UCL Mathematical and Physical Sciences Faculty (MAPS) Equity, Diversity and Inclusion (EDI) Strategy 2022 - 2027

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1.1 Background

To formulate the MAPS EDI Strategy 2022 - 2027, we have taken into consideration the gender, ethnicity, and disability data for MAPS from 2016 - 2021. We have also considered key institutional EDI priorities for the next five years as well as the impact of the MAPS and UCL EDI initiatives and actions developed during 2019 - 2022.

MAPS gender data from 2016 - 2021 shows that the gender gap among undergraduate students (UG) has been continuously decreasing at a significant rate¹. The same is not observed for higher education and academic levels (from PGT to academic staff), where the gap increases as the academic levels are higher and the change within each level is slow². In contrast, the gender gap for professional services staff in MAPS has been decreasing continuously in the last five years³.

From 2016 - 2021 there has been a slow but continuous increase in the percentage of students disclosing they have a disability. The percentage is slightly better for PGR students, indicating the students are feeling marginally more comfortable disclosing a disability⁴. A similar trend is observed for staff, with a higher percentage of people stating a disability during 2020 amid the COVID-19 pandemic⁵. Despite this, there is still a lack of trust due to fear of stigmatisation, preventing staff from sharing their disabilities. An impactful action that will help cultural change in this direction is to normalise conversations about non-visible disabilities.

It is well documented, during the COVID-19 pandemic, staff with a disability and who identify as Black or from an ethnic minority have been disproportionally affected⁶. Only recently a Disability Equality Steering Group at UCL was established.

The MAPS Student ethnic profiles from 2016 - 2021 show a notable change in the demographics of students in the last five years. MAPS has had a continuous and significant decrease in White UG, a continuous decrease in Black UG students, and a continuous and significant increase in Chinese UG students⁷. Understanding the student experiences of the different ethnic groups and the award gaps according to ethnicity will be key to addressing the ambitious institutional goal of eliminating the awarding gap by 2025⁸⁹.

The decision by UMC to withdraw UCL from the Stonewall programmes has had a detrimental impact on the experiences of the LGBTQ+ communities at UCL, especially the transgender community. We commit to creating departmental and faculty-wide initiatives to support these communities¹⁰.

⁸ UCL BAME Awarding Gap: UCL Staff Toolkit

¹ Appendix A: Undergraduate Students Gender Data, Faculty of Mathematical and Physical Sciences EDI Data Report June 2022

² Appendix B: Higher Education to Academic Level Gender Data, Faculty of Mathematical and Physical Sciences EDI Data Report June 2022

³ Appendix C: Professional Services Gender Data, Faculty of Mathematical and Physical Sciences EDI Data Report June 2022

⁴ Appendix D: Students Disability Data, Faculty of Mathematical and Physical Sciences EDI Data Report June 2022

⁵ Appendix E: Staff Disability Data, Faculty of Mathematical and Physical Sciences EDI Data Report June 2022

 ⁶ Appendix F: BAME Staff Disability Data, Faculty of Mathematical and Physical Sciences EDI Data Report June 2022
 ⁷ Appendix G: All Students Ethnicity Data, Faculty of Mathematical and Physical Sciences EDI Data Report June 2022

⁹ Eliminating the BAME Awarding Gap: Guidance For MAPS Departments

¹⁰ MAPS EDI Funding Opportunities (e.g., Take Bold Action for Inclusion)

All the above facts align with the growing body of research showing that historically

disadvantaged and excluded groups in academia face structural barriers and hostile environments that negatively impact their lived experiences and progression, resulting in a loss of talent. In moving forward, actions to accelerate cultural change and reduce the barriers faced by different disadvantaged groups at all levels must be at the centre of the MAPS EDI agenda.

A most crucial step towards the desired cultural change in MAPS, and in the wider context of UCL, is to effectively communicate the benefits and impact that meaningful (not performative) EDI work has for everyone in the university, and for research, education, and society.

MAPS EDI Strategic Goals 2022 - 2027 1.2

Our overall aim: To accelerate a cultural change in the MAPS faculty that is accompanied by: a significant reduction of the structural and systemic barriers faced by disadvantaged groups in our work and study environments and increased recognition of the benefits of equity, diversity, and inclusion for all.

To achieve this overall aim, we have envisioned six goals, each of which will require coordinated initiatives through 2022 - 2027.

