Project 2: STEM vs Arts/Humanities Attainment Gaps

1. Background information		
Strand	Black British students	√
	Disability/Mental Health student	
Context	Assessment & Feedback	
	Teaching & Learning	√
	Learning development/skills support	
	University/College systems and processes	
Specific research question	Are there differences in the attainment gap between STEM students and Arts & Humanities students?	
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2. Executive summary

This project aimed to investigate differences in attainment gaps between black British students studying STEM and Arts/Humanities courses. This was in response to a perceived variation in educational experiences encountered in STEM subjects, with a shared understanding amongst student co-researchers that there would be fewer opportunities for racist encounters in the delivery of the subject content, more practical assessment tasks that do not require subjective critical arguments, and therefore less opportunity for unconscious bias in assessment marking. The key method of data collection for this project was a survey distributed to Black British student committees within Cambridge, which asked for student perspectives about the attainment gap in STEM disciplines, and the identification of any factors that might impact the students' academic performance. This was followed by an analysis of the attainment gap data available currently available on the Exam Results Analytics dashboard, comparing the gaps course-by-course. The findings from the survey found that the majority of student respondents agreed with the perception that there would be narrower attainment gaps for STEM subjects. However, the initial and limited findings from the Exam Results Analytics dashboard were a surprise, indicating that the attainment gaps in STEM subjects were similar across the disciplines. This was unexpected, as many possible explanations for attainment gaps referred to poor handling of sensitive issues relating to race, but the subject matter of STEM subjects is considered 'neutral' and 'objective'. The preliminary findings from this project indicate that more research needs to be undertaken to explore the different educational experiences of STEM students, and what educational interventions might address the attainment gaps.

3. Rationale

During the first APP PAR forum, the student co-researchers were asked to discuss and identify the possible reasons for the attainment gaps for Black British students, and to speculate about possible educational interventions that might narrow those gaps. The majority of the student co-researchers in the Black British strand are studying Arts/Humanities subjects, and so the majority of possible teaching

and learning topics tended to focus on their experiences. Many points raised related to poor handling of sensitive subject material relating to race in the curriculum design and the delivery of teaching in Arts/Humanities subjects, which was thought to take a toll on black students. It was also considered more difficult for students interested in certain topics relating to race and identity to find supervisors/material relevant to these topics.

However, the issues canvassed in this first forum are not those that STEM students face, as the subject material is considered neutral and research topics would be easier to research, without encountering explicit or unconscious bias by supervisors. This prompted the questions: is there an attainment gap for black students studying STEM? If there is not, what is it about STEM educational experience that supports black students' academic performance? And if there is, what are the reasons for the impact on the academic performance of black STEM students?

4. Existing evidence

While there is an increasing amount of literature on black or BME student attainment gaps in the UK Higher Education sector, there is relatively little that more narrowly focuses on attainment gaps in STEM disciplines. For this project, a review of literature was undertaken through the library catalogues, and also through a review of presentations and resources produced in UK BME attainment gap conferences.

Recent sector-wide analysis and discussions about BME attainment gaps agree that that it is a UK-wide problem, and that the gaps are not removed by controlling for other factors such as differences in entry qualifications or socio-economic status. This is borne out in Cambridge's Business Analytics Team analysis of the gaps. However, commentators from other universities discuss how the gaps "can vary widely between subjects, with gaps often being lower in Science, Technology, Engineering and Mathematics (STEM) subjects" (University of Nottingham, 2019). In fact, University College London showed some of their data broken down by subject area, and showed stark differences in BAME student attainment between different subject areas, with BAME students actually outperforming their white counterparts in some areas (UCL 2018). This research underscores the importance of gathering the right data and carefully analysing where attainment gaps are present so that positive actions can be appropriately targeted and prioritised. The topic of STEM attainment gaps is the focus of an ongoing research project at the University of Reading (2019), although findings from this project are not yet published.

