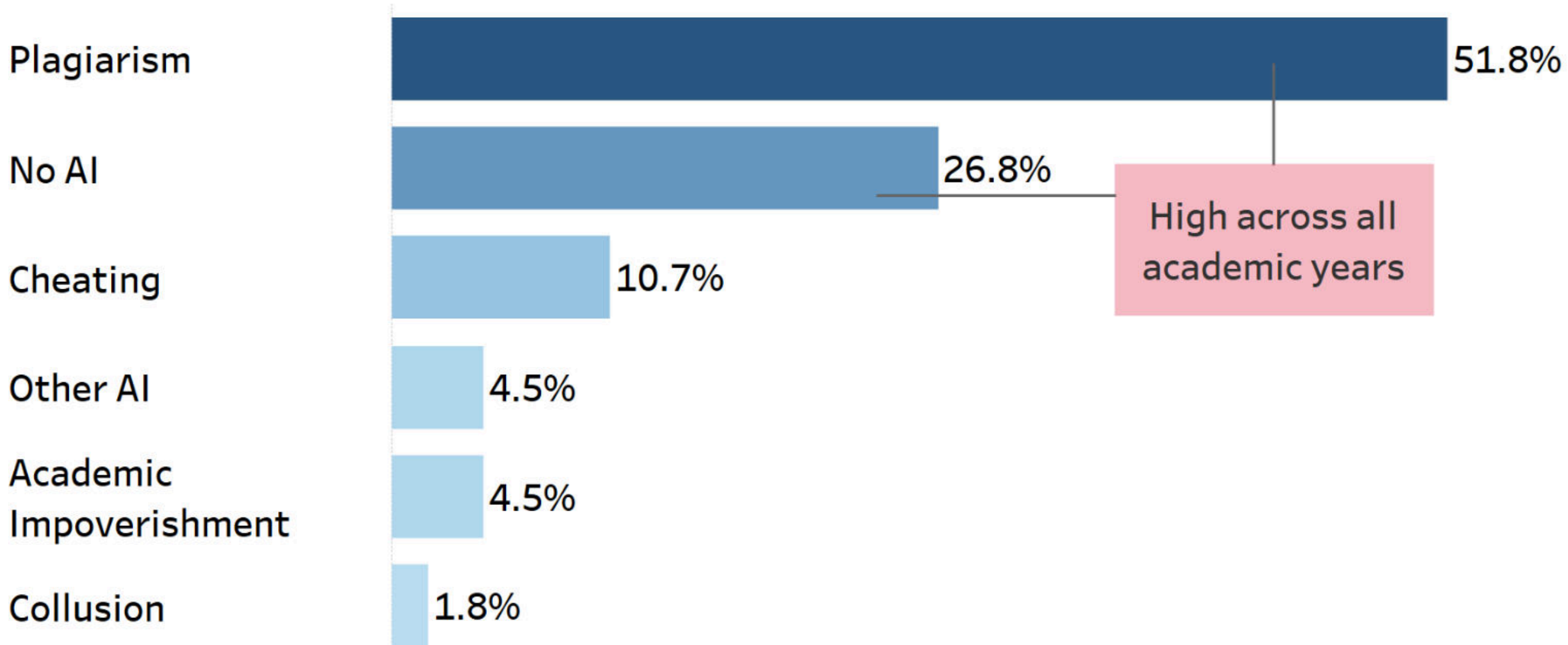
- 1) Global analysis of data and research (large parts done).
- 2) Quantitative analysis of existing DBS data will begin by utilising existing metrics for AI and cases across programmes, disciplines, intakes and semesters to identify trends, or potential high risk content (discussed today).
- 3) Qualitative analysis, in targeted focus groups and lecturer feedback sessions, is designed to glean insights from the quantitative data previously derived.
- 4) Analysis and synthesis will be undertaken throughout the process, with a goal to identify parallels or challenges between the cases, and understanding of learners and lecturers.
- 5) Outputs: The researchers intend to deliver a series of both live and online seminars highlighting the results but also actioning the outputs of the project.

