

Craft, Design, Engineering and Graphics in Local Authority Secondary Schools

November 2022

Contents

Introduction.....	4
Survey of craft, design, engineering and graphics provision in secondary schools.....	5
Craft, design, engineering and graphics Teacher FTE.....	5
Craft, design, engineering and graphics staffing in schools.....	5
S1/2 Overall.....	5
Survey Results - National Qualifications.....	6
Entries and Attainment Over Time.....	7
CDEG Graded Attainment Over Time (2018 – 2022).....	8
CDEG Nat 4 Entries and Attainment Over Time (2018 – 2022).....	8
Design and Manufacture.....	9
Graded Presentations Over Time.....	9
National 4 Design and Manufacture.....	10
Presentations Over Time.....	10
Awards Over Time as percentage of cohort.....	10
National 5 Design and Manufacture.....	11
Changes in Gender Uptake Over Time.....	11
Attainment 2022.....	11
% Grade Distribution.....	11
Higher Design and Manufacture.....	12
Changes in Gender Uptake Over Time.....	12
Attainment 2022.....	12
% Grade Distribution.....	12
Advanced Higher Design and Manufacture.....	13
Changes in Gender Uptake Over Time.....	13
Attainment 2022.....	13
% Grade Distribution.....	13
Local Authority Schools Presenting Design and Manufacture.....	14
Percentage of Local Authority Schools Presenting Design and Manufacture.....	14
Graphic Communication.....	15
Graded Presentations Over Time.....	15
National 4 Graphic Communication.....	16
Presentations Over Time.....	16
Awards Over Time as percentage of cohort.....	16
National 5 Graphic Communication.....	17
Changes in Gender Uptake Over Time.....	17
Attainment 2022.....	17
% Grade Distribution.....	17
Higher Graphic Communication.....	18
Changes in Gender Uptake Over Time.....	18
Attainment 2022.....	18
% Grade Distribution.....	18
Advanced Higher Graphic Communication.....	19
Changes in Gender Uptake Over Time.....	19
Attainment 2022.....	19
% Grade Distribution.....	19

Local Authority Schools Presenting Graphic Communication.....	20
Percentage of Local Authority Schools Presenting Graphic Communication.....	20
Engineering Science.....	21
Graded Presentations Over Time.....	21
National 4 Engineering Science.....	22
Presentations Over Time.....	22
Awards Over Time as percentage of cohort.....	22
National 5 Engineering Science.....	23
Changes in Gender Uptake Over Time.....	23
Attainment 2022.....	23
% Grade Distribution.....	23
Higher Engineering Science.....	24
Changes in Gender Uptake Over Time.....	24
Attainment 2022.....	24
% Grade Distribution.....	24
Advanced Higher Engineering Science.....	25
Changes in Gender Uptake Over Time.....	25
Attainment 2022.....	25
% Grade Distribution.....	25
Local Authority Schools Presenting Engineering Science.....	26
Percentage of Local Authority Schools Presenting Engineering Science.....	26
Practical Metalwork.....	27
National 4 Presentations Over Time.....	27
Awards Over Time as percentage of cohort.....	27
National 5 Presentations Over Time.....	28
Changes in Gender Uptake Over Time.....	29
Attainment 2022.....	29
% Grade Distribution.....	29
Practical Woodwork.....	30
National 4 Presentations Over Time.....	30
Awards Over Time as percentage of cohort.....	30
National 5 Presentations Over Time.....	31
Changes in Gender Uptake Over Time.....	32
Attainment 2022.....	32
% Grade Distribution.....	32
Local Authority Schools Presenting Practical Woodworking / Practical Metalworking.....	33
Percentage of Local Authority Schools Presenting Practical Woodworking / Practical Metalworking.....	33
Recommendations.....	34
Education Scotland Actions.....	34
Further Recommendations.....	34

Introduction

This paper provides an overview of craft, design, engineering and graphics(CDEG) delivery in Local Authority Secondary schools. Education Scotland carried out a survey of 356 schools between January 2022 and April 2022. The survey was promoted via local authority technologies leads, CDEG teacher groups and Education Scotland officer contacts with local authorities and regional improvement collaborative(RIC). At the point of writing, the survey has had 254/356 unique local authority school responses. This represents 71% of local authority secondary schools. Whilst this is the majority of schools, it is acknowledged that the survey data is not complete and that this paper should be treated as provisional in this respect.

The survey collected data relating to CDEG teacher numbers, delivery of CDEG in S1/2 and opportunities for learners to study CDEG or related courses in the senior phase.

The purpose of the paper is to examine the provision of craft, design, engineering and graphics nationally and identify areas where support could be offered. It is worth pointing out that the data covers the period of the pandemic starting in 2020 and therefore includes the period of alternative certification and course modifications.

The data relating to SQA qualifications has been taken from SQA website and supported by additional queries to the SQA enquiries team. [Statistics and information - SQA](#)

Data relating to attainment and deprivation has been taken from Insight.

Data relating to schools was taken from [Pupil census: supplementary statistics - gov.scot \(www.gov.scot\)](#)

Survey of craft, design, engineering and graphics provision in secondary schools

Education Scotland carried out a survey with local authority secondary schools regarding CDEG delivery in schools. At the point of collating the report, 254/356 secondary schools have submitted a response to this survey (71%). Initial analysis of the 254 responses has highlighted the following:

Craft, design, engineering and graphics Teacher FTE

- all 254 schools state that they have a CDEG teacher
- 932 teachers of CDEG across the 254 schools who responded to the survey.
- 870.02 FTE CDEG teachers across the 254 schools who responded to the survey.

Craft, design, engineering and graphics staffing in schools

- 18/254 schools have 1 FTE CDEG teacher (essentially single person departments). Additionally, 5 schools from the survey report having less than 1 FTE CDEG teachers.
- 174/254 survey responses state that CDEG as a subject is part of a faculty structure.
- 179/254 survey responses state the faculty head/curriculum leader/principal teacher is a registered CDEG teacher.
- 58/254 schools report having vacancies for CDEG and there were 83 vacancies across the 58 schools.

S1/2 Overall

- 10/254 schools who responded to the survey do not offer CDEG in S1
- 2/254 schools who responded to the survey do not offer CDEG in S2
- The average period length is 52 minutes
- The average number of CDEG periods per week is 2.13 in S1 and 2.03 in S2
- 44/254 schools state they offer additional CDEG experiences in S1 and S2, for example upcycling, CAD, robotics, STEAM.

The S1/2 BGE content experience in S1/2 varies. However, most S1/2 courses reference content and skills that articulate with CDEG qualifications. Engineering being the only area covered by less than 50% of schools.

- 225/254 (88.6%) of schools state Craft is part of their S1 course
- 215/254 (84.6%) of schools state Design is part of their S1 course
- 96/254 (37.8%) of schools state Engineering is part of their S1 course
- 241/254 (94.9%) of schools state Graphics is part of their S1 course

- 246/254 (96.9%) of schools state Craft is part of their S2 course
- 221/254 (87%) of schools state Design is part of their S2 course
- 115/254 (45.3%) of schools state Engineering is part of their S2 course
- 250/254 (98.4%) of schools state Graphics is part of their S2 course

Survey Results - National Qualifications

Of the 254 responses:

- 159 (44.7%) offer National 4 Design and Manufacture
- 170 (47.8%) offer National 5 Design and Manufacture
- 163 (45.8%) offer Higher Design and Manufacture
- 45 (12.6%) offer Advanced Higher Design and Manufacture

- 68 (19.1%) offer National 4 Engineering Science
- 74 (20.8%) offer National 5 Engineering Science
- 68 (19.1%) offer Higher Engineering Science
- 16 (4.5%) offer Advanced Higher Engineering Science

- 229 (64.3%) offer National 4 Graphic Communication
- 240 (67.4%) offer National 5 Graphic Communication
- 230 (64.6%) offer Higher Graphic Communication
- 119 (33.4%) offer Advanced Higher Graphic Communication

- 234 (65.7%) offer National 4 Practical Woodworking
- 244 (68.5%) offer National 5 Practical Woodworking

- 102 (28.7%) offer National 4 Practical Metalworking
- 112 (31.5%) offer National 5 Practical Metalworking

The survey also asked schools if senior phase CDEG courses were available via local college or local authority or other arrangements:

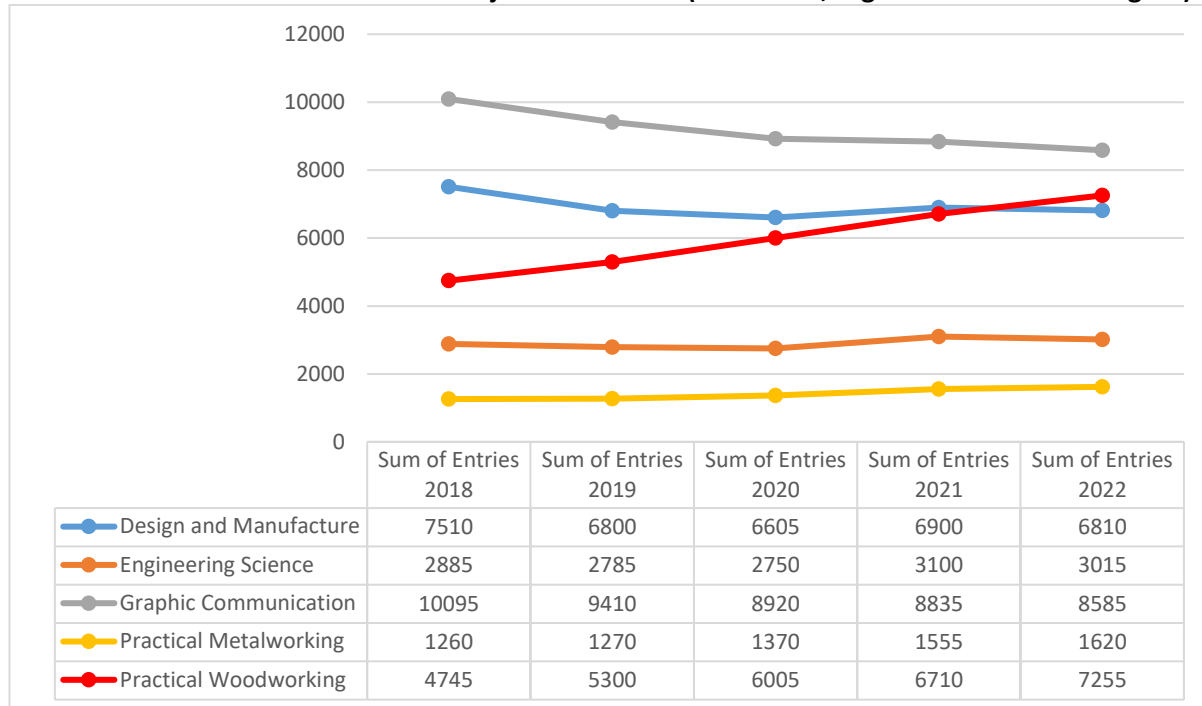
- 150/254 (42%) schools are able to offer senior phase CDEG courses to their learners via college partnership
- 112/254 (32%) schools are able to offer senior phase CDEG courses to their learners via local authority provision.
- 8/254 (2.2%) schools were presenting the Creative Thinking qualification at level 5.

Entries and Attainment Over Time

Since 2018, the number of entries in Design and Manufacture and Graphic Communication has decreased where as the numbers in Engineering Science, Practical Metal working and Practical Woodworking has increased.

Attainment since 2018 has increased in all subjects except Graphic Communication.

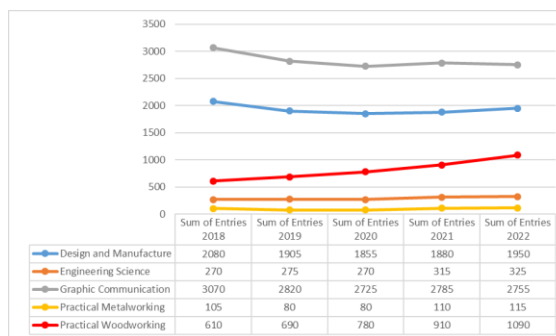
Cumulative Entries in Graded CDEG Subjects Over Time (National 5, Higher and Advanced Higher)



Cumulative Entries in Graded CDEG Subjects Over Time By Gender (Male)



Cumulative Entries in Graded CDEG Subjects Over Time By Gender (Female)



CDEG Graded Attainment Over Time (2018 – 2022)

CDEG Attainment	2022					2021					2020					2019					2018				
	A	B	C	D	No Award	A	B	C	D	No Award	A	B	C	D	No Award	A	B	C	D	No Award	A	B	C	D	No Award
Design and Manufacture	1510	3305	5165	6290	510	2235	4045	5845	6575	320	1860	3915	5950	6470	135	1075	2625	4430	5815	985	970	2400	4380	5855	1655
AH	25	40	65	95	15	35	60	95	105	0	10	30	45	45	0	0	25	55	60	15	5	30	50	65	25
F	10	15	25	40	0	20	30	45	50	0	5	15	20	20	0	0	15	25	25	5	5	20	25	35	10
M	15	25	40	55	15	15	30	50	55	0	5	15	25	25	0	0	10	30	35	10	0	10	25	30	15
H	400	875	1540	2035	245	690	1305	1860	2120	170	535	1165	1735	1910	55	265	660	1220	1760	485	400	965	1725	2070	745
F	205	360	525	615	35	315	495	615	655	20	220	455	590	630	5	135	280	465	605	105	210	410	640	710	135
M	195	515	1015	1420	210	375	810	1245	1465	150	315	710	1145	1280	50	130	380	755	1155	380	190	555	1085	1360	610
NS	1085	2390	3560	4160	250	1510	2680	3890	4350	150	1315	2720	4170	4515	80	810	1940	3155	3995	485	565	1405	2605	3720	885
F	490	835	1085	1200	55	560	820	1050	1130	25	505	845	1125	1185	15	335	660	945	1080	85	240	510	820	1045	145
M	595	1555	2475	2960	195	950	1860	2840	3220	125	810	1875	3045	3330	65	475	1280	2210	2915	400	325	895	1785	2675	740
Engineering Science	1330	1910	2355	2715	295	1465	2075	2630	2915	185	1290	1945	2500	2670	75	1095	1680	2130	2480	300	975	1620	2155	2455	420
AH	10	25	45	65	25	25	55	75	85	0	10	20	35	40	0	10	15	25	30	0	10	20	40	45	10
F	0	0	5	10	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M	10	25	40	55	25	25	55	70	80	0	10	20	35	40	0	10	15	25	30	0	10	20	40	45	10
H	325	585	820	1020	160	475	740	985	1105	80	435	720	950	1030	35	295	505	725	930	180	230	485	705	815	195
F	35	60	85	95	10	60	85	110	120	5	55	90	115	120	0	35	60	80	100	15	30	60	80	85	15
M	290	525	735	925	150	415	655	875	985	75	380	630	835	910	35	260	445	645	830	165	200	425	625	730	180
NS	995	1300	1490	1630	110	965	1280	1570	1725	105	845	1205	1515	1600	40	790	1160	1380	1520	120	735	1115	1410	1595	215
F	145	170	180	190	15	135	150	165	175	10	90	130	145	150	0	100	130	145	155	0	80	115	140	155	10
M	850	1130	1310	1440	95	830	1130	1405	1550	95	755	1075	1370	1450	40	690	1030	1235	1365	120	655	1000	1270	1440	205
Graphic Communication	1980	4255	6390	7790	785	3590	5800	7820	8495	345	3220	6040	8295	8770	150	1855	4310	6835	8385	1030	2000	4700	7415	8785	1315
AH	70	165	280	370	90	145	265	390	435	25	95	230	345	360	10	50	180	320	380	130	55	190	350	410	120
F	30	70	105	135	20	70	115	145	150	0	40	90	120	120	0	25	85	135	155	40	30	95	155	170	15
M	40	95	175	235	70	75	150	245	285	25	55	140	225	240	10	25	95	185	225	90	25	95	195	240	105
H	620	1515	2365	2915	255	1475	2390	3065	3265	95	1265	2370	3115	3265	35	630	1595	2610	3190	310	830	1970	3130	3520	615
F	250	545	785	930	50	580	850	1005	1040	10	475	820	990	1020	10	245	565	880	1020	80	360	745	1090	1175	125
M	370	970	1580	1985	205	895	1540	2060	2225	85	790	1550	2125	2245	25	385	1030	1730	2170	230	470	1225	2040	2345	490
NS	1290	2575	3745	4505	440	1970	3145	4365	4795	225	1860	3440	4835	5145	105	1175	2535	3905	4815	590	1115	2540	3935	4855	580
F	540	1000	1350	1515	100	795	1170	1450	1530	50	750	1210	1510	1560	15	455	900	1245	1440	85	470	915	1285	1465	120
M	750	1575	2395	2990	340	1175	1975	2915	3265	175	1110	2230	3325	3585	90	720	1635	2660	3375	505	645	1625	2650	3390	460
Practical Metalworking	715	1130	1425	1520	95	580	1005	1350	1460	90	580	975	1290	1350	20	465	815	1045	1160	105	490	815	1025	1145	115
NS	715	1130	1425	1520	95	580	1005	1350	1460	90	580	975	1290	1350	20	465	815	1045	1160	105	490	815	1025	1145	115
F	60	90	105	110	0	50	80	100	105	0	45	70	75	80	0	35	50	70	70	5	45	65	85	95	10
M	655	1040	1320	1410	95	530	925	1250	1355	90	535	905	1215	1270	20	430	765	975	1090	100	445	750	940	1050	105
Practical Woodworking	3670	5375	6665	7025	235	2870	4695	6170	6545	165	2460	4310	5655	5890	115	1840	3450	4555	5015	280	1855	3140	4060	4455	295
NS	3670	5375	6665	7025	235	2870	4695	6170	6545	165	2460	4310	5655	5890	115	1840	3450	4555	5015	280	1855	3140	4060	4455	295
F	635	850	1010	1065	30	430	670	845	890	20	365	600	740	765	15	300	515	620	655	30	290	435	540	580	35
M	3035	4525	5655	5960	205	2440	4025	5325	5655	145	2095	3710	4915	5125	100	1540	2935	3935	4360	250	1565	2705	3520	3875	260