However, currently it is difficult to gain an accurate insight into the differences in attainment for black British students in STEM and Arts/Humanities subjects. This is because there are such small numbers of black students overall (only 230 altogether in 2019/2020), that statistically significant data is hard to extract. Additionally, although the Exam Results Analytics dashboard currently allows researchers to examine attainment gaps by course or college, and by ethnicity, gender and disability, it does not currently have a tool to further drill down to attainment gaps by STEM vs Arts/Humanities. This is not unusual - the Office for Students attainment gap dashboards also do not show this picture. This causes challenges for initiatives such as the APP PAR project, that seeks to further investigate the reasons for attainment gaps, speculating that they causes may be related to curriculum design, assessment practice and other teaching and learning experiences that support students' academic performance.

A report from the recent Being BME in STEM conference (University of Bristol 2019) points out that in the STEM community, finding up-to-date data is tricky. The report cites a study that looked at the 2012-13 student cohort studying STEM subjects and found that 21% were from a BAME background, and that the majority of BAME students tended to attend universities with large BAME communities. More recently, the Royal Society looked at diversity in the scientific workforce, finding that BAME graduates in 2014

were less likely to progress to scientific jobs than white students: "The relatively high proportion of BAME students in HE should mean there is a secure pipeline of talent coming into STEM subjects...This is not universally the case across the disciplines and there is scope for more proactive support to draw students in to rewarding STEM career pathways."

The data that we do have about STEM and black British students at Cambridge includes the overall numbers of black students by course, provided by the Business Information Team at the start of this project.

- In the current academic year there are 230 black British students (or 1.84%), within a population of 12,480 undergraduate students across Cambridge.
- Of these 230 students, 104 are studying STEM subjects (45%) and 126 study Arts/Humanities subjects (55%)
- NOTE: if, for the purposes of analysing attainment gaps by third year course results, we exclude Medicine, Engineering, Chemical Engineering, Vet Medicine (which all have a fourth year Masters or pass/fail outcome), then only 25 black British students are studying STEM subjects in ways that count for the attainment gaps reporting to the Office for Students.

A quick note:
There is more literature about race and STEM disciplines from the United States. Given the uncertainty of the findings for this project, which started with assumptions about the 'neutrality' and probable narrow attainment gap for black STEM students, it is worth noting the following insights into mathematics education, which is typically considered completely objective, race-neutral, and culture-free:

> "The reality of learning mathematics in White institutional spaces requires that Black students take two sets of notes. The first must be used to pass the test; the second must be used to deconstruct and challenge the faulty mathematical knowledge that has been presented as objective, true, and culture-free." (Martin 2008 cited in Davis 2018, p69)

As Todman (2019) from Kings College London notes, we need to "think about staff as well as students when designing behavioural interventions to address the BAME attainment gap"

References:

- Burke M (2019) Minding the attainment gap for BAME students (2019) Feature article in Education In Chemistry.
- Davis J (2018) Redefining Black Students' Success and High Achievement in Mathematics Education: Toward a Liberatory Paradigm, Journal of Urban Mathematics Education, Vol. 11, No. 1&2, pp. 69–77
- University of Bristol (2019) Report on Being BME in STEM Conference, 6 February, University of Bristol
- University College London (2018) Closing the undergraduate BME attainment gap at UCL, BME Conference Presentation
- University of Nottingham (2018) The Black, Asian or minority ethnic (BAME) Attainment Gap: learning from the student experience, Equality and Diversity in Biosciences, Blog Post by Langley-Davis.
- University of Reading (2019) Student experiences in STEM, BME Attainment at UK Universities: Case studies, Universities UK and NUS, pp25-27
- Todman V (2019) *Think about staff as well as students when designing behavioural interventions to address the BAME attainment gap*, What Works Department: Social Mobility & Student Success, Kings College London

5. Generation of evidence

Stage 1: focus group discussion amongst black British student co-researchers
The student co-researchers in the black British strand of the APP PAR Project spent time in the first and second forums discussing the reasons for attainment gaps and possible educational interventions. Much of the discussion was centered around Arts & Humanities student experiences due to the backgrounds of the students: of the 9 student co-researchers, only one is studying a STEM course. Students discussed difficulties in interpersonal relationships between students and teachers, and the delivery of course content in supervisions and lectures, which all were considered to have racialised overtones and could lead to lack of confidence amongst black British students, if not conscious or unconscious bias by teachers and marker. At this stage, James pointed out that these issues did not appear to him to arise in STEM teaching and learning contexts. He argued, and the rest of the team agreed, that where ideas about race, class, and other sensitivities have the potential to come up often in the learning experience of Arts & Humanities students, the STEM students' practical and technical content means that there are differences in exposure and experiences.