- Goal 1: Realise and widen participation in structured conversations around the issues of respect, structural barriers, and imbalances in power dynamics in academia and higher education.
- Goal 2: Embed EDI principles, with emphasis on an intersectional approach, • across all areas of work in the faculty as a means to reduce systemic barriers for different ethnic and gender groups, groups with disabilities, as well as the barriers faced depending on staff category.
- Goal 3: Improve the ethnic and gender diversity, sense of belonging, and overall • work experience of our staff body ensuring parity of esteem and care for all members of our community.
- Goal 4: Develop targeted actions to improve the study experiences and sense of belonging of the different ethnic groups of students.
- **Goal 5:** Promote collective responsibility in consolidating hostility-free and caring work and study environments.
- Goal 6: Strengthen the links, impact, and visibility of the EDI activities across the • faculty departments and institutes and promote the sharing of best practices.



Goal 1: Realise and widen participation in structured conversations around the issues of respect, structural barriers, and imbalances in power dynamics in academia and higher education.

Key areas of work:

- 1.1 Discuss effective ways of collectively addressing the barriers faced by:
 - Women (and all staff and students) based on their ethnicity
 - Staff and students with disabilities
 - Staff and students with neurodivergence
 - Staff and students belonging to the LGTBQ+ community
- 1.2 Discuss effective ways of implementing an EDI agenda on **gender equity** that recognises the non-binary character of the category gender.
- 1.3 Understand effective ways of addressing barriers faced depending on staff category.
- 1.4 Provide practical information for a broad audience on how to be an effective ally.

Related UCL Initiatives:

- Male Allies Network
- Friends of Out@UCL

Goal 2: Embed EDI principles, with emphasis on an intersectional approach, across all areas of work in the faculty as a means to reduce systemic barriers for different ethnic and gender groups, groups with disabilities, as well as the barriers faced depending on staff category.

Key areas of work:

- 2.1 Increasing gender and ethnic diversity of shortlisted candidates for all positions. As part of this key area, improving the diversity of original applicants should also be investigated.
- 2.2 Development of a recognition system that appropriately rewards effective EDI work by the different members of the community. This implies developing recognition schemes that are meant for professional services staff members and technicians, students, research staff, and for academics. For instance, the MAPS faculty can create the EDI equivalent to the current MAPS Education Prize where departments can nominate members and awards are given in distinct categories. EDI work could also be strongly emphasised as a potential contribution, worthy of profoundly serious consideration, to cases for promotion.
- 2.3 Implement departmental self-assessments that go beyond Athena Swan or Juno Schemes to include a detailed assessment of whether departments are disability friendly. In the first instance, to encourage these self-assessments, there should be well-supported frameworks for facilitating and conducting them. This could take the form of dedicated and appropriately valued staff positions. For example, pilot schemes involving voluntary self-assessments may provide useful context and outcomes.



2.4 Developing effective communication channels between EDI, Education and Research committees both at the faculty and departmental level.

Related UCL Initiatives:

- Fair Recruitment Scheme
- Race Equality Tool
- <u>Reasonable Adjustments</u>
- Disability Equality Guidance Materials for Staff and Managers

Goal 3: Improve the ethnic and gender diversity, sense of belonging, and overall work experience of our staff body ensuring parity of esteem and care for all members of our community.

Key areas of work:

- 3.1 Positive action to recruit women and women BAME researchers at all levels, particularly senior levels, in line with the institutional priority. In this context, for example, equality law allows positive action to be used in recruitment before or at the application stage.
- 3.2 Ensure departmental and faculty **race equity** work and initiatives align with institutional priorities. Particular attention needs to be given to the anti-racist agenda and consolidation of anti-racist structures. Continue with departmental race pledges and accountability on those.

Related UCL Initiatives:

- Accelerate to Leadership Scheme
- <u>B-Mentor Professional Mentoring Scheme & B-Mentor Academic Mentoring</u>
 <u>Scheme</u>

Goal 4: Develop targeted actions to improve the study experiences and sense of belonging of the different ethnic groups of students.

Key areas of work:

- 4.1 Understanding the awarding gap, study experience and sense of belonging of different ethnic groups of students.
- 4.2 Understanding the gender and ethnicity gap in progression from undergraduate to postgraduate study (PGT and PGR).

Related UCL Initiatives:

- <u>Access UCL Scheme</u>
- <u>Student BME Networks</u>
- BAME Awarding Gap Project

Goal 5: Promote collective responsibility in consolidating hostility-free and caring work and study environments.