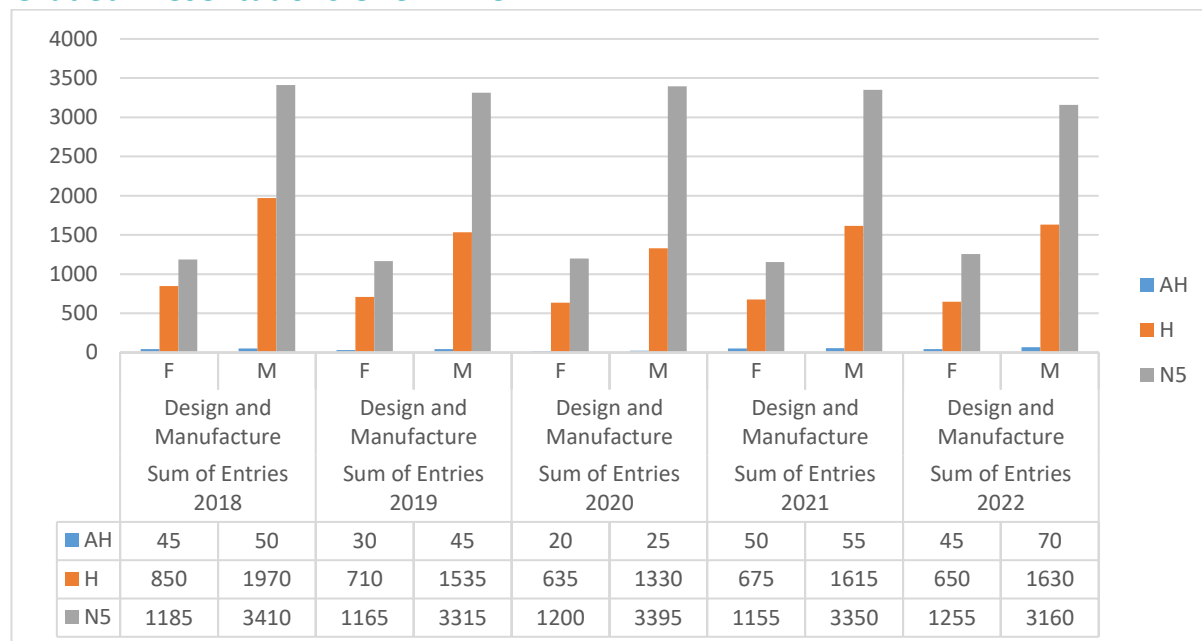
CDEG Nat 4 Entries and Attainment Over Time (2018 – 2022)

Nat 4 Subject	2022		2021		2020		2019		2018	
	Entries	Awards	Entries	Awards	Entries	Awards	Entries	Awards	Entries	Awards
Design and Manufacture	1690	1385	1345	1140	1560	1285	1515	1145	1530	1250
F	350	295	240	210	285	240	260	200	270	215
M	1340	1090	1105	930	1275	1045	1255	945	1260	1035
Engineering Science	340	265	265	240	265	230	340	265	370	320
F	20	15	10	10	10	10	25	15	25	25
M	320	250	255	230	255	220	315	250	345	295
Graphic Communication	1385	1215	1100	1005	1165	1040	1210	1030	1210	1065
F	330	280	210	190	265	240	200	170	205	180
M	1055	935	890	815	900	800	1010	860	1005	885
Practical Metalworking	175	110	180	140	165	115	140	105	150	115
F	20	10	10	5	10	10	10	10	5	5
M	155	100	170	135	155	105	130	95	145	110
Practical Woodworking	1530	1205	1575	1345	1490	1240	1515	1190	1545	1275
F	215	160	205	175	215	175	190	150	185	150
M	1315	1045	1370	1170	1275	1065	1325	1040	1360	1125

The following tables are split into each subject area and level. They show the gender breakdown of graded presentations, the difference in entries over consecutive years by gender, the changes in gender uptake over time, attainment by gender and grade distribution.

Design and Manufacture

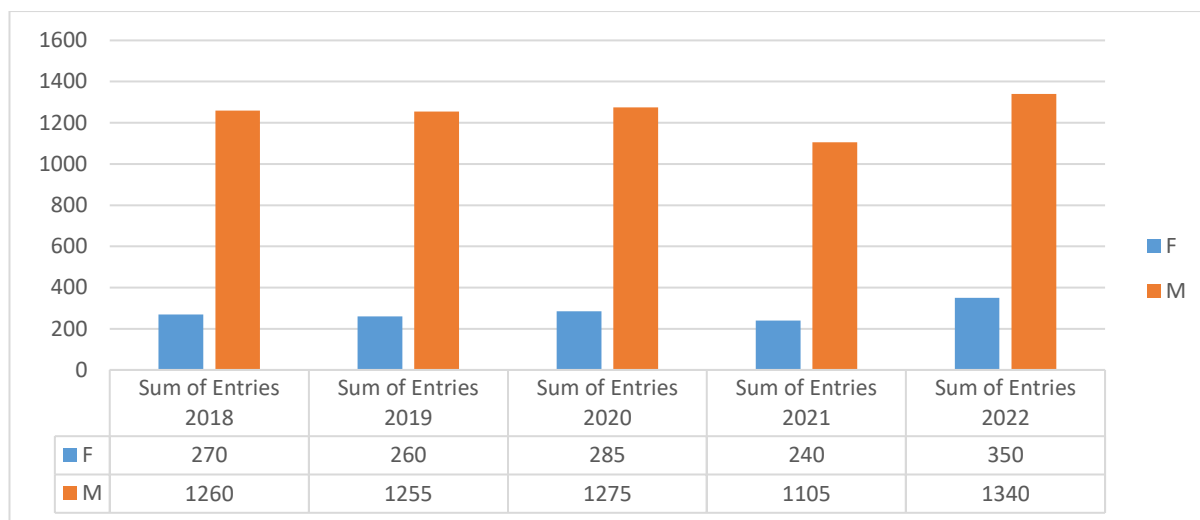
Graded Presentations Over Time



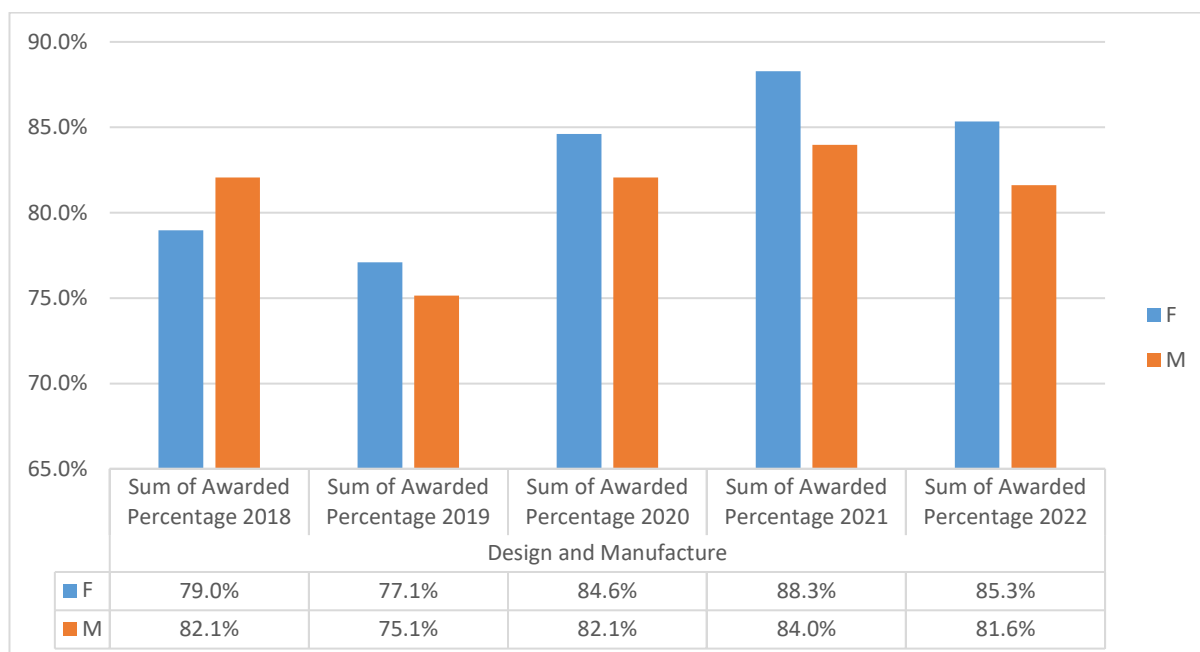
% Difference in Entries over consecutive years by gender				
Gender	2019 %difference from 2018	2020 %difference from 2019	2021 %difference from 2020	2022 %difference from 2021
Design and Manufacture	-10.44%	-2.95%	4.28%	-1.32%
AH	-26.67%	-66.67%	57.14%	8.70%
F	-50.00%	-50.00%	60.00%	-11.11%
M	-11.11%	-80.00%	54.55%	21.43%
H	-25.61%	-14.25%	14.19%	-0.44%
F	-19.72%	-11.81%	5.93%	-3.85%
M	-28.34%	-15.41%	17.65%	0.92%
N5	-2.57%	2.50%	-2.00%	-2.04%
F	-1.72%	2.92%	-3.90%	7.97%
M	-2.87%	2.36%	-1.34%	-6.01%