Stage 2: analysis of Exam Results Analytics

The student co-researchers were provided with a breakdown of black student numbers by course across the last 5 years from the Business Information Team. This allowed us to examine where black students were clustered in different courses. We asked for this table to be updated with % to show not just the number of black students per course, but the % of black students per total student population in each course. This allowed us to concentrate on a comparison of STEM and Arts/Humanities courses with the largest proportionate clusters of black British students.

When the co-researchers on this project examined the data visualisations of attainment gaps available to us through the Exam Results Analytics, we discovered that the attainment gap was actually wider for STEM subjects. This shocked us, and challenged all of our assumptions about the 'neutrality' of STEM. It was important to us to find qualitative data that reflected students' understandings of the attainment gap issues in STEM subjects and their own perceptions of where they have encountered racial bias in teaching and learning contexts, or encountered academic tasks or challenges that they felt negatively impacted their academic performance.

We had to manually pull up the attainment gap picture course-by-course to compare the gap between black British and white undergraduate students, as there is currently no tool to allow us to compare the attainment gaps between STEM and Arts/Humanities courses. We understood that the data visualisation we came up with was not necessarily accurate or statistically significant, given the tiny number of black British students in each course.

Stage 3: data collection via an online survey
The student and staff co-researchers on this project co-designed a survey with 10 closed and open questions. The survey did not just include 'yes/no' questions, but ones that had answers that ranged from 'strongly agree' to 'strongly disagree' allowing us to have a wider range of perspectives and to not rule out certain assumptions just because an individual response only agreed or disagreed slightly. It also allowed for comments so that we might collate a variety of student perspectives.

The survey was sent to the members of the African and Caribbean Society, as the social network with the most direct access to the black student community at Cambridge. Overall there were 21 responses (the lower than anticipated rate of response was attributed to the fact that the targeted group were engaged with the BME campaign elections and were overloaded with email notices). Not every respondent

answered each question. Out of these responses, students came from 6 different STEM disciplines (medicine, computer science, engineering, natural sciences, chemical engineering, geography, psychology) and 3 different Arts/Humanities disciplines (Education, HPS, History). The majority of respondents were male (53%) although we were unable to find data to indicate if this matched the overall gender distribution across STEM and Arts/Humanities students.

The following questions were asked in the survey:

- *Do you believe that the way Cambridge positions your black British identity has impacted on your wellbeing or welfare?*
- *Do you believe that issues related to your black British identity has affected your academic performance?*
- *Do you think that the attainment gap is better or worse for black British students in STEM subjects than in Arts and Humanities subjects?*
- *Do you believe that there are significant differences in the teaching and learning experiences for students in STEM and Arts and Humanities courses?*
- *Do you believe that any differences in the teaching and learning experiences would explain the differences in the attainment/awarding gaps between black and white students?*
- *Where do you think racial bias may appear in STEM teaching and learning?*

6. Small project research findings

Every student respondent agreed that there are significant differences in the teaching and learning experience for STEM and Arts/Humanities students at Cambridge. However, there was more variation in the discussion about black British students' experiences and whether their race had an impact on their wellbeing or academic performance in STEM subjects.

Overall, the 21 survey respondents did not believe that subject content was an issue for black British students in STEM subjects, in line with the discussion in the earlier focus group with the student representative discussion. The majority of respondents felt that black students would have better (narrower) attainment gaps in STEM subjects than in Arts/Humanities (53.84% with 15.38% uncertain). The overall rationale for this belief was due to the assumed 'neutrality' of subject material and educational experiences in STEM. For instance:

- *I think STEM subjects overall have more neutral content and have more practical elements, so are less likely to have a negative impact on black students. They are also assessed in different ways - less about personal opinions and arguments that can be marked badly by examiners.*
- *Technical supervisions and lectures - Minimal raising of political and social issues related to blackness*
- *STEM subjects are less likely to have issues surrounding a disregard for the specific academic interests that black students have. The subject area in STEM means that the work that black students do is not devalued if they, say, want to focus on black history or literature. And this can have a huge impact on one's academic performance*