Key areas of work:

5.1 Demystifying Report and Support process to encourage non-anonymous reporting.

5.2 Preventing escalation of unacceptable behaviour.

Related UCL Initiatives:

- Report & Support Tool
- Full Stop Campaign
- Where do you draw the line? Training
- Dignity Advisors
- Employee Assistance Programme

Goal 6: Strengthen the links, impact, and visibility of the EDI activities across the faculty departments and institutes and promote the sharing of best practices.

Key areas of work:

6.1 Continuous funding of local EDI initiatives.

6.2 Levelling up EDI in all departments by sharing best practices.

6.3 Develop an effective communication campaign highlighting the benefits of EDI for all.



Appendix A: Undergraduate Students Gender Data, Faculty of Mathematical and Physical Sciences EDI Data Report June 2022



Figure 1. Graph showing percentage of female versus male undergraduate 2014-2021

		Academic year							
	2014/1	2015/1	2016/1	2017/1	2018/1	2019/2	2020/2	2021/2	
Gender*	5	6	7	8	9	0	1	2	
UG	2100	2242	2277	2417	2468	2586	3113	3261	
Female	893	983	992	1061	1090	1160	1445	1492	
Male	1207	1259	1285	1356	1378	1426	1668	1769	

Table 1: Female and male undergraduate students 2014 – 2021 extracted from MAPS student data records

Academic Year	Female	Male	Grand Total*
2014/15	1411	1986	3397
2015/16	1551	2125	3676
2016/17	1560	2199	3759
2017/18	1704	2315	4019
2018/19	1748	2339	4087
2019/20	1875	2431	4306
2020/21	2319	2843	5162
2021/22	2302	2809	5111

*'Other' excluded from the analysis.

Table 2: Female, male and grand total of students (UG, PGT and PGR) 2014 – 2021 extracted from MAPS student data records



Figure 2. Graph showing percentage of female versus male students (UG, PGT, PGR) 2014-2021



Appendix B: Higher Education to Academic Level Gender Data, Faculty of Mathematical and Physical Sciences EDI Data Report June 2022

Level of		Academic year						
Study/	2014/1	2015/1	2016/1	2017/1	2018/1	2019/2	2020/2	2021/2
Gender*	5	6	7	8	9	0	1	2
PGT	301	358	422	492	515	589	920	720
Female	133	167	173	220	230	241	404	336
Male	168	191	249	272	285	348	516	384
PGR	582	641	625	649	670	685	730	711
Female	203	203	199	206	210	234	245	250
Male	379	438	426	443	460	451	485	461
Grand Total	2983	3241	3324	3558	3653	3860	4763	4692

Table 3: Female and male PGT and PGR students 2014 – 2021 extracted from MAPS student data records

*'Other' excluded from the analysis.



Figure 4. Graph showing percentage of female versus male PGT students 2014-2021



Figure 3. Graph showing percentage of female versus male PGR students 2014-2021

Staff astagony	Academic year								
Stall category	2016	2017	2018	2019	2020	2021			
Research	339	334	347	351	333	317			
Female	85	89	99	95	83	91			
Male	254	245	248	256	250	226			
Teaching	65	70	90	107	114	231			
Female	24	26	35	37	33	76			
Male	41	44	55	70	81	155			
Academic	290	295	300	325	327	340			
Female	58	63	65	71	76	82			
Male	232	232	235	254	251	258			

Table 4: Female and male research, teaching and academic staff 2016 – 2021 extracted from MAPS staff data records



Figure 6. Graph showing percentage of female versus male ART staff 2016-2021



Figure 7. Graph showing percentage of female versus male teaching staff 2016-2021

*ART (Academic-Research-Teaching)





Figure 5. Graph showing percentage of female versus male research staff 2016-2021



Figure 8. Graph showing percentage of female versus male academic staff 2016-2021



Appendix C: Professional Services Gender Data, Faculty of Mathematical and Physical Sciences EDI Data Report June 2022

Staff catogony	Academic year							
Starr Category	2016	2017	2018	2019	2020	2021		
Professional Services Technicians Manual and Craft	226	223	232	246	255	264		
Female	94	93	101	110	118	120		
Male	132	130	131	136	137	144		

Table 5: Female and male professional services staff 2016 – 2021 extracted from MAPS staff data records



Figure 9. Graph showing percentage of female versus male professional services staff 2016-2021



Appendix D: Students Disability Data, Faculty of Mathematical and Physical Sciences EDI Data Report June 2022