National 4 Design and Manufacture

Presentations Over Time

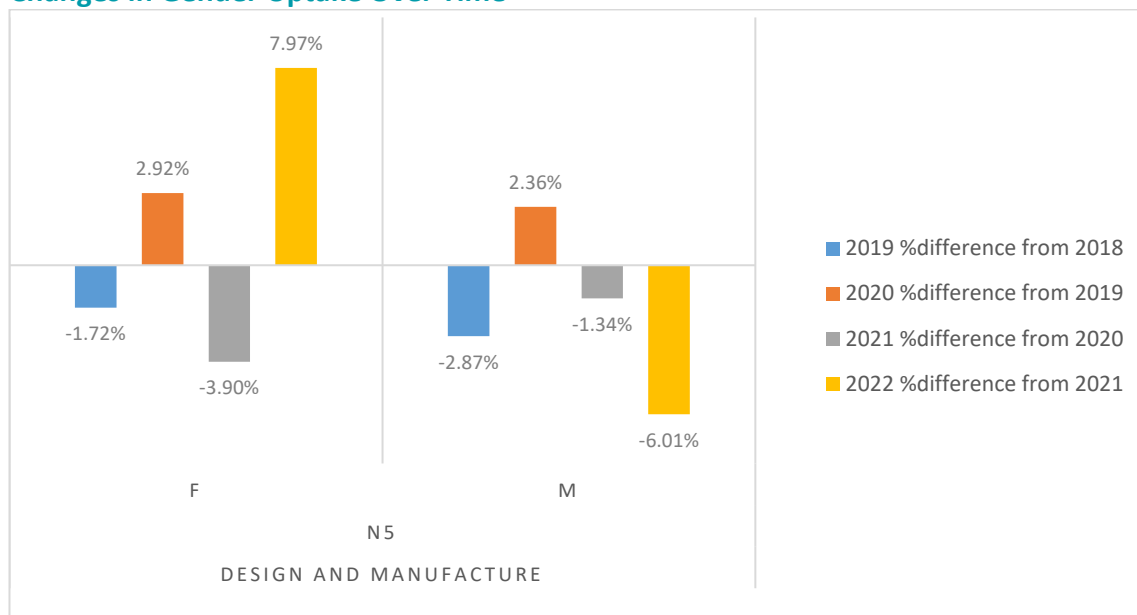


Awards Over Time as a percentage of cohort

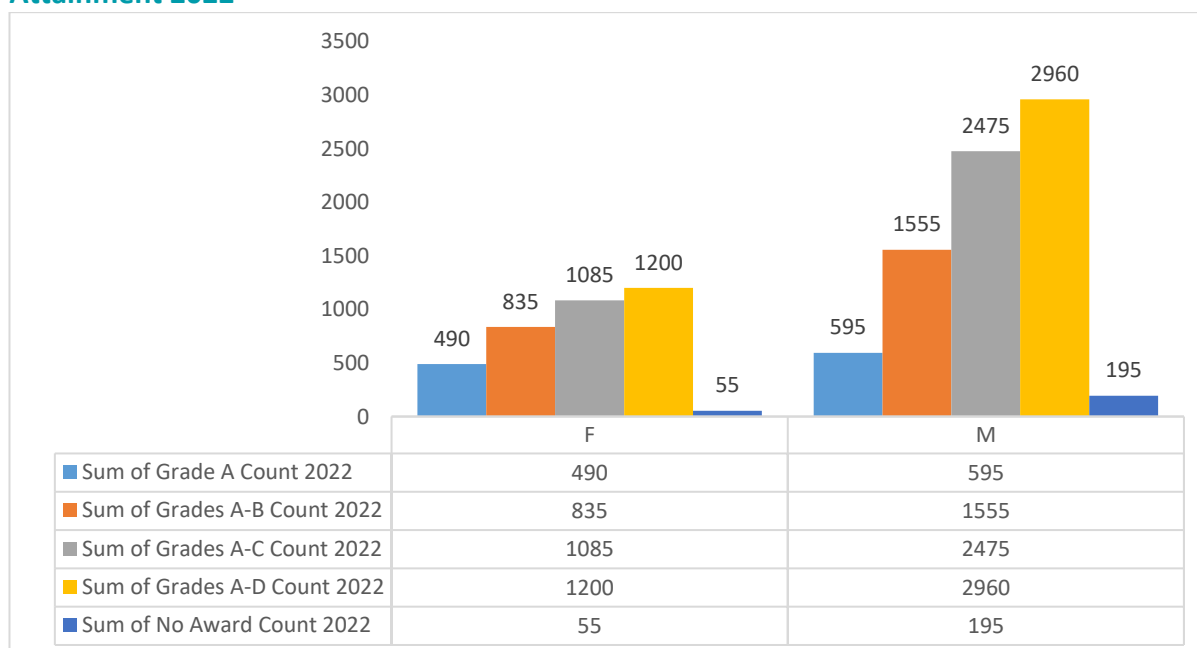


National 5 Design and Manufacture

Changes in Gender Uptake Over Time



Attainment 2022

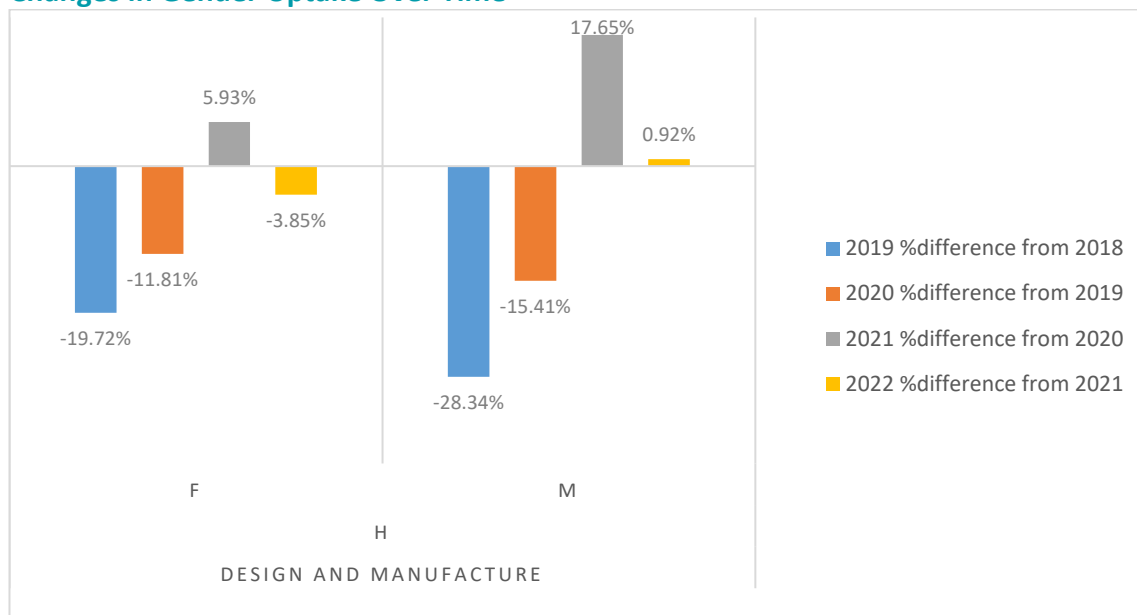


% Grade Distribution

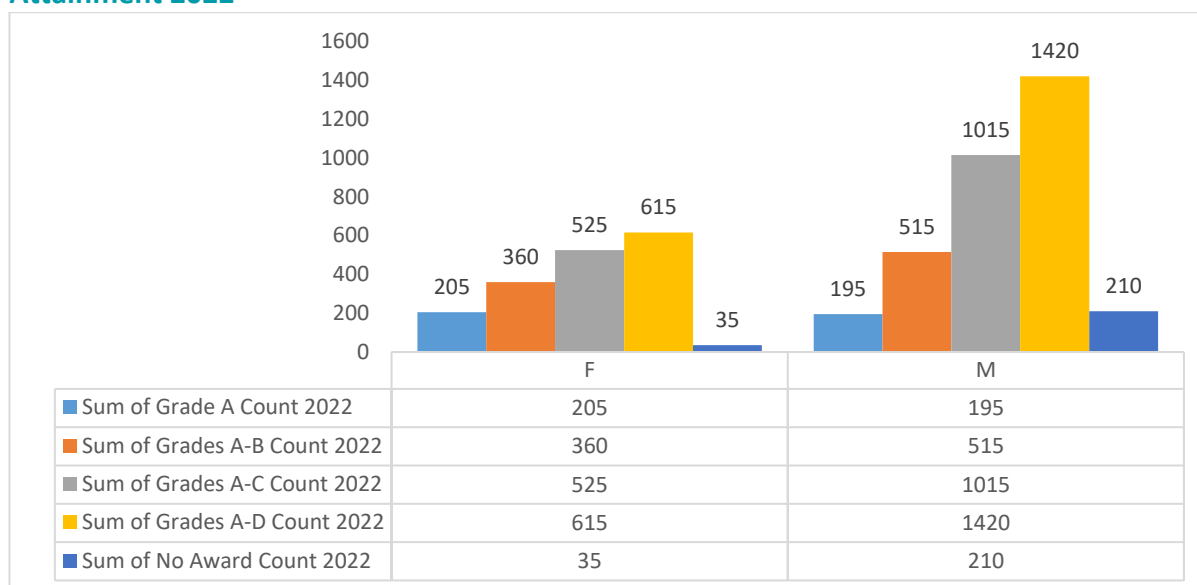
	Grade A	Grade A-B	Grade A-C	Grade A-D	No Award
% of all entries	24.58%	54.13%	80.63%	94.22%	5.66%
% f only entries	39.04%	66.53%	86.45%	95.62%	4.38%
% m only entries	18.83%	49.21%	78.32%	93.67%	6.17%

Higher Design and Manufacture

Changes in Gender Uptake Over Time



Attainment 2022

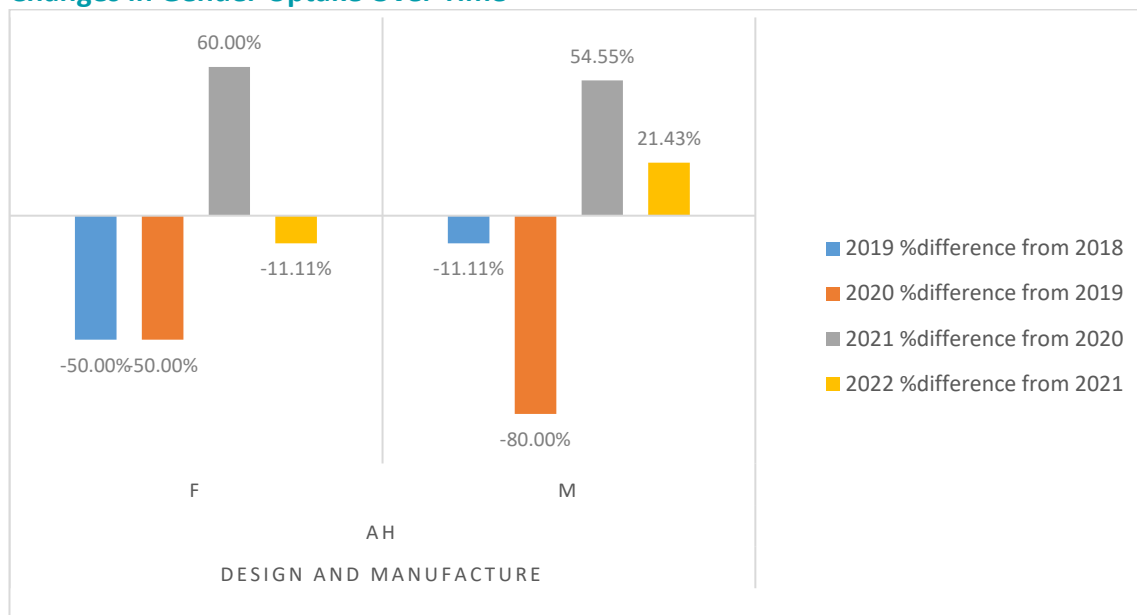


% Grade Distribution

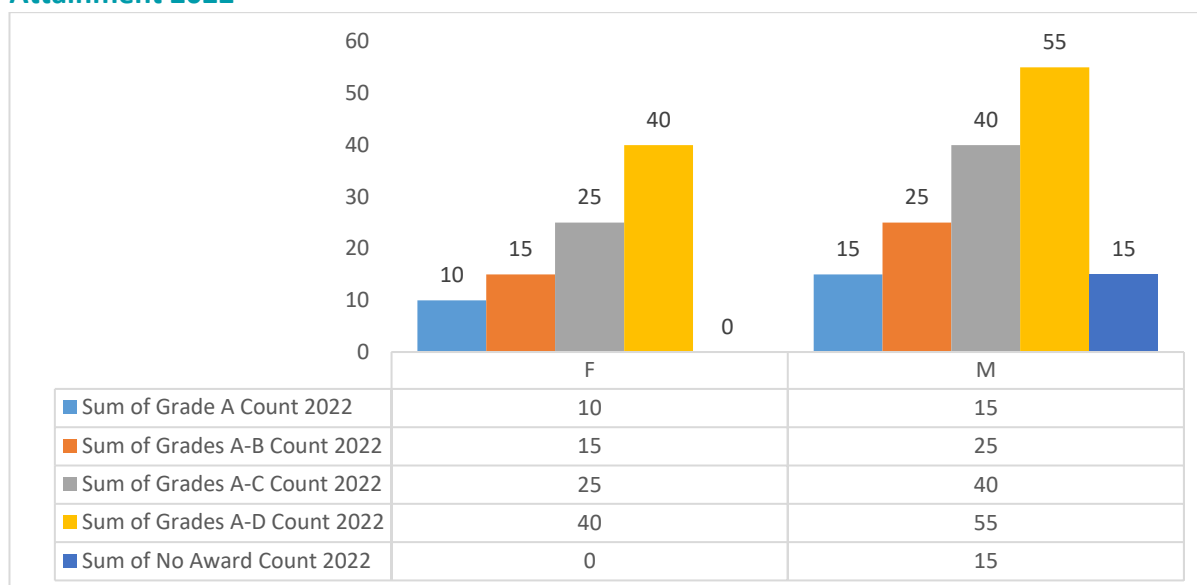
	Grade A	Grade A-B	Grade A-C	Grade A-D	No Award
% of all entries	17.54%	38.38%	67.54%	89.25%	10.75%
% f only entries	31.54%	55.38%	80.77%	94.62%	5.38%
% m only entries	11.96%	31.60%	62.27%	87.12%	12.88%

Advanced Higher Design and Manufacture

Changes in Gender Uptake Over Time



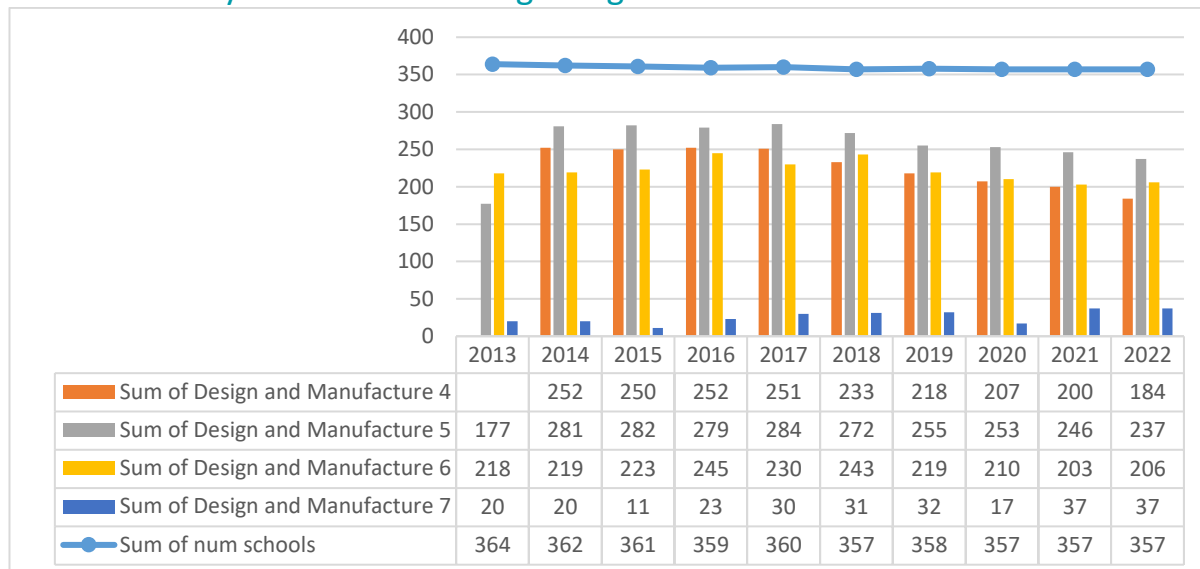
Attainment 2022



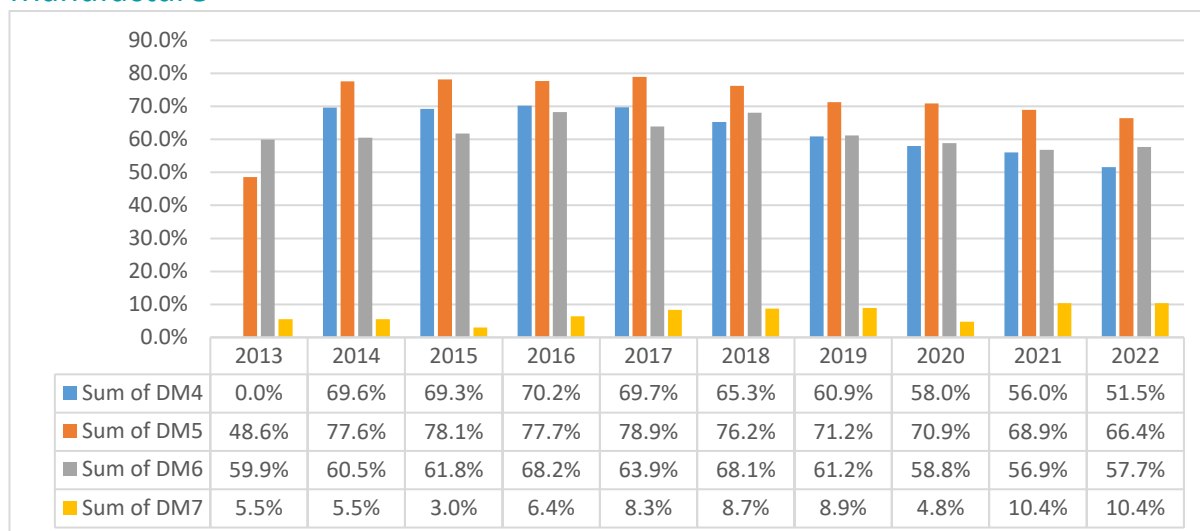
% Grade Distribution

	Grade A	Grade A-B	Grade A-C	Grade A-D	No Award
% of all entries	21.74%	34.78%	56.52%	82.61%	13.04%
% f only entries	22.22%	33.33%	55.56%	88.89%	0.00%
% m only entries	21.43%	35.71%	57.14%	78.57%	21.43%