There were some exceptions, for instance:

- *In the study of the human body, typically conditions are explained as presented on Caucasians*
- *I feel like people have a subconscious bias that science is not a place for black and minority ethnic people. Feel like as there aren't many black and minority ethnics here I feel a pressure to do well to prove to people that BME individuals can be good at science.*

Other students pointed out that the differences might be felt less in Faculty lectures than in College supervisions and the bias of supervisors:

- *In the expectations that supervisors have regarding the ability of a student. If unconscious bias means that a supervisor sees a black student as less intelligent, they are more likely to not give them as much help and support to go through the difficult content*
- *It may be apparent during supervisions by some exclusion from the discussion when topics in the lectures are being covered*
- *Often feel kind of stared at in lectures/practicals as the only BME person there (might just be overthinking). I definitely feel like I can't relate to my supervisors as well as I did my teachers in school.*

A majority of respondents (53.84%) believed that issues related to their black British identity have affected their wellbeing, with a smaller number believing that their black British identify affected their academic performance (38.46% with 23% unsure and 38.46% disagreeing). The resulting attainment gap was most often attributed to the lack of welfare support available to them in Cambridge.

Students' perceptions of reasons for the attainment gaps in STEM

An analysis of the qualitative commentary provides the following insights into students' perception of the reasons for the attainment gaps:

- Students expressed a lack of black mentors/role models in their STEM subjects having a negative effect on motivation.
- A few responses express that unconscious bias may be a factor: supervisors may assume black students are less bright/have less subject knowledge
- Internal pressures: being one of very few black students in a STEM subject/Cambridge in general causes students to feel as though they have something to prove (worsened impostor syndrome).

The first open comment question in the survey was 'do you believe that any differences in the teaching and learning experiences would explain the differences in the attainment/awarding gaps between black and white students?' The general consensus here was, indeed, the different experiences could definitely play a part. Students mentioned supervisor's support in pursuing topics and subjects in Arts & Humanities that were related to blackness, and how this correlates to successful academic performance.

- *The way that students are treated by staff members; it can lead to low self esteem/being awarded worse marks*
- *It may be apparent during supervisions by some exclusion from the discussion when topics in the lectures are being covered*
- *Discussions with supervisors, where there may be an assumed lack of knowledge*

Representation within the staff was also raised as a distinguishing factor between STEM and Arts & Humanities learning experiences, one student stating that not seeing BAME representation made it 'difficult to push through when the workload gets tough' as well as it being 'demotivating'. We don't currently have the statistics of the ethnic representation of staff in the two sectors, but from the survey responses, can assume that the makeup of the STEM teaching staff is primarily white. Again, this points to an issue of welfare, lack of representation doesn't just feed into imposter syndrome, but also makes it difficult for students to reach out for help within the faculty if they are finding things difficult. Similarly, the issue of lack of mentors was raised, this is a problem due to the small numbers of black students in STEM, making it difficult for current students to navigate the space without informal guidance and support.

- *The fact that I haven't had a single non-white lecturer in a year and a half is something I find kind of demotivating. If you don't see anyone like you teaching here makes it difficult to push through when the work load gets tough, and also the feeling of being less comfortable/not fitting in as*

much in supervisions and not feeling comfortable to ask as many questions might be a factor, although could just be a Cambridge thing for everyone.

Unconscious or racial bias in STEM subjects

In the question of where racial bias could occur in STEM subjects, the issue of unconscious bias came up often. Students reported that although the subject material is 'neutral', supervisors can still 'assume' the knowledge of their students and behave accordingly, and many times, this assumption is that their black students know less than their white counterparts. Some mentioned feeling 'excluded' from supervision discussions therefore, and receiving less support and instruction. 'Low self-esteem' seems to be the perceived conclusion from such behaviour from staff members, which of course can translate itself into low academic performance through the anxiety, lack of confidence and frustration it can cause.
Beyond this, some students mentioned the assumed 'neutrality' of STEM subjects, stating that much of the course content considers only 'Western and supposedly neutral' theories. This student asks the question of if the content of STEM is racially neutral, when there is a clear pattern of the kinds of theorists that are celebrated and cited. Again, this relates to the issue of lack of representation.