Data Analysis Preview

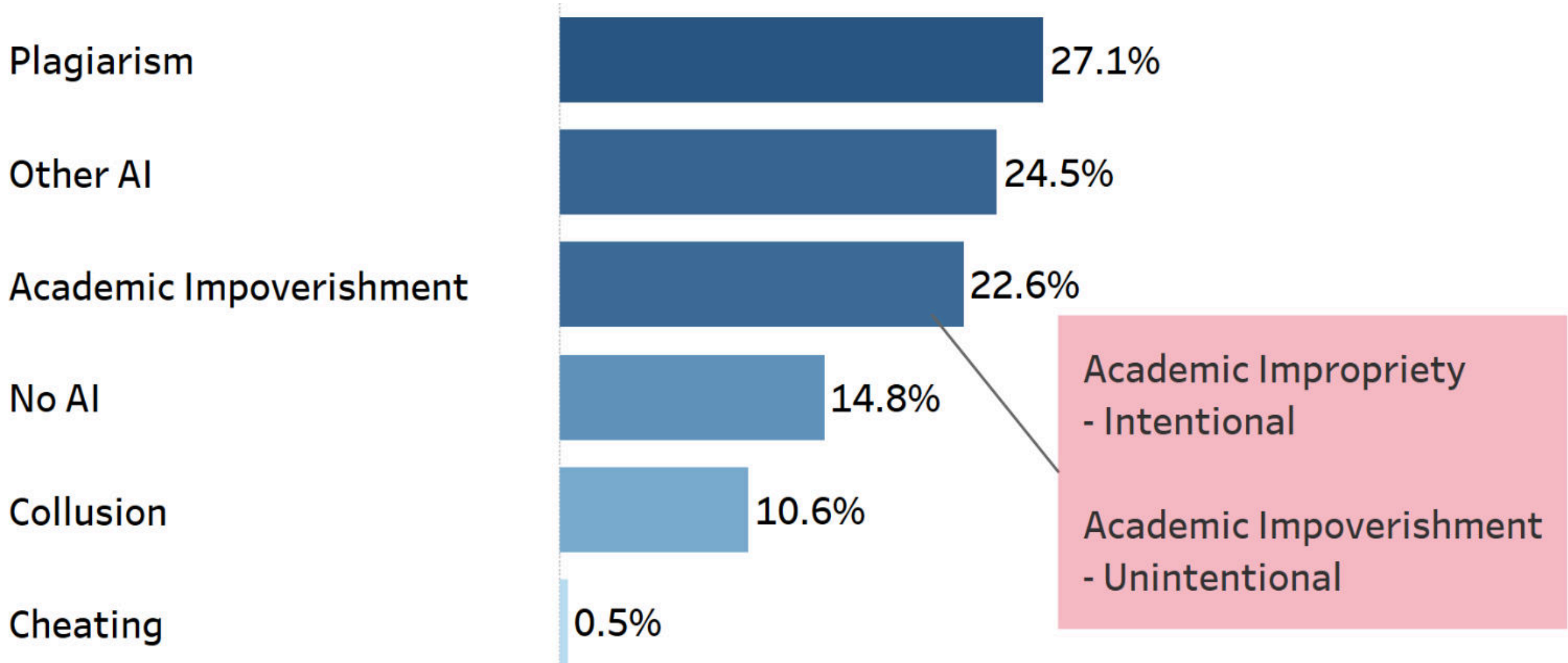
Recently, Kunwar Madan joined the team to assist with data analysis and added another expert eye to the project.

Academic Impropriety data from last five academic years is being analyzed.