Local Authority Schools Presenting Design and Manufacture

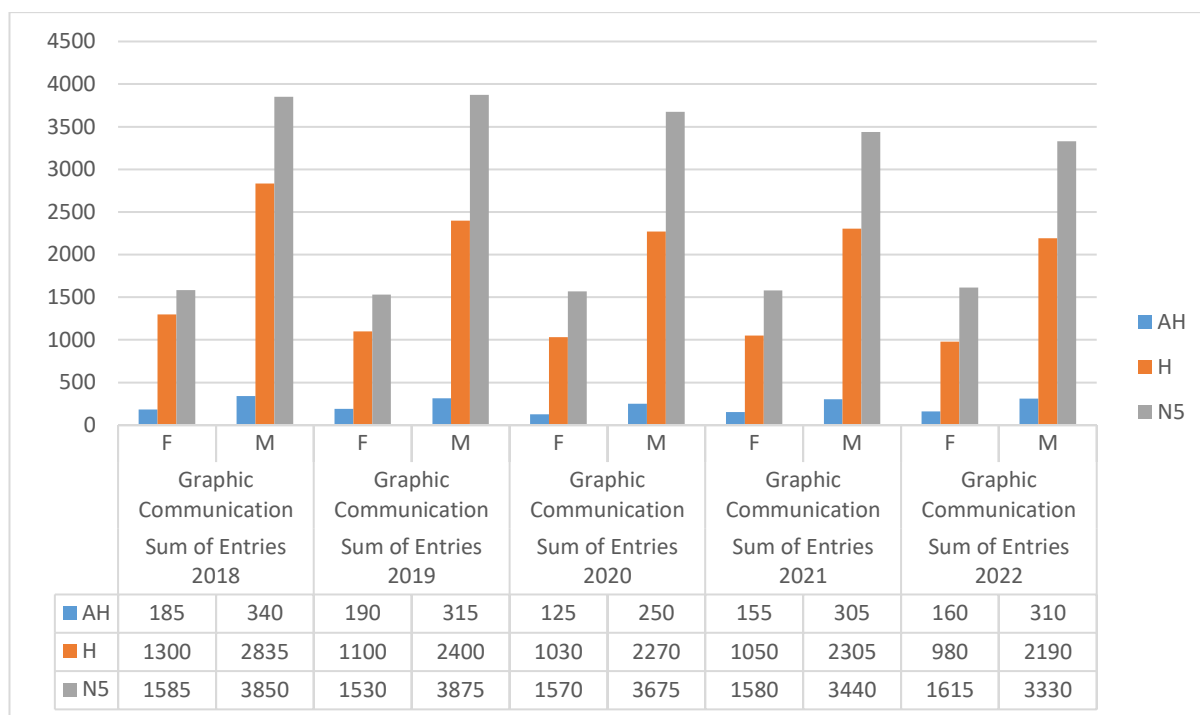


Percentage of Local Authority Schools Presenting Design and Manufacture



Graphic Communication

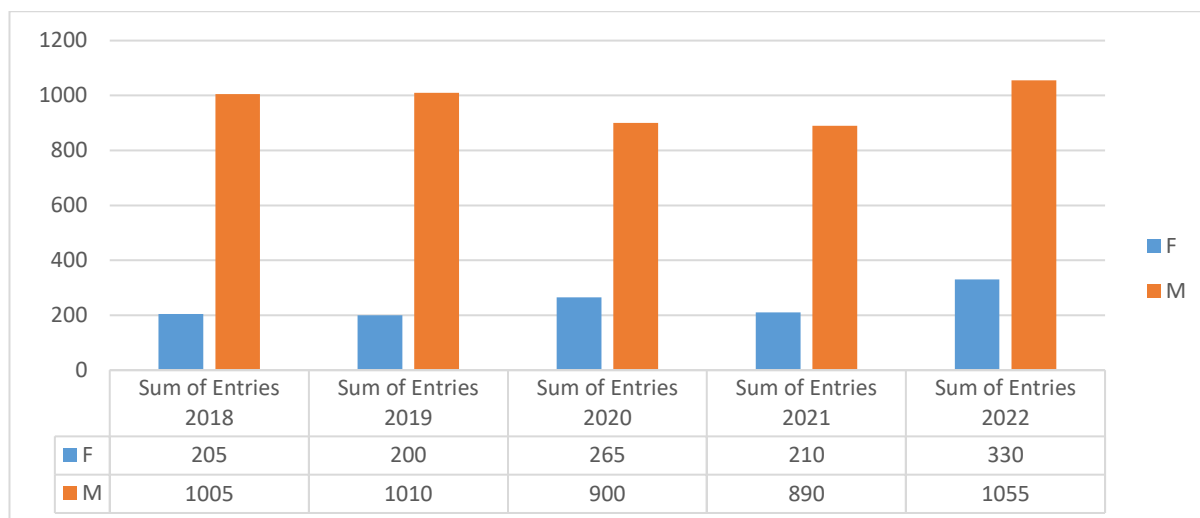
Graded Presentations Over Time



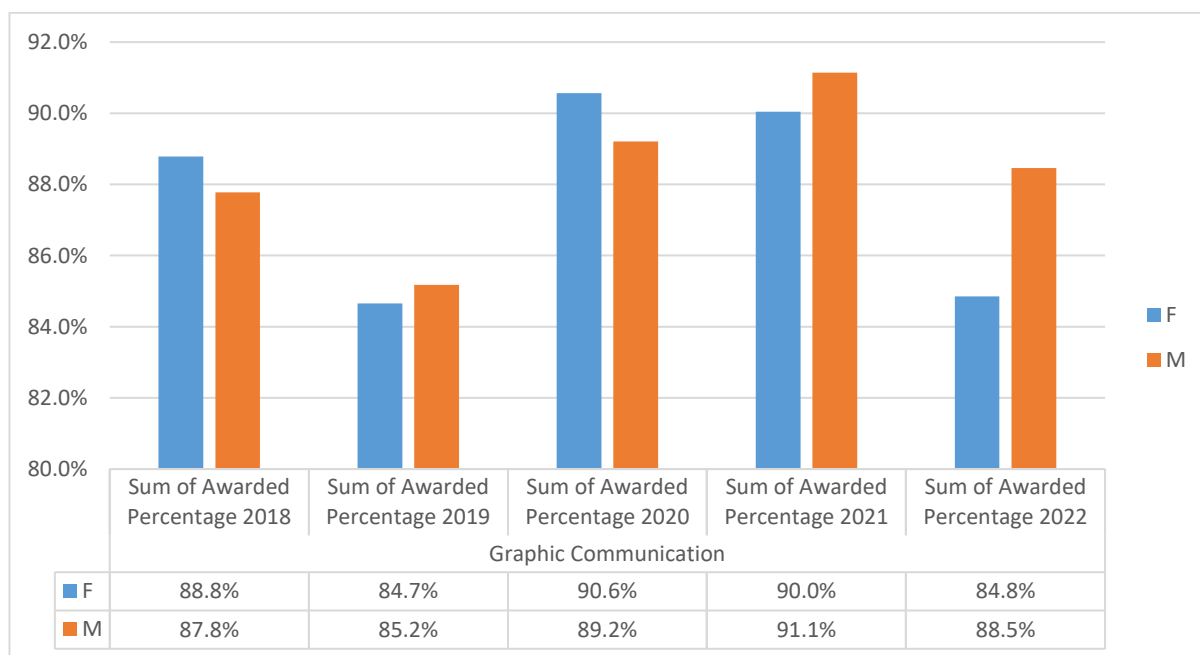
% Difference in Entries over consecutive years by gender				
Gender	2019 %difference from 2018	2020 %difference from 2019	2021 %difference from 2020	2022 %difference from 2021
Graphic Communication	-7.28%	-5.49%	-0.96%	-2.91%
AH	-3.96%	-34.67%	18.48%	2.13%
F	2.63%	-52.00%	19.35%	3.13%
M	-7.94%	-26.00%	18.03%	1.61%
H	-18.14%	-6.06%	1.64%	-5.84%
F	-18.18%	-6.80%	1.90%	-7.14%
M	-18.13%	-5.73%	1.52%	-5.25%
N5	-0.56%	-3.05%	-4.48%	-1.52%
F	-3.59%	2.55%	0.63%	2.17%
M	0.65%	-5.44%	-6.83%	-3.30%

National 4 Graphic Communication

Presentations Over Time

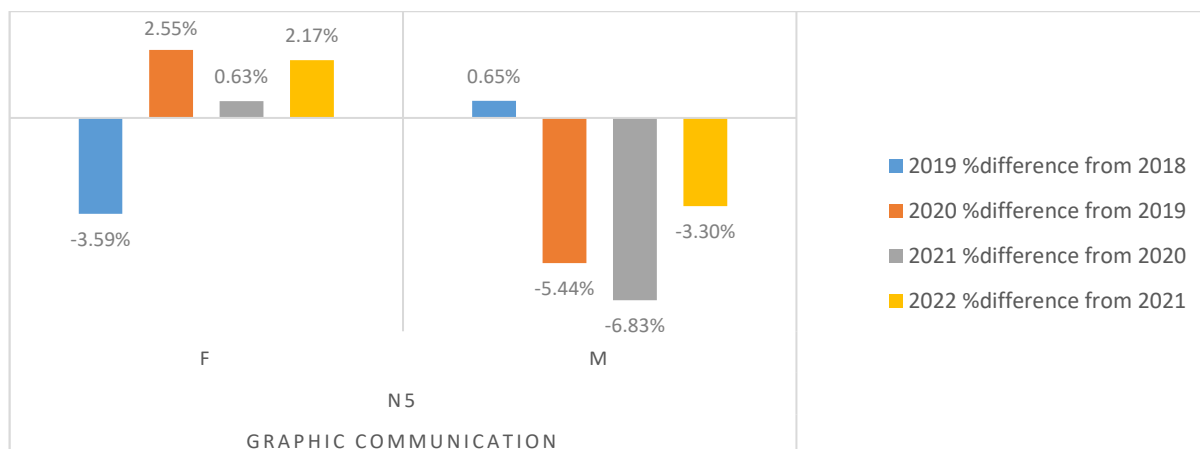


Awards Over Time as a percentage of cohort

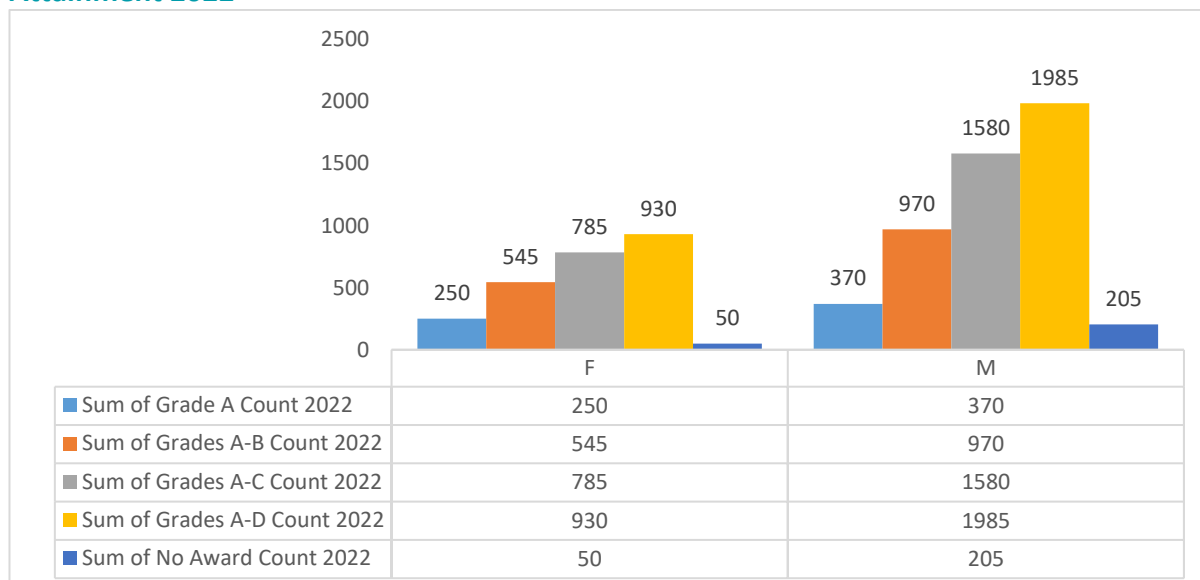


National 5 Graphic Communication

Changes in Gender Uptake Over Time



Attainment 2022

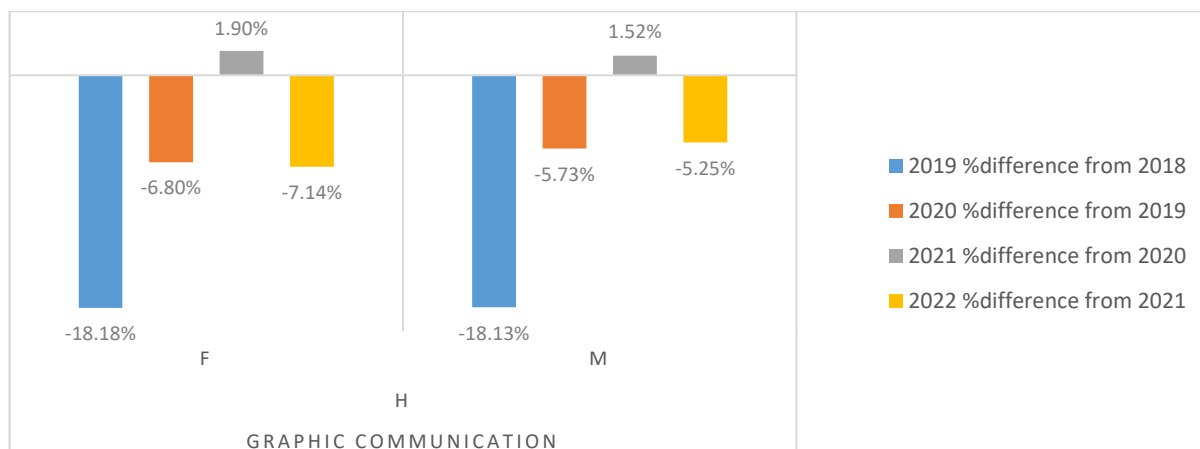


% Grade Distribution

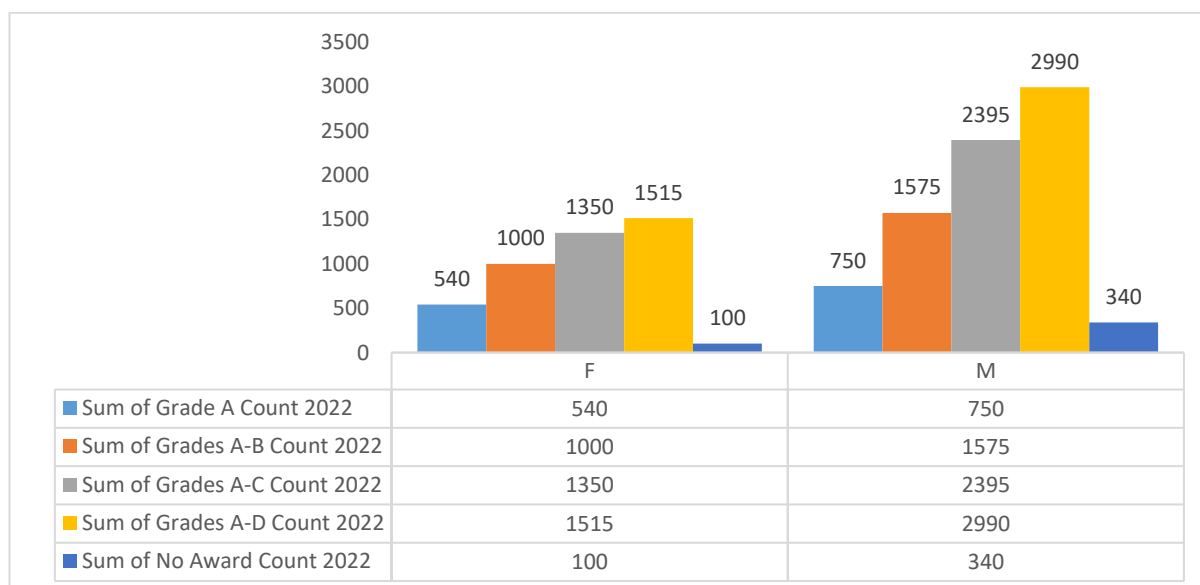
	Grade A	Grade A-B	Grade A-C	Grade A-D	No Award
% of all entries	19.56%	47.79%	74.61%	91.96%	8.04%
% f only entries	25.51%	55.61%	80.10%	94.90%	5.10%
% m only entries	16.89%	44.29%	72.15%	90.64%	9.36%