Perhaps most interestingly, although not directly related to the question, was one student's response stating that they felt a 'pressure to prove that BME individuals can be good at science'. Although this is not an example of racial bias coming externally, it does demonstrate how the feelings of isolation mentioned above can culminate in an exaggerated sense of responsibility to do well. Such pressure cannot be healthy and could most definitely lead to the opposite of the intentions, such as burning out or not doing as well as one has hoped because of the emotional burden and toll placed on oneself:

- *While I would expect that there is less racial bias in STEM subjects, you can't discount the impact of microagressions or unconscious bias on black students, just in day-to-day experiences in College or their feelings of confidence in speaking up in class. Crossover with welfare and academic performance can't be discounted.*
- *I think it is the impact on welfare that then affects academic performance in STEM subjects, rather than direct confrontations with ideas about race*

Overall, the conclusions from the students were largely based around the idea that it was the negative impact on welfare was what was indirectly affecting academic performance. Impacts on welfare came from unconscious bias in supervisions, which causes lack of confidence, lack of mentors and black or BAME supervisors and lectures which fuels a feeling of isolation, this is expounded by the small numbers of black students in these subjects that means that an informal network of support is also almost non-existent. The survey demonstrates the importance of analysing experiences as well as quantitative research.

Exam Results Analytics:

We reviewed the attainment gaps by the courses where the largest proportion of numbers of black students were clustered in the current academic year, in both STEM and Arts/Humanities subjects. In 2019/2020, for STEM the largest proportionate cluster of black students is in Architecture (10 black students making 11.90% of the population across all years of study), followed by Psychology (10 black students making 6.99% of the population across all years of study). For Arts/ Humanities the largest proportionate cluster of black students is in Land Economy (7 black students making 7.87% of the population across all years of study), followed by Human, Social and Political Science with 31 black students making 7.62% of the population across all years of study).

Our reading of the attainment gaps as visualised in the Exam Results Dashboard (looking manually course by course, by 'good honours', by UK domiciled and by grouped ethnicity) showed us that the attainment gaps for black students was similar across the STEM and non-STEM subjects with the highest proportion

of black students, if not worse. Please see attachment for screenshots of the Exam Results Analytics data visualisation of the four courses (STEM: Architecture and Psychology, Arts/Humanities: Land Economy and HPS).

(Note: We acknowledge that this visualisations of the attainment gap are indicative and not statistically reliable, given the small numbers of graduating black students in the previous five years, which also meant that the gaps fluctuated wildly between years depending on an individual black British students' academic success.)

Nonetheless, this data showed that the attainment gaps between STEM and Arts/Humanities black British students were similar, if not actually worse for STEM students. This was not what we expected to find, so our assumptions were challenged.

7. Outcomes of research/implications for Cambridge practices and processes.

Increased research
Due to small numbers of students, the focus needs to be on qualitative data: the experiences of black STEM students. Further investigation is needed into the cause of attainment gaps for these students as it is not likely caused by the material they are studying.

Further collection of data as the numbers of black students increase. This will improve the validity of conclusions drawn from quantitative data provided by the Business Information Team and observable in the Exam Results Analytics dashboard.

Cross-referencing
Beyond the scope of this small project are some questions that need further investigation: How does class, gender and sexuality play into black attainment gaps? For instance, are there systematic demographic differences between black students in STEM vs those in Arts/Humanities?

Staff role models
Overall there are very few black or BME staff role models available for students. This impacts on black students' sense of belonging and confidence to speak up in class or seek support, which will inevitably impact their academic performance and attainment.

Mentorship
There currently exists only informal networks of mentorship for black students, mostly in schemes ran by the African-Caribbean Society and the CUSU BME Campaign. Formalising and resourcing such networks and ensuring that there are extra welfare provisions placed for black STEM students can be the start of addressing the identified problems with academic performance and attainment.

Formalising these networks can be done by running these schemes through the department and advertising it through the Faculty, not just through the societies. The Faculty should also be responsible in monitoring the networking relationships and ensuring that students are having their welfare needs met.