	No known			
Academic Year	disability	Disabled	Unknown	Grand Total
2014/15	3192	175	30	3397
2015/16	3447	205	24	3676
2016/17	3503	199	57	3759
2017/18	3692	248	80	4020
2018/19	3710	296	82	4088
2019/20	3888	337	81	4306
2020/21	4680	400	84	5164
2021/22	4575	456	83	5114

Table 6: Disclosing a disability in all students (UG, PGT, PGR) 2014 – 2021 extracted from MAPS student data records











Figure 12. Graph showing percentage of no known disability, disabled and unknown in PGT students 2014-2021







Appendix E: Staff Disability Data, Faculty of Mathematical and Physical Sciences EDI Data Report June 2022

Academic Year	No known disability	Disabled	Unknown	Grand Total
2016/17	730	18	172	920
2017/18	757	18	147	922
2018/19	790	17	162	969
2019/20	841	25	163	1029
2020/21	902	45	82	1029
2021/22	859	87	206	1152

Table 7: Disclosing a disability in all staff 2016 – 2021 extracted from MAPS staff data records



Figure 14. Graph showing percentage of no known disability, disabled and unknown in all staff 2016-2021



Appendix F: BAME Staff Disability Data, Faculty of Mathematical and Physical Sciences EDI Data Report June 2022

Academic	No known	Disabled	Unknown	Grand Total
Teal	uisability	Disableu	Unknown	Granu Total
2016/17	130	3	17	150
2017/18	140	1	10	151
2018/19	149	1	11	161
2019/20	157	2	12	171
2020/21	159	6	6	171
2021/22	142	23	10	175

Table 8: Disclosing a disability in BAME staff 2016 – 2021 extracted from MAPS staff data records



Figure 15. Graph showing percentage of no known disability, disabled and unknown in BAME staff 2016-2021



Appendix G: All Students Ethnicity Data, Faculty of Mathematical and Physical Sciences EDI Data Report June 2022

Academic Year	White	BAME	Unknown	Grand Total
2014/15	410	154	18	582
2015/16	443	175	23	641
2016/17	422	185	18	625
2017/18	418	221	11	650
2018/19	422	234	15	671
2019/20	406	268	11	685
2020/21	426	286	19	731
2021/22	407	287	18	712

Table 9: White, BAME, unknown and grand total of students (UG, PGT, PGR) 2014 – 2021 extracted from MAPS student data records



Figure 16. Graph showing percentage of white, BAME and unknown ethnicity in all students (UG, PGT, PGR) 2014-2021

Level of				Acaden	nic year			
Study/								
Ethnicity	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
UG	2100	2242	2277	2417	2468	2586	3113	3262
White	906	943	923	931	861	826	828	823
BAME	1164	1278	1327	1463	1562	1713	2226	2366
Unknown	30	21	27	23	45	47	59	73
PGT	301	358	422	492	515	589	921	721
White	142	157	155	215	205	222	285	234
BAME	153	199	262	273	299	351	617	478
Unknown	6	2	5	4	11	16	19	9
PGR	582	641	625	650	671	685	731	712
White	410	443	422	418	422	406	426	407
BAME	154	175	185	221	234	268	286	287
Unknown	18	23	18	11	15	11	19	18
Grand								
Total	2983	3241	3324	3559	3654	3860	4765	4695

Table 10: All student's ethnicity (white, BAME, unknown) 2014 – 2021 extracted from MAPS student data records



Figure 17. Graph showing percentage of white, BAME and unknown ethnicity in UG students 2014-2021







Figure 18. Graph showing percentage of white, BAME and unknown ethnicity in PGT students 2014-2021

Figure 19. Graph showing percentage of white, BAME and unknown ethnicity in PGR students 2014-2021

All Ethnicity		Academic year						
Breakdown	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
White	1719	1816	1754	1810	1710	1657	1730	1637
Chinese	799	894	985	1085	1221	1497	2123	2107
Asian or Asian								
British	512	543	570	652	669	661	765	768
Mixed heritage	150	198	195	213	210	214	240	243
Black or Black								
British	76	83	96	106	99	90	75	93
Arab	36	41	46	55	62	54	66	83
Other ethnic								
backgrounds	43	50	55	57	40	48	58	69
Unknown	62	51	58	42	77	85	107	114
Grand Total	3397	3676	3759	4020	4088	4306	5164	5114

Table 11: A breakdown of all student's ethnicity 2014 – 2021 extracted from MAPS student data records