Higher Graphic Communication

Changes in Gender Uptake Over Time



Attainment 2022

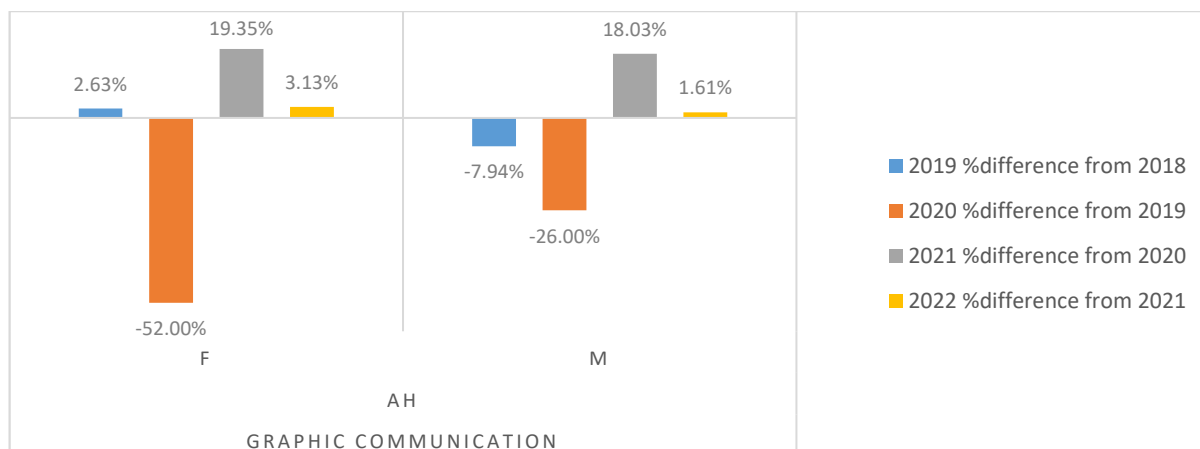


% Grade Distribution

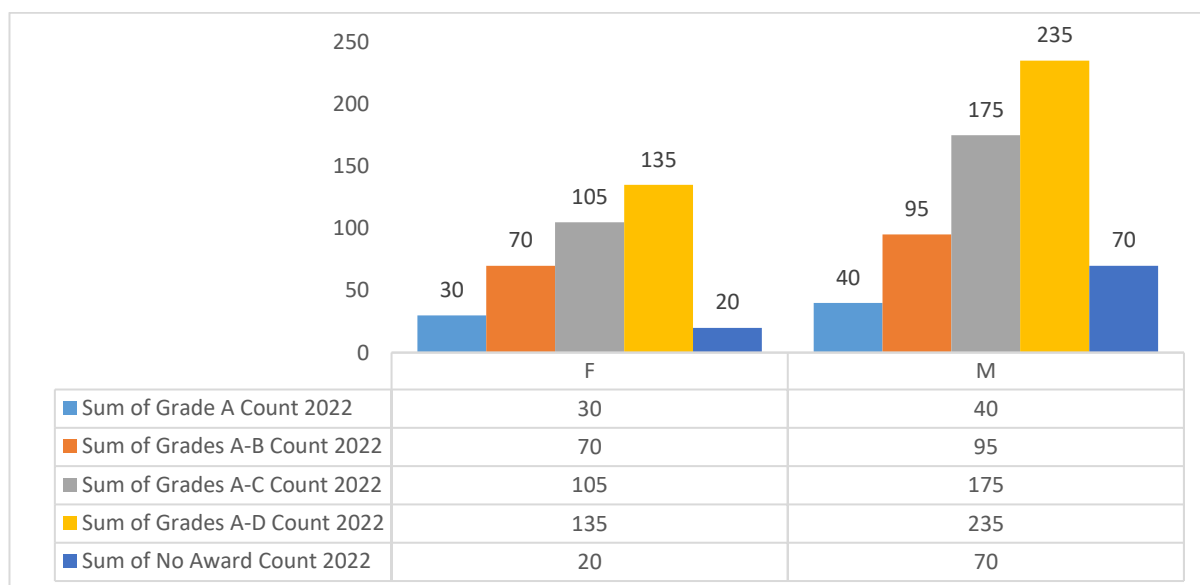
	Grade A	Grade A-B	Grade A-C	Grade A-D	No Award
% of all entries	26.09%	52.07%	75.73%	91.10%	8.90%
% f only entries	33.44%	61.92%	83.59%	93.81%	6.19%
% m only entries	22.52%	47.30%	71.92%	89.79%	10.21%

Advanced Higher Graphic Communication

Changes in Gender Uptake Over Time



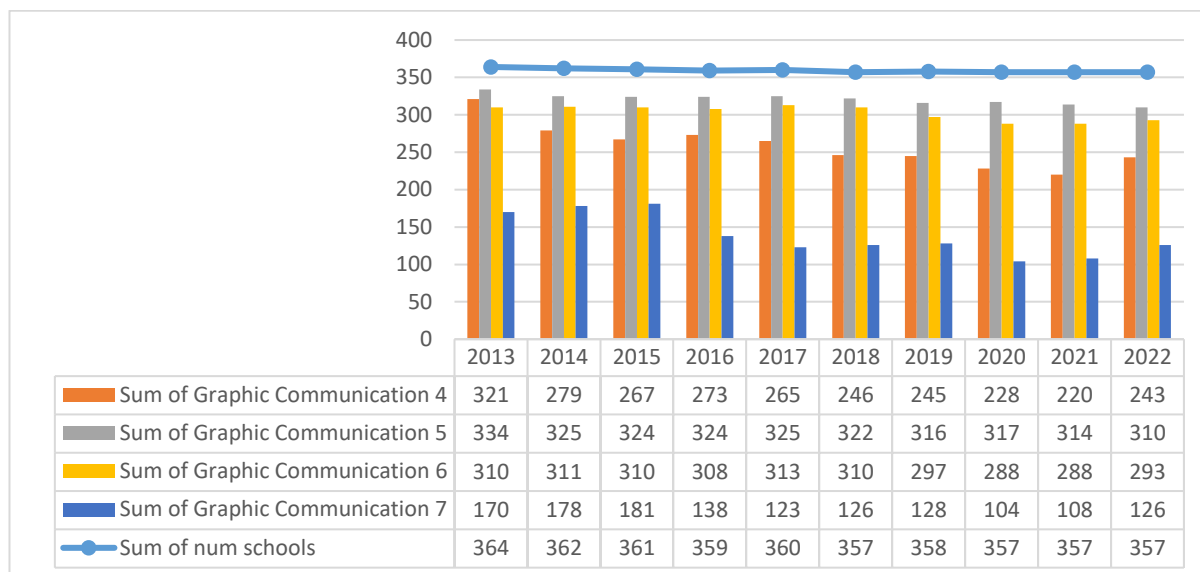
Attainment 2022



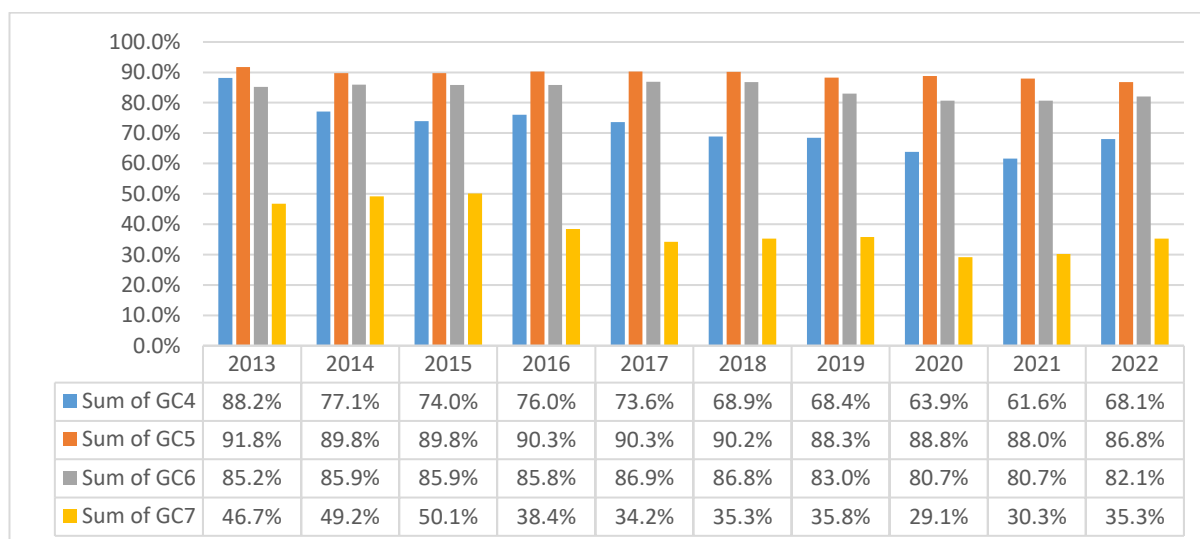
% Grade Distribution

	Grade A	Grade A-B	Grade A-C	Grade A-D	No Award
% of all entries	14.89%	35.11%	59.57%	78.72%	19.15%
% f only entries	18.75%	43.75%	65.63%	84.38%	12.50%
% m only entries	12.90%	30.65%	56.45%	75.81%	22.58%