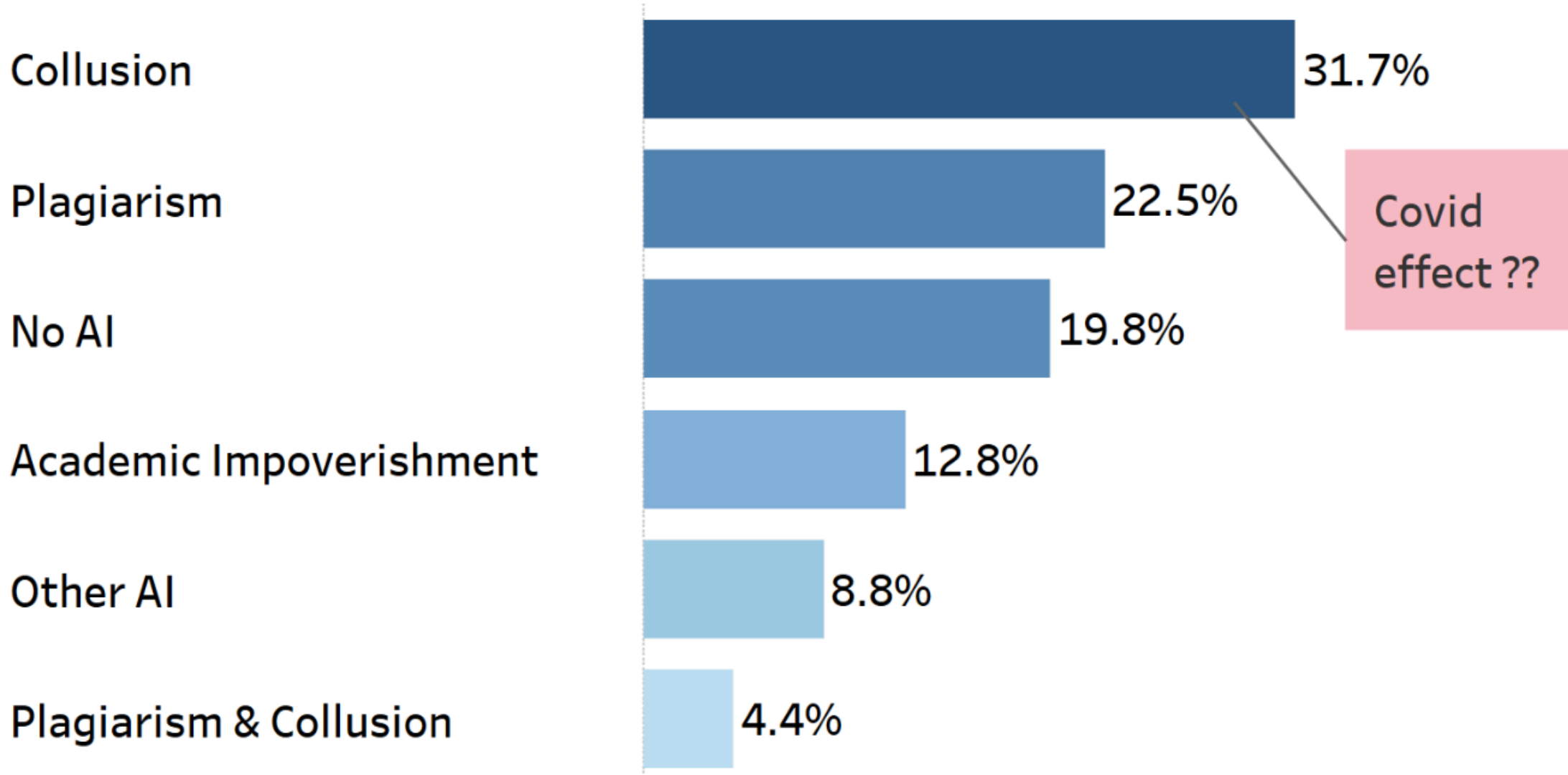
Evaluation of reported AI cases, AY 2018-19