Racial bias and sensitivity training
Not just necessary for STEM staff, but all, however, in this context, as students have raised specific issues about feeling 'excluded' and 'isolated' in supervisions, largely because 'assumptions' of knowledge and other racial biases, it may be worthwhile looking into what these biases are exactly, and offering training to staff on racial sensitivity.

8. RECOMMENDED ACTIONS

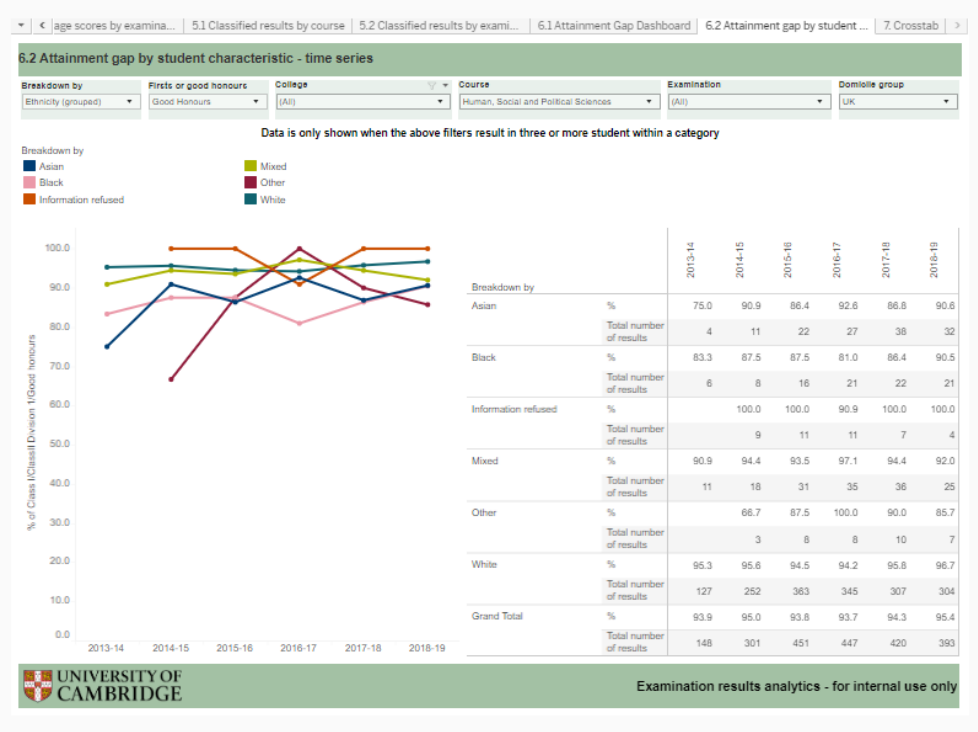
1. That the Business Information Team develop a tool within the Exam Results Analytics dashboard that would allow a comparison of attainment gaps by STEM and Arts/Humanities.
2. That more research be undertaken about the teaching, learning and assessment experiences within STEM and the impact on students' academic performance and attainment gaps (by ethnicity, disability and gender)
3. That welfare support and avenues to find informal or formal academic mentors are clearly communicated and resourced for black British students in STEM.

Appendix: STEM vs Arts/Humanities Attainment Gaps in Exam Results Analytics

The following images are screenshots of the data visualisation of selected STEM and Arts/Humanities subjects, filtered to look at good honours results for UK domiciled undergraduates across 5 years.

Human, Social and Political Science (Arts/Humanities)