Local Authority Schools Presenting Graphic Communication

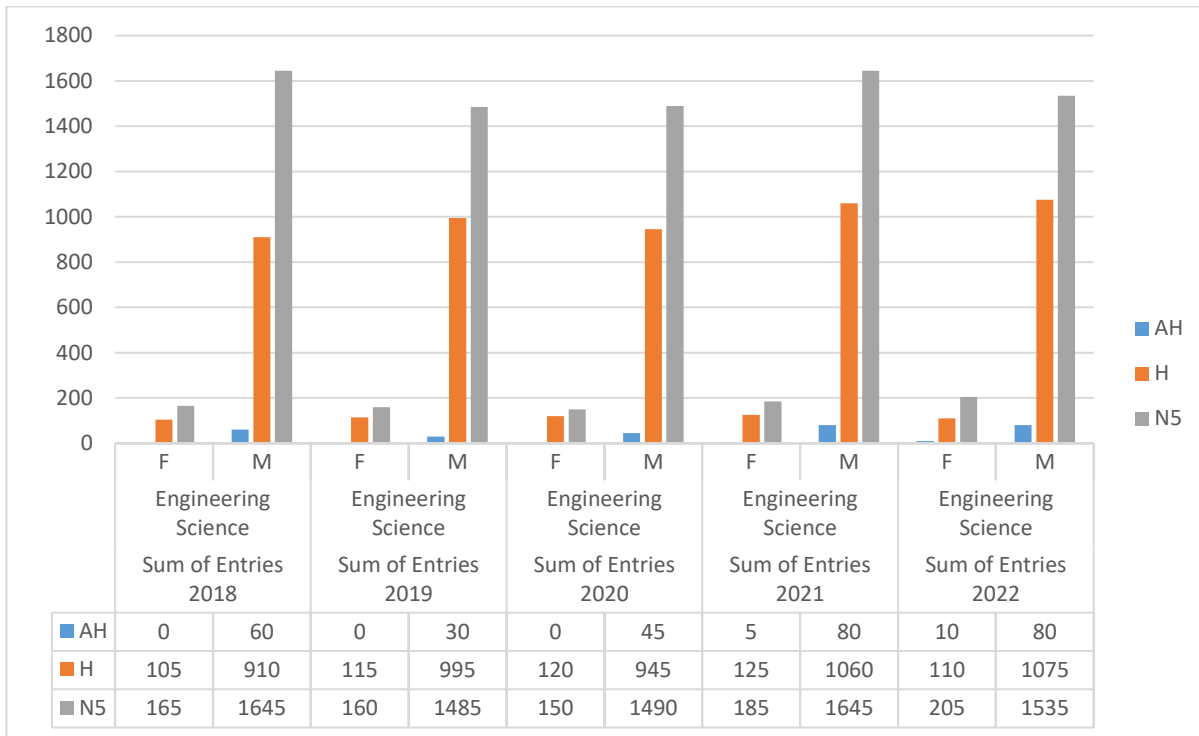


Percentage of Local Authority Schools Presenting Graphic Communication



Engineering Science

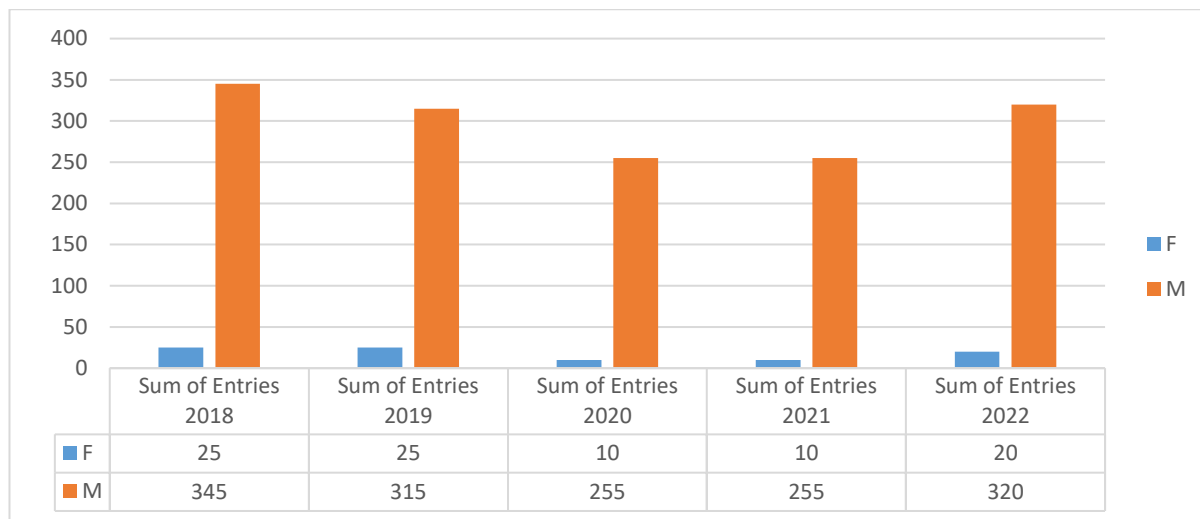
Graded Presentations Over Time



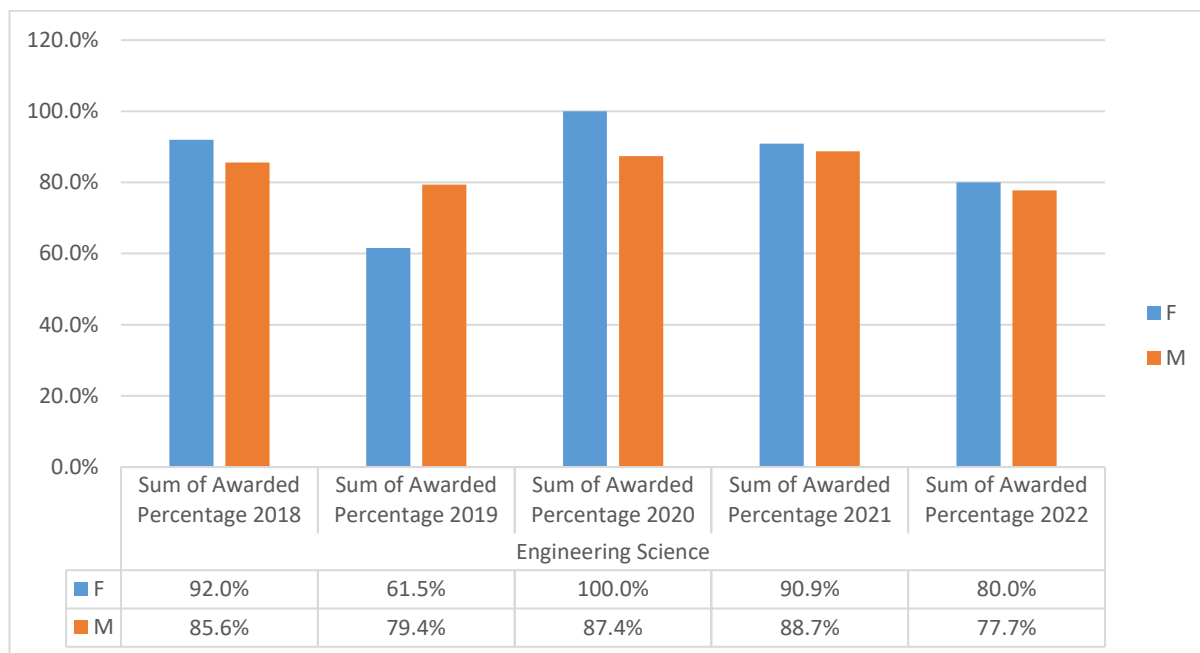
% Difference in Entries over consecutive years by gender				
Gender	2019 %difference from 2018	2020 %difference from 2019	2021 %difference from 2020	2022 %difference from 2021
Engineering Science	-3.59%	-1.27%	11.29%	-2.82%
AH	-100.00%	33.33%	47.06%	5.56%
F			100.00%	50.00%
M	-100.00%	33.33%	43.75%	0.00%
H	8.56%	-4.23%	10.13%	0.00%
F	8.70%	4.17%	4.00%	-13.64%
M	8.54%	-5.29%	10.85%	1.40%
N5	-10.03%	-0.30%	10.38%	-5.17%
F	-3.13%	-6.67%	18.92%	9.76%
M	-10.77%	0.34%	9.42%	-7.17%

National 4 Engineering Science

Presentations Over Time

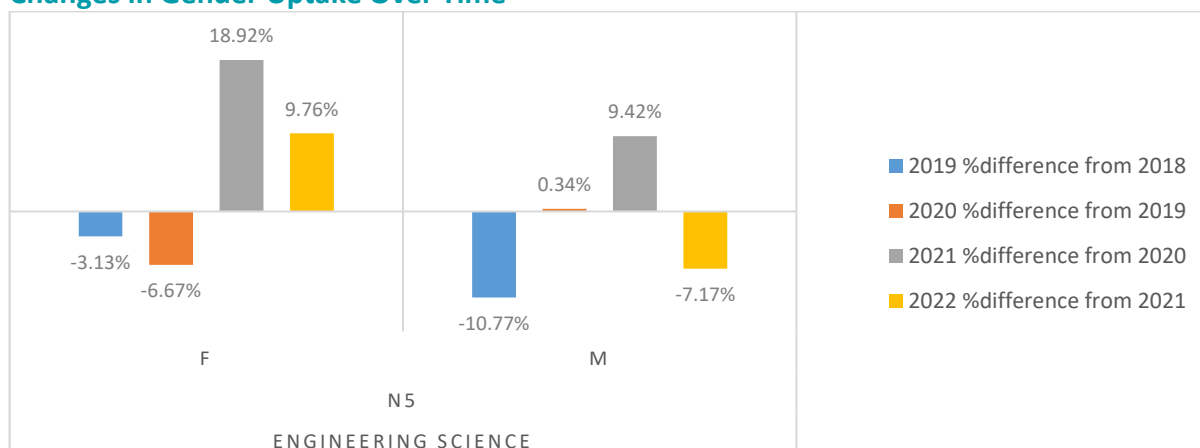


Awards Over Time as a percentage of cohort

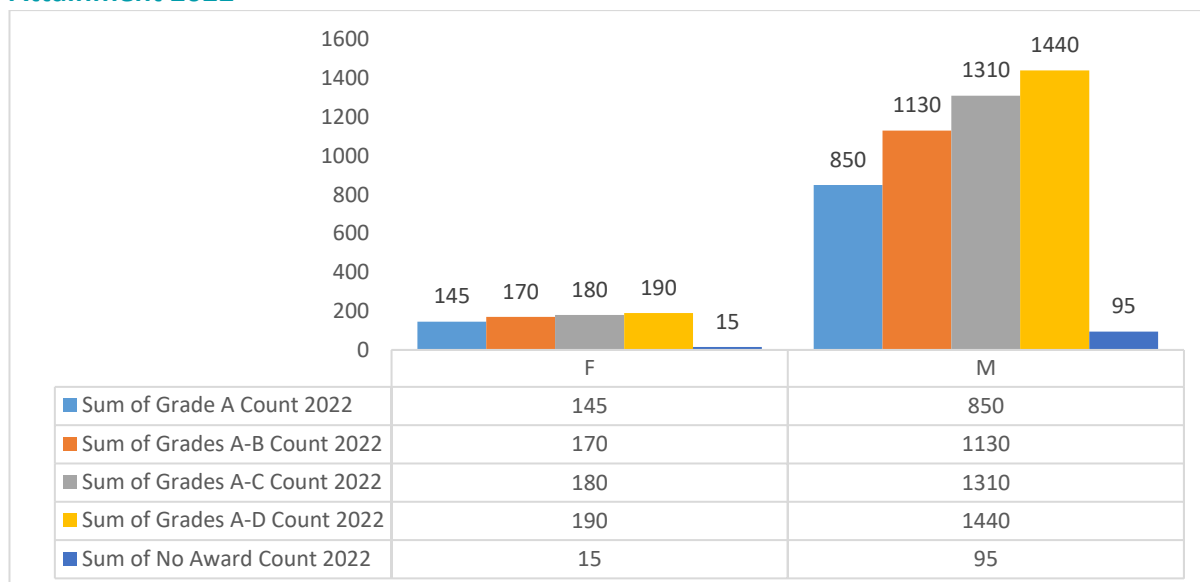


National 5 Engineering Science

Changes in Gender Uptake Over Time



Attainment 2022

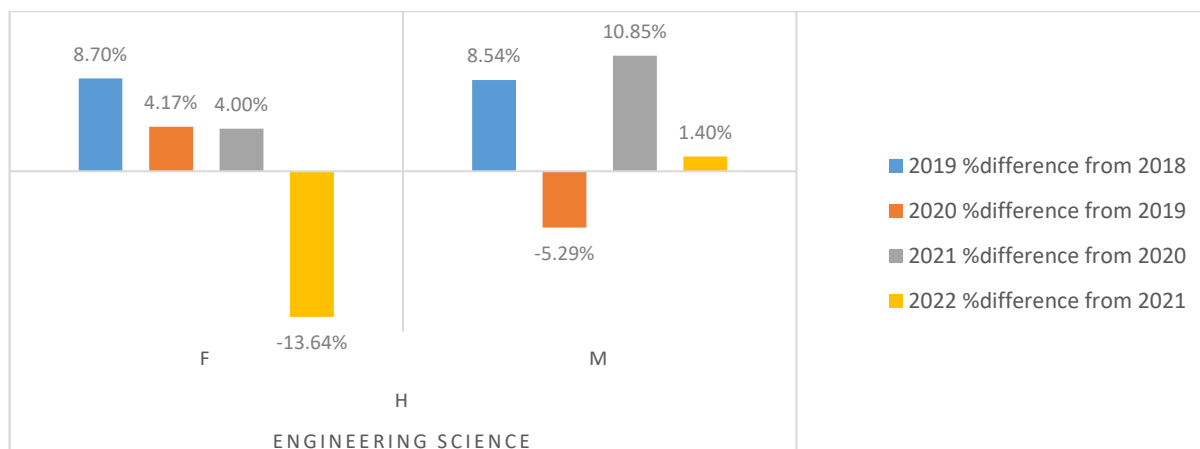


% Grade Distribution

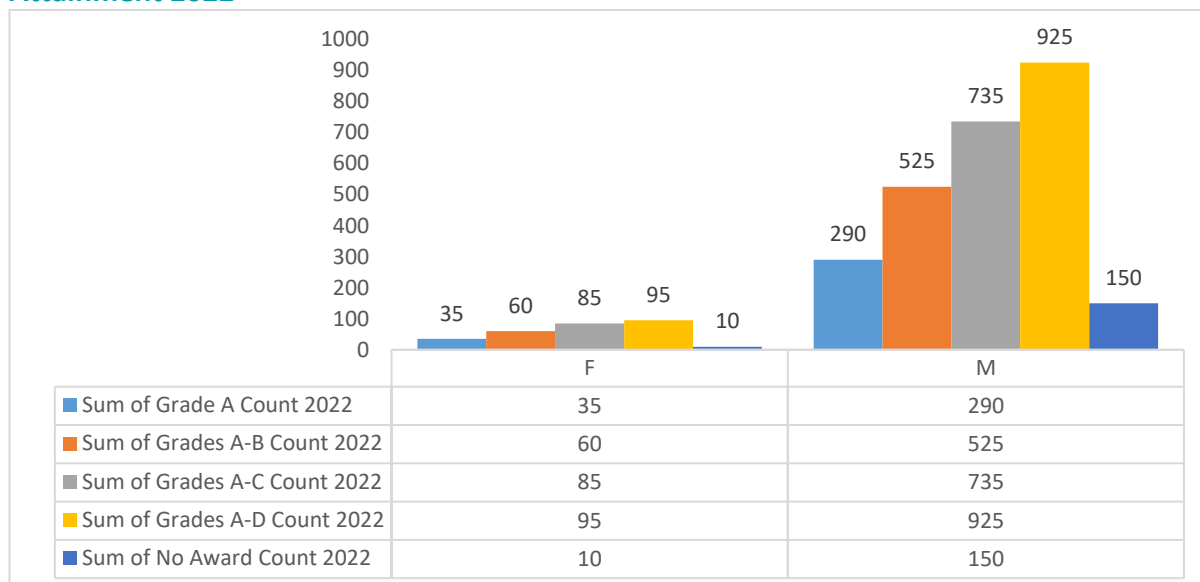
	Grade A	Grade A-B	Grade A-C	Grade A-D	No Award
% of all entries	57.18%	74.71%	85.63%	93.68%	6.32%
% f only entries	70.73%	82.93%	87.80%	92.68%	7.32%
% m only entries	55.37%	73.62%	85.34%	93.81%	6.19%

Higher Engineering Science

Changes in Gender Uptake Over Time



Attainment 2022

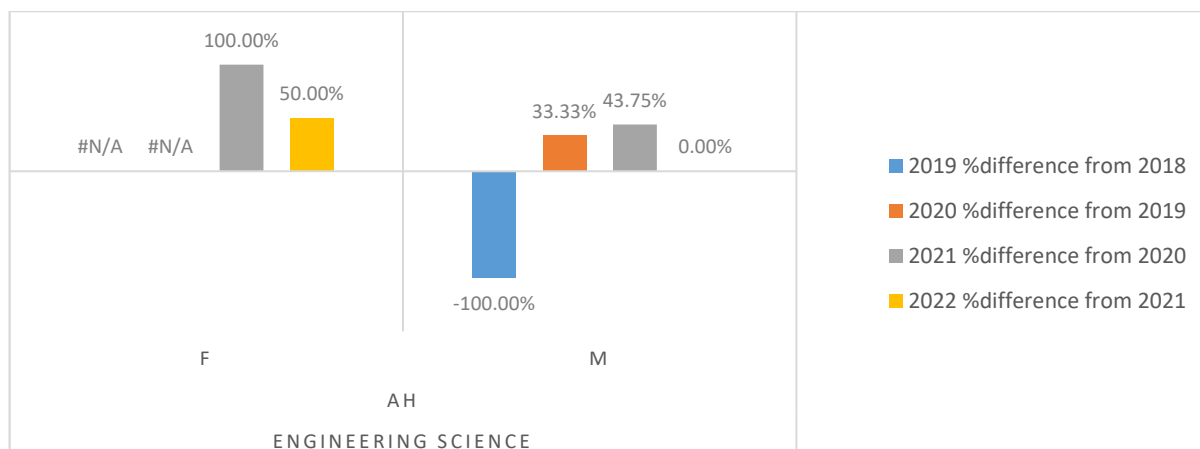


% Grade Distribution

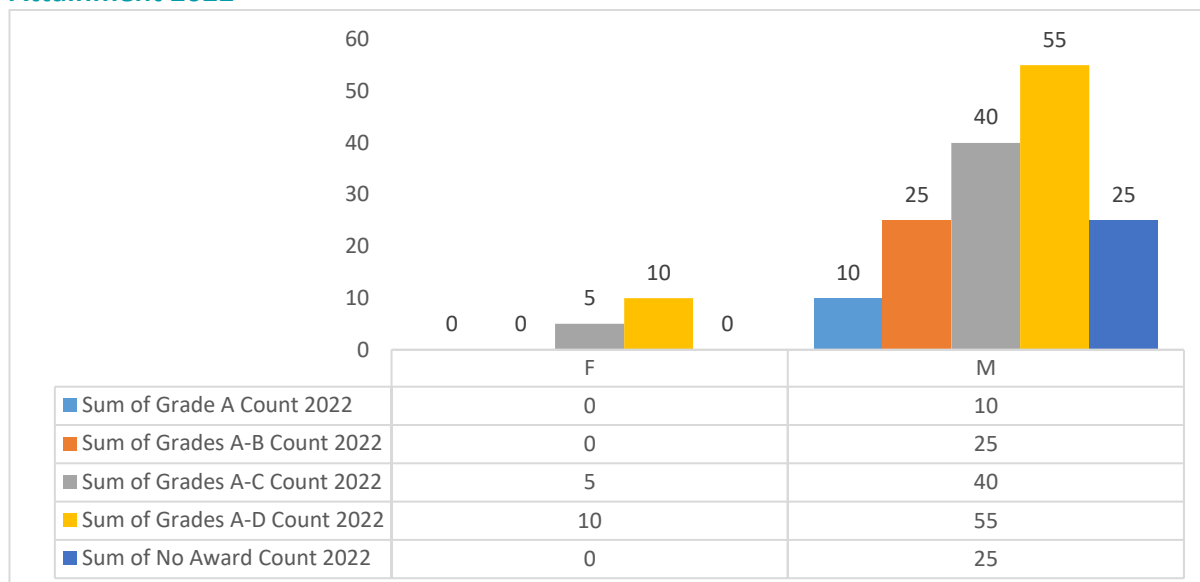
	Grade A	Grade A-B	Grade A-C	Grade A-D	No Award
% of all entries	27.43%	49.37%	69.20%	86.08%	13.50%
% f only entries	31.82%	54.55%	77.27%	86.36%	9.09%
% m only entries	26.98%	48.84%	68.37%	86.05%	13.95%