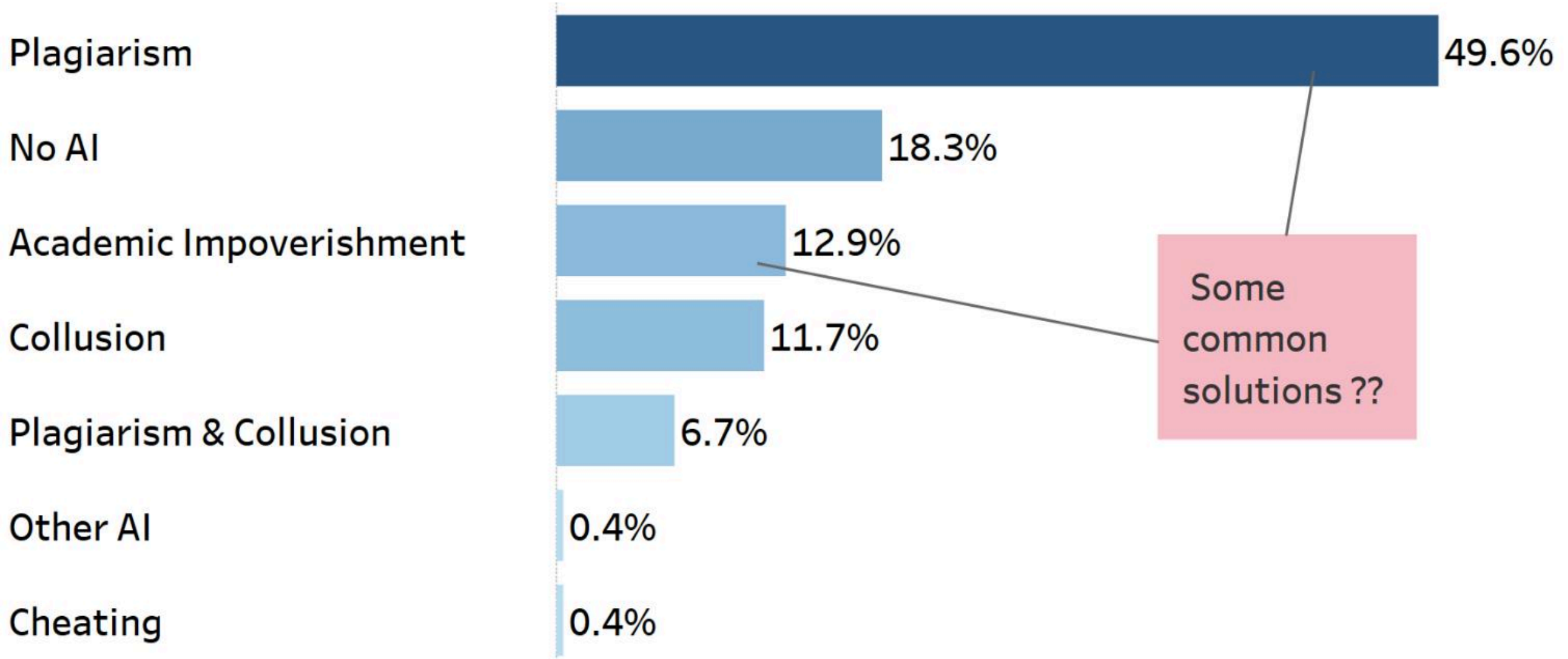
Evaluation of reported AI cases, AY 2019-20