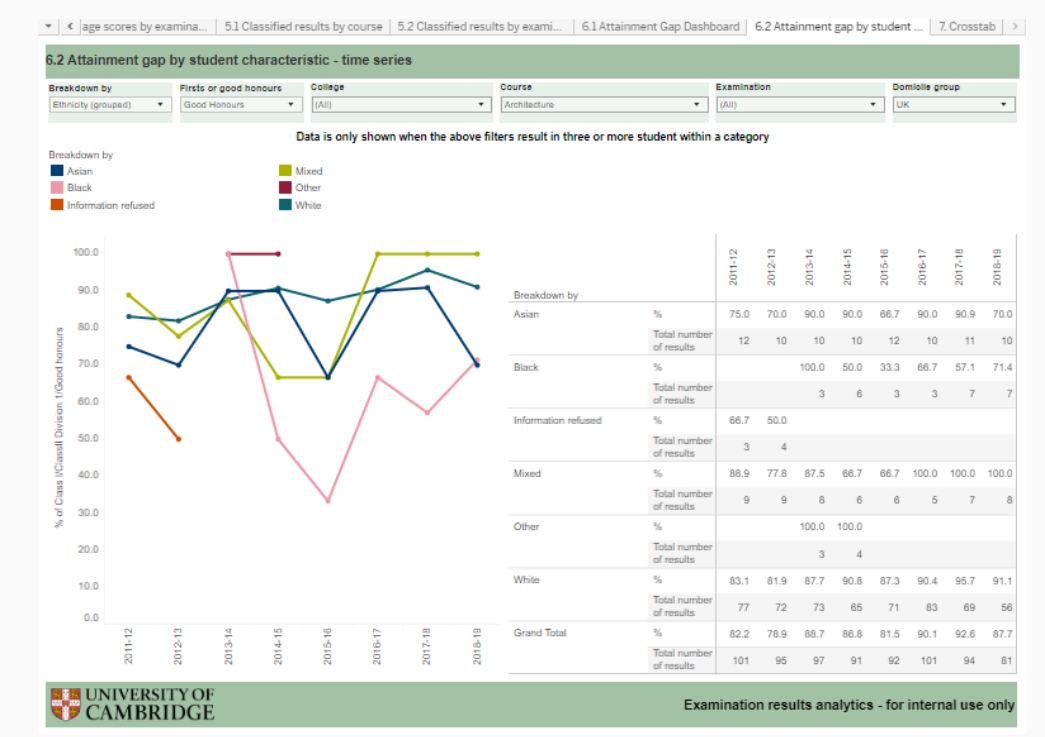
This is one of the courses with the highest numbers & % proportion of black British students to white students. Note in the graph below that all results cluster in quite a high percentage range: this is typical of Arts/Humanities that tend to give higher results overall. The attainment gap between black British students (pink line) and white students (dark green line) is observable and sustained across 5 years, but relatively narrow.



Breakdown by		2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Asian	%	75.0	90.9	86.4	92.6	86.8	90.6
	Total number of results	4	11	22	27	38	32
Black	%	83.3	87.5	87.5	81.0	86.4	90.5
	Total number of results	6	8	16	21	22	21
Information refused	%		100.0	100.0	90.9	100.0	100.0
	Total number of results		9	11	11	7	4
Mixed	%	90.9	94.4	93.5	97.1	94.4	92.0
	Total number of results	11	18	31	35	36	25
Other	%		66.7	87.5	100.0	90.0	85.7
	Total number of results		3	8	8	10	7
White	%	95.3	95.6	94.5	94.2	95.8	96.7
	Total number of results	127	252	363	345	307	304
Grand Total	%	93.9	95.0	93.8	93.7	94.3	95.4
	Total number of results	148	301	451	447	420	393

Architecture (STEM)