Advanced Higher Engineering Science

Changes in Gender Uptake Over Time



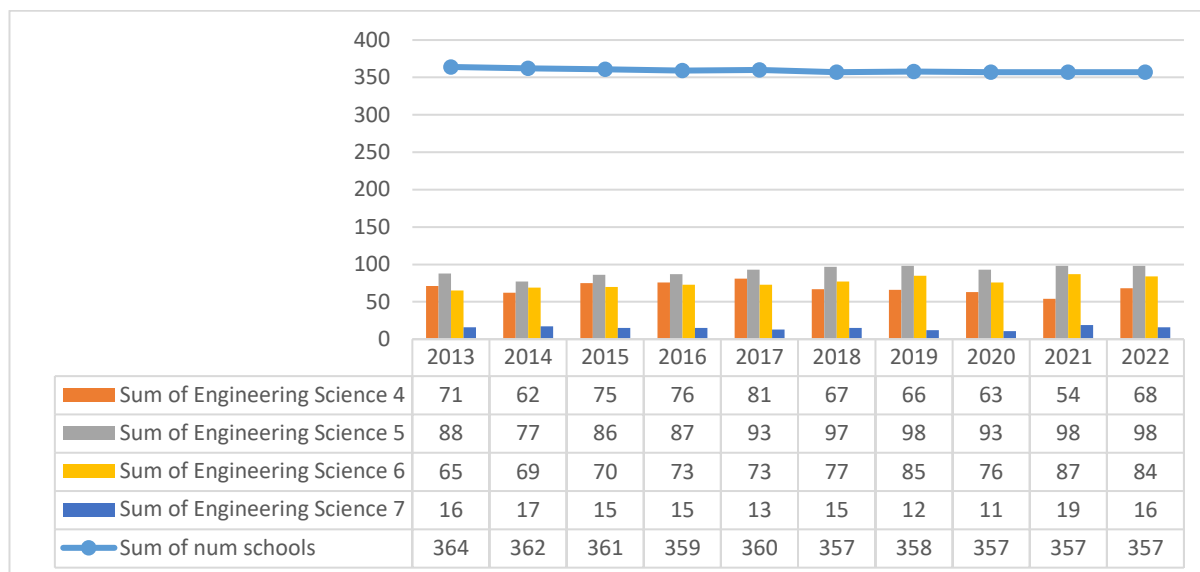
Attainment 2022



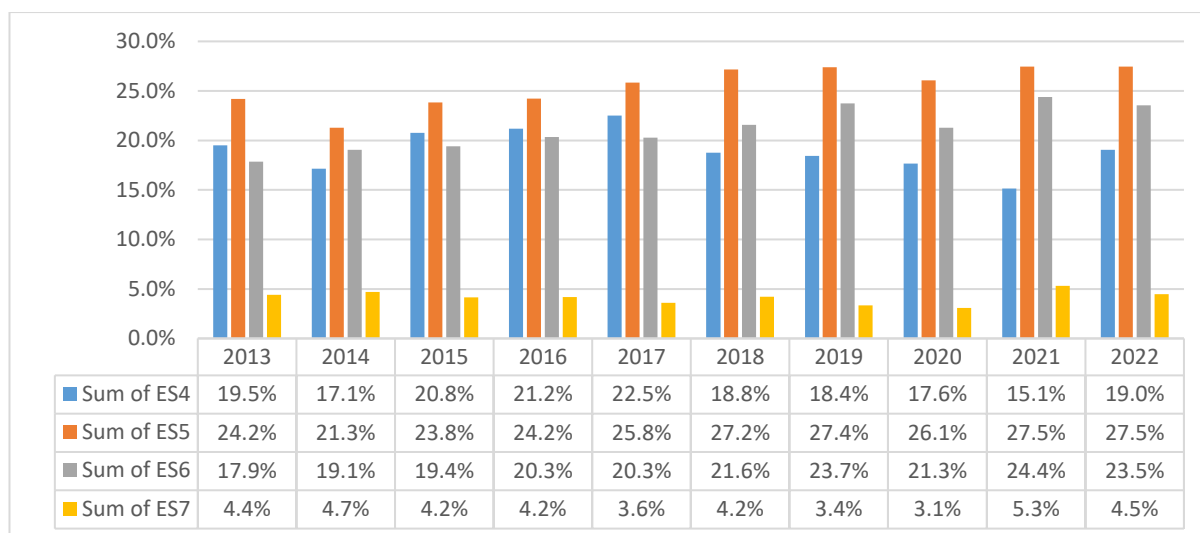
% Grade Distribution

	Grade A	Grade A-B	Grade A-C	Grade A-D	No Award
% of all entries	11.11%	27.78%	50.00%	72.22%	27.78%
% f only entries	0.00%	0.00%	50.00%	100.00%	0.00%
% m only entries	12.50%	31.25%	50.00%	68.75%	31.25%

Local Authority Schools Presenting Engineering Science

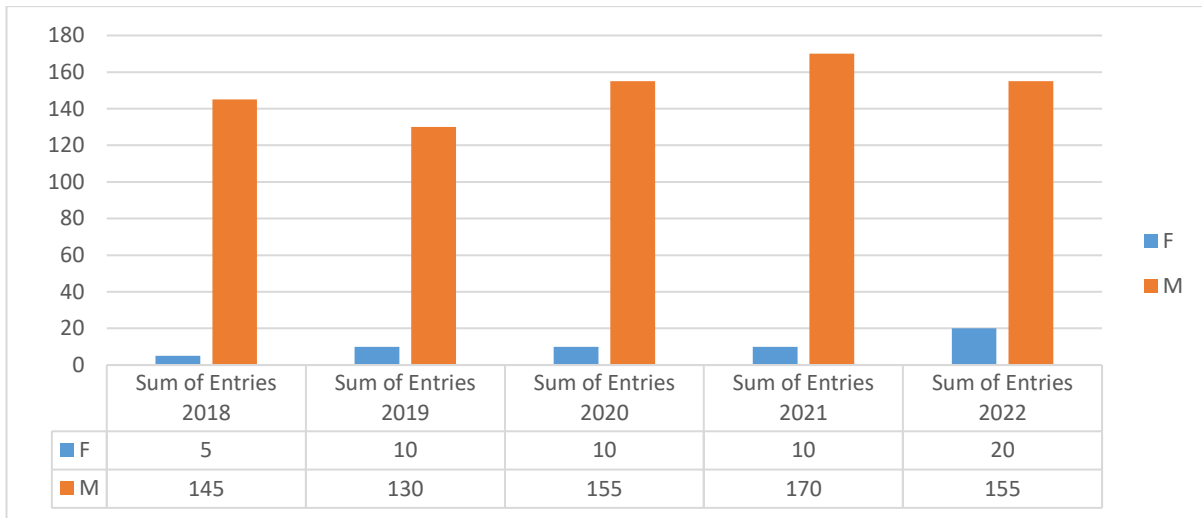


Percentage of Local Authority Schools Presenting Engineering Science

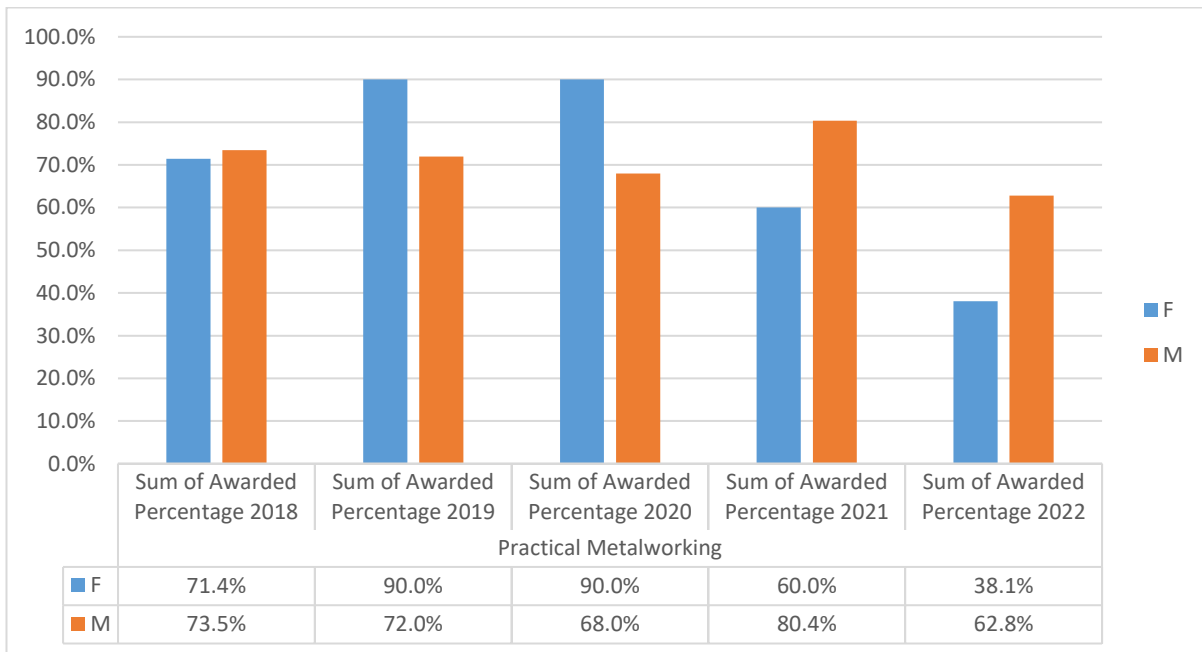


Practical Metalwork

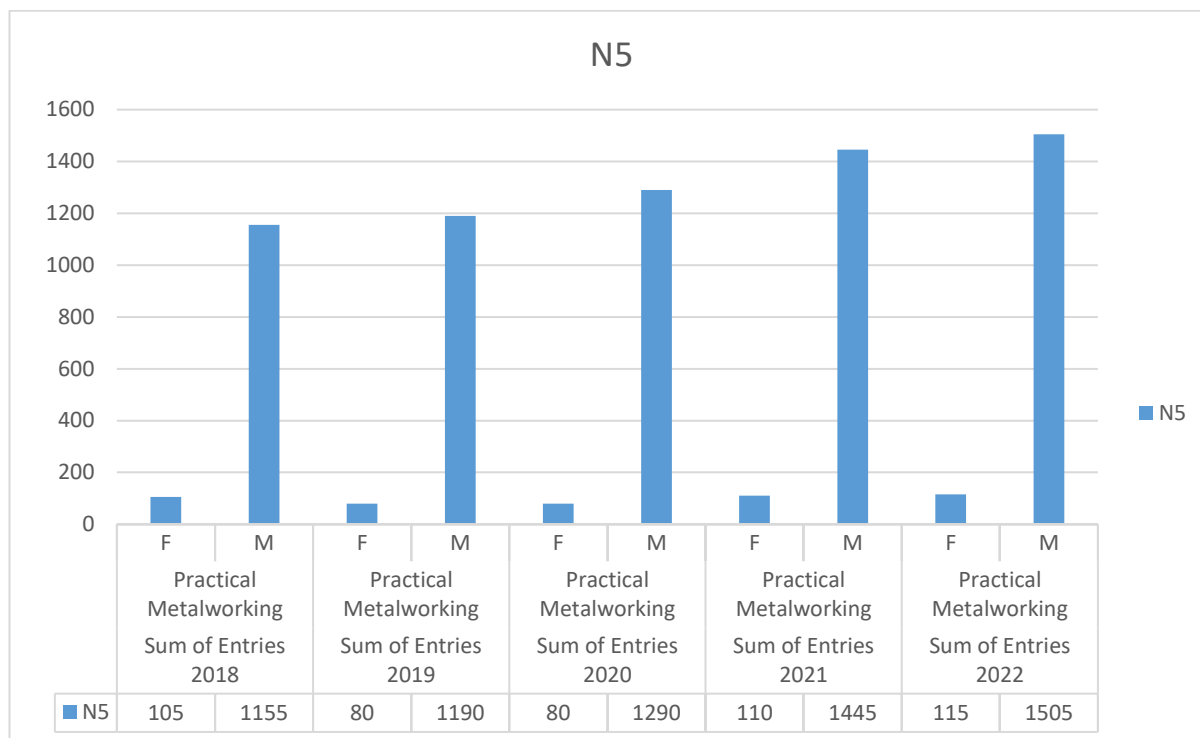
National 4 Presentations Over Time



Awards Over Time as a percentage of cohort

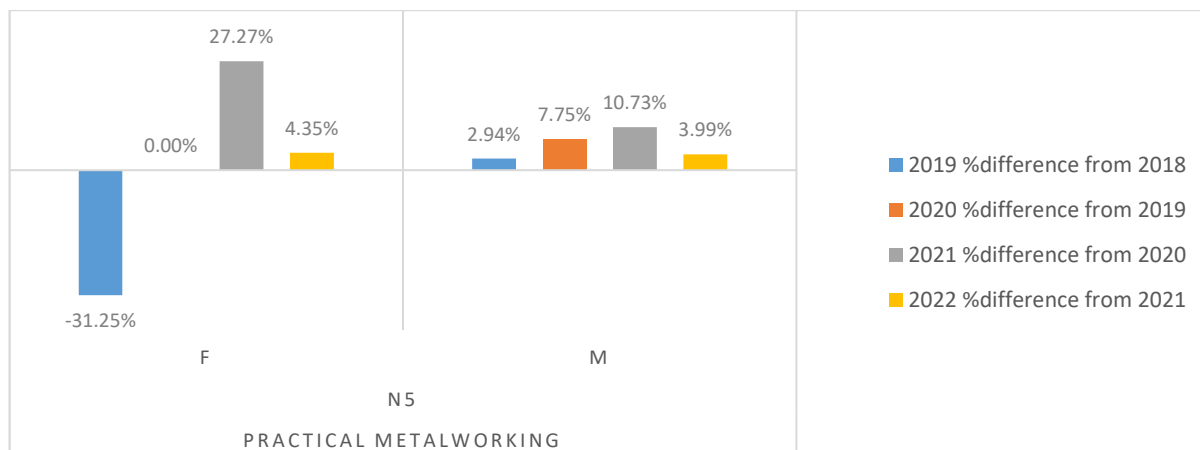


National 5 Presentations Over Time

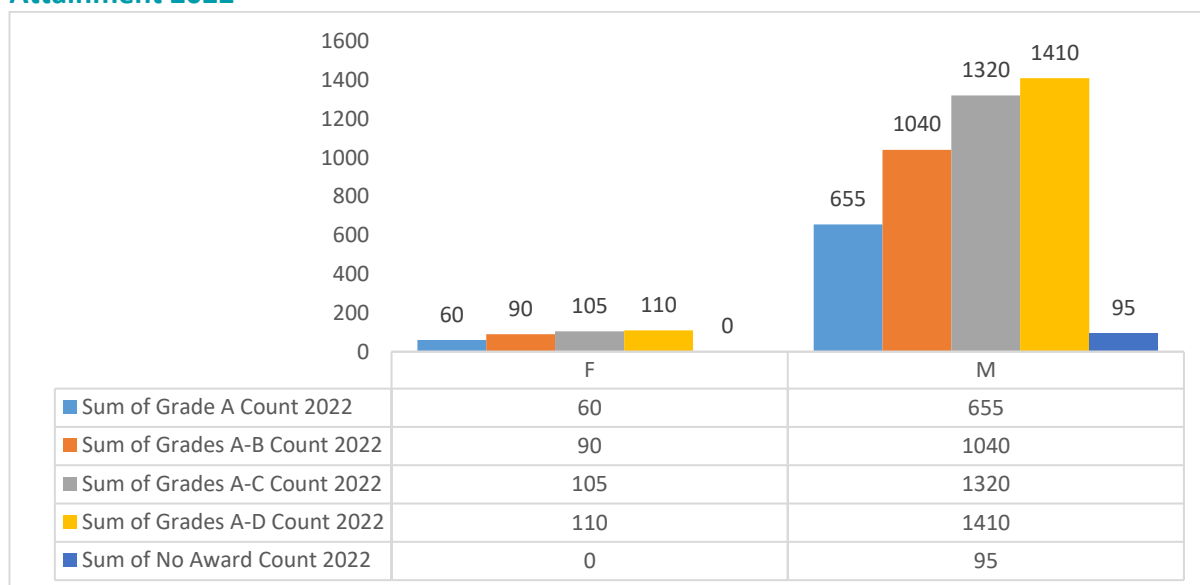


% Difference in Entries over consecutive years by gender				
Gender	2019 %difference from 2018	2020 %difference from 2019	2021 %difference from 2020	2022 %difference from 2021
Practical Metalworking	0.79%	7.30%	11.90%	4.01%
N5	0.79%	7.30%	11.90%	4.01%
F	-31.25%	0.00%	27.27%	4.35%
M	2.94%	7.75%	10.73%	3.99%