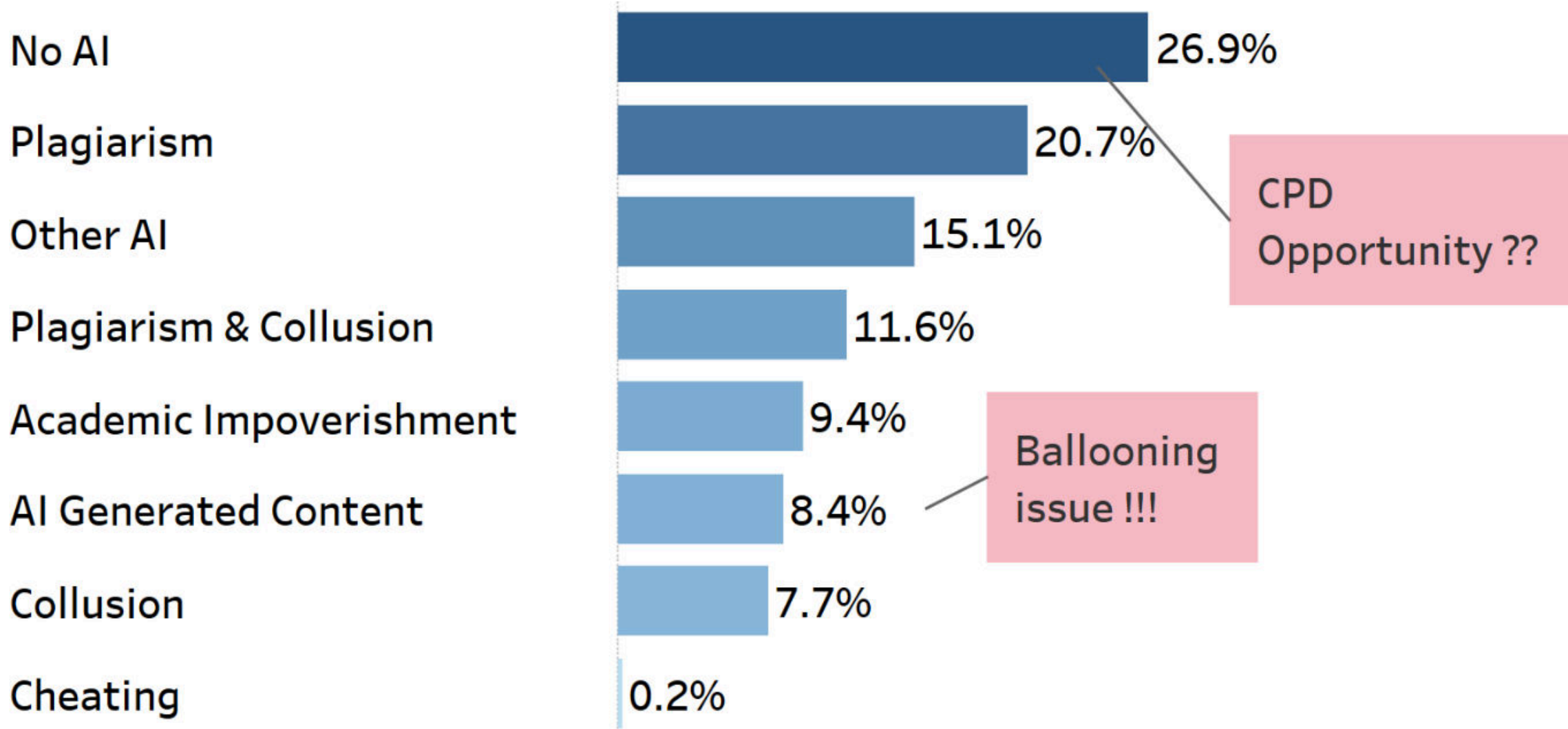
Evaluation of reported AI cases, AY 2020-21



Evaluation of reported AI cases, AY 2021-22



Evaluation of reported AI cases, AY 2022-23



Some questions raised by data

- 1) What more can we do to lower instances of plagiarism?
- 2) What can we do to identify academically impoverished students early?
- 3) What could lead to false alarms when it comes to detecting AI? Could online exams (proctored and unproctored) play a role here?
- 4) How can we encourage faculty/ invigilators to report all suspected cases of AI whilst minimizing the number of false alarms?
- 5) In general, how can we design assessments to minimize the chances of AI?

Conclusion: Pointing to the Qualitative

Ethical approval was granted for the quantitative aspects

The qualitative opened up other questions though around outputs and anonymity

Deciding on these directions will structure further outputs

Focus Groups

Depending on the full data analysis

Staff Focus Groups

Student Focus Groups

Early 2024

PARC 24