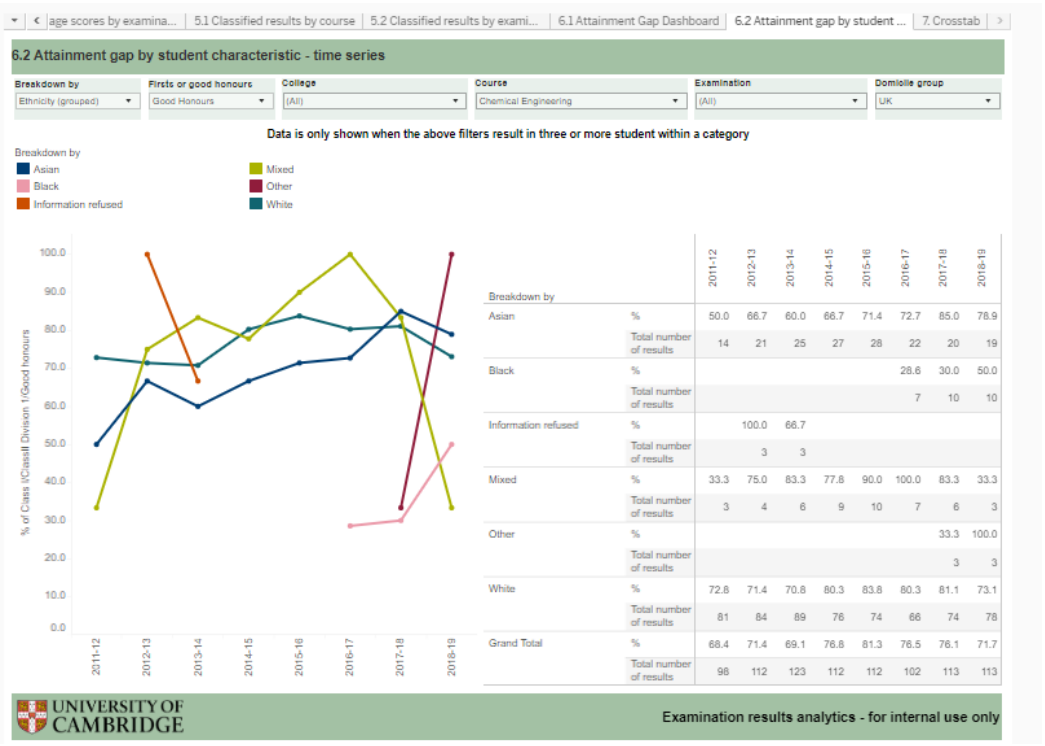
This is the STEM course with the highest no of black British students and % proportion against the whole student population. Note that there are much wider and more erratic spikes in attainment for the black British students (the pink line) while the white students (dark Green remain stable. This is attributed to very small numbers of black students, where one students' performance will have an impact on overall course outcomes. Also note that overall, the outcomes for all students are in a much lower range across all five years: this is typical of STEM subjects that tend to give lower % marks.



Breakdown by		2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Asian	%	75.0	70.0	90.0	90.0	66.7	90.0	90.9	70.0
	Total number of results	12	10	10	10	12	10	11	10
Black	%			100.0	50.0	33.3	66.7	57.1	71.4
	Total number of results			3	6	3	3	7	7
Information refused	%	66.7	50.0						
	Total number of results	3	4						
Mixed	%	88.9	77.8	87.5	66.7	66.7	100.0	100.0	100.0
	Total number of results	9	9	8	6	6	5	7	8
Other	%			100.0	100.0				
	Total number of results			3	4				
White	%	83.1	81.9	87.7	90.8	87.3	90.4	95.7	91.1
	Total number of results	77	72	73	65	71	83	69	56
Grand Total	%	82.2	78.9	88.7	86.8	81.5	90.1	92.6	87.7
	Total number of results	101	95	97	91	92	101	94	81

Chemical Engineering (STEM)

Because one of the student co-researchers on this project is studying Chemical Engineering, we are also including a snapshot of the attainment gap for this course. This graph shows a very wide attainment gap, as well as missing years of data for the black students (the pink line). This indicates small numbers of black students in this course (it was only in 2018/2019 that more than three graduated, so that their numbers would be represented in the Exam Results Analytics). In the last academic year there were 12 black British students, and this year there are 6.



Breakdown by		2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Asian	%	50.0	66.7	60.0	66.7	71.4	72.7	85.0	78.9
	Total number of results	14	21	25	27	28	22	20	19
Black	%						28.6	30.0	50.0
	Total number of results						7	10	10
Information refused	%		100.0	66.7					
	Total number of results		3	3					
Mixed	%	33.3	75.0	83.3	77.8	90.0	100.0	83.3	33.3
	Total number of results	3	4	6	9	10	7	6	3
Other	%							33.3	100.0
	Total number of results							3	3
White	%	72.6	71.4	70.8	80.3	83.8	80.3	81.1	73.1
	Total number of results	81	84	89	76	74	66	74	78
Grand Total	%	68.4	71.4	69.1	76.8	81.3	76.5	76.1	71.7
	Total number of results	98	112	123	112	112	102	113	113