Changes in Gender Uptake Over Time



Attainment 2022

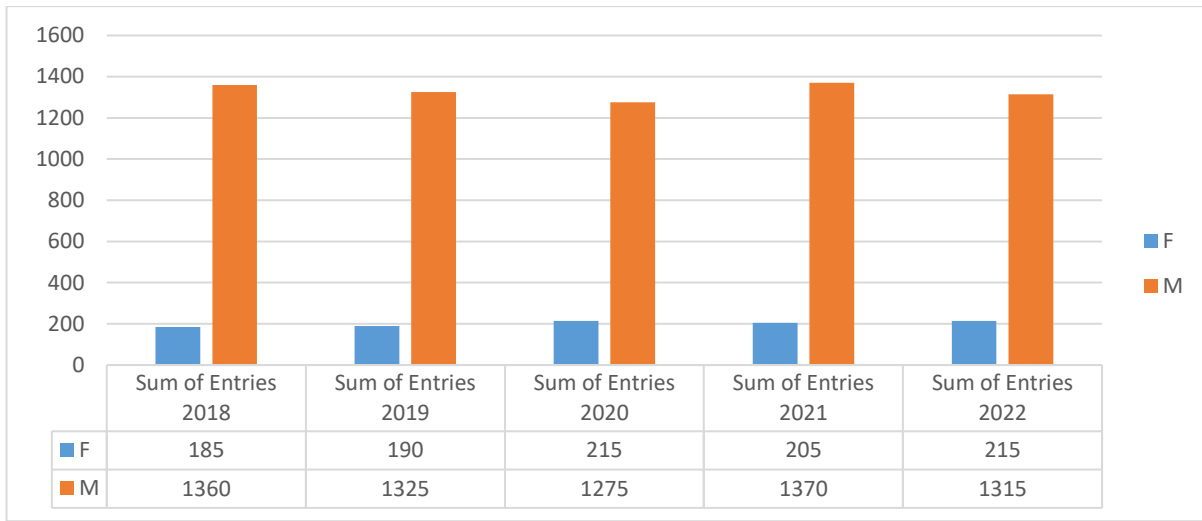


% Grade Distribution

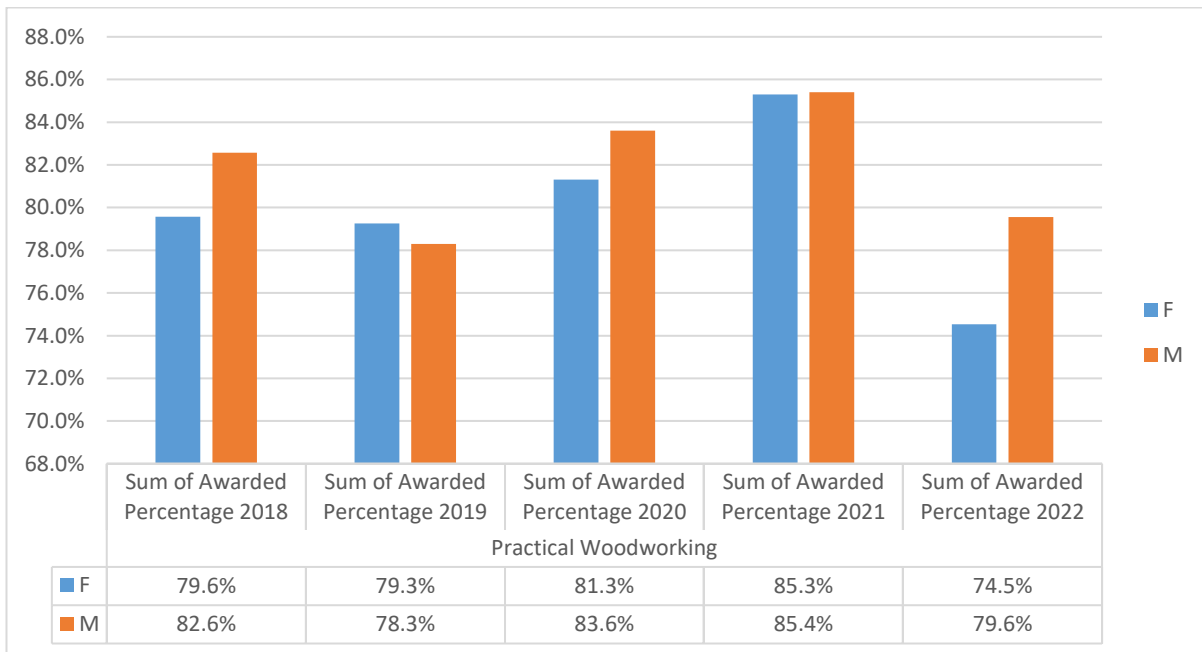
	Grade A	Grade A-B	Grade A-C	Grade A-D	No Award
% of all entries	44.14%	69.75%	87.96%	93.83%	5.86%
% f only entries	52.17%	78.26%	91.30%	95.65%	0.00%
% m only entries	43.52%	69.10%	87.71%	93.69%	6.31%

Practical Woodwork

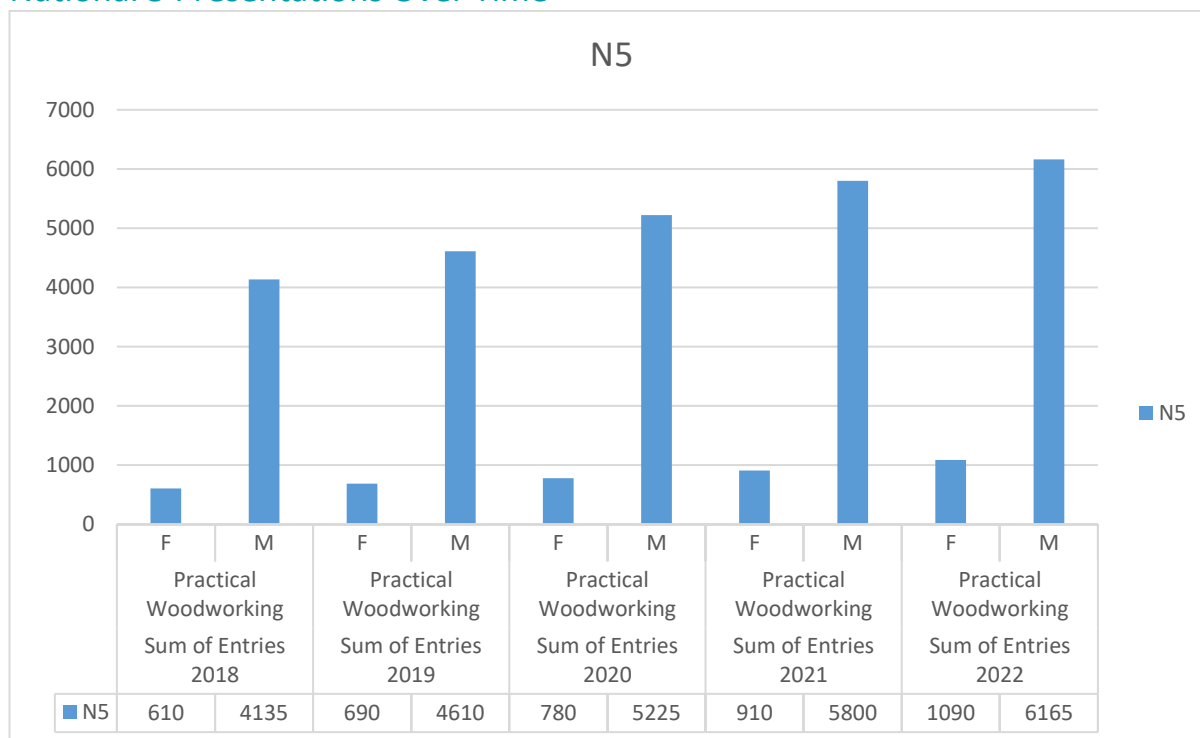
National 4 Presentations Over Time



Awards Over Time as a percentage of cohort

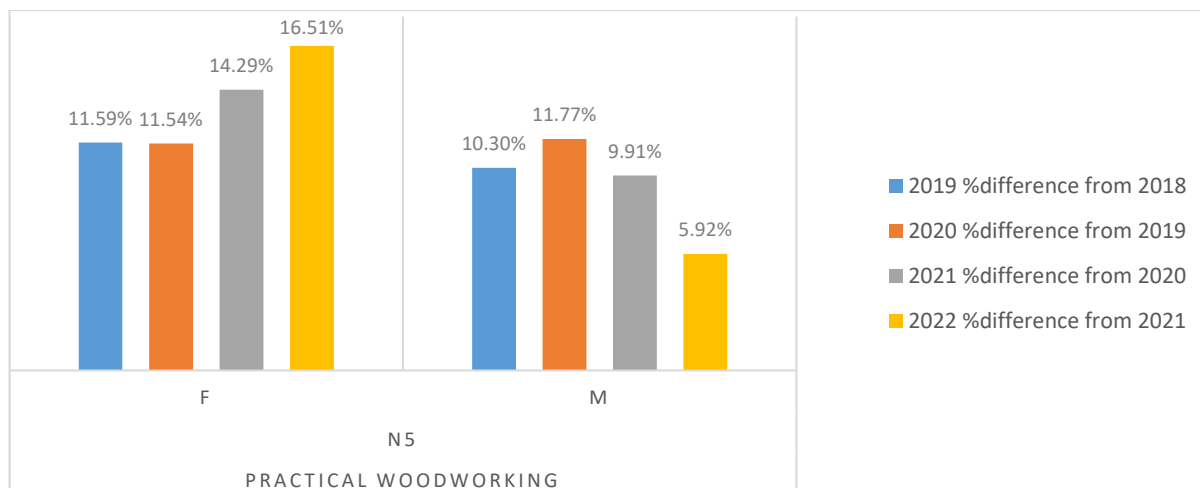


National 5 Presentations Over Time

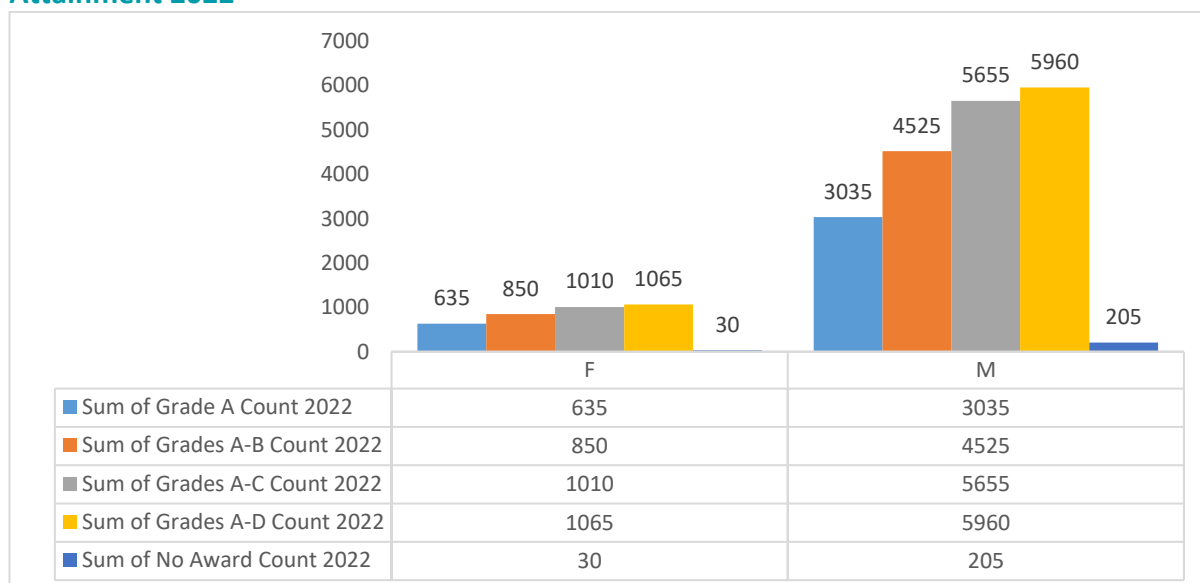


% Difference in Entries over consecutive years by gender				
Gender	2019 %difference from 2018	2020 %difference from 2019	2021 %difference from 2020	2022 %difference from 2021
Practical Woodworking	10.47%	11.74%	10.51%	7.51%
N5	10.47%	11.74%	10.51%	7.51%
F	11.59%	11.54%	14.29%	16.51%
M	10.30%	11.77%	9.91%	5.92%

Changes in Gender Uptake Over Time



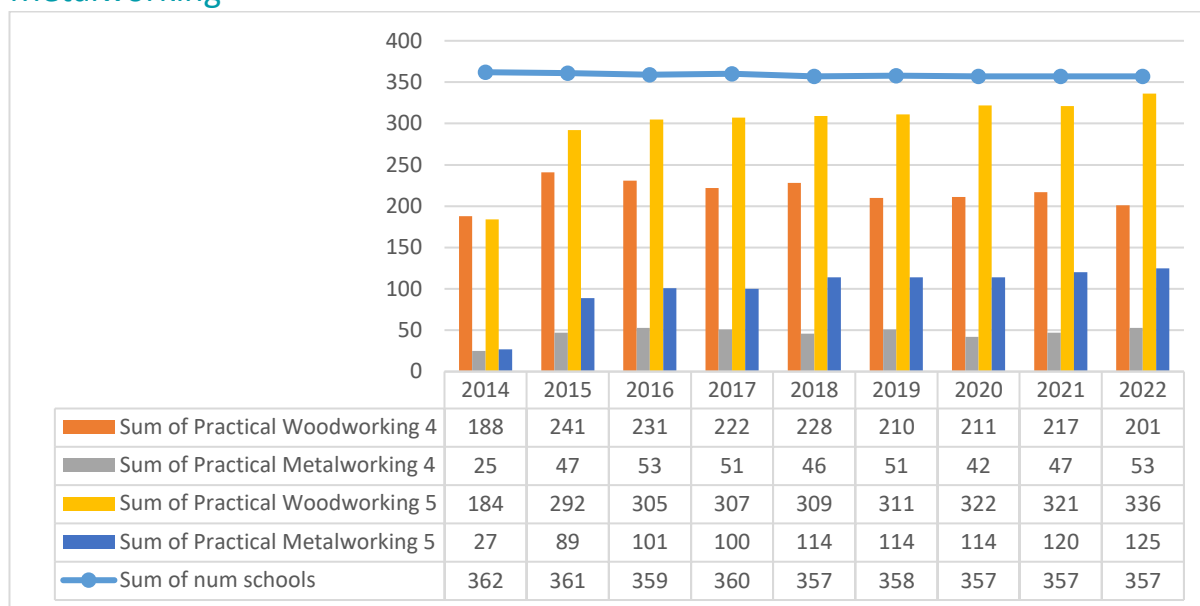
Attainment 2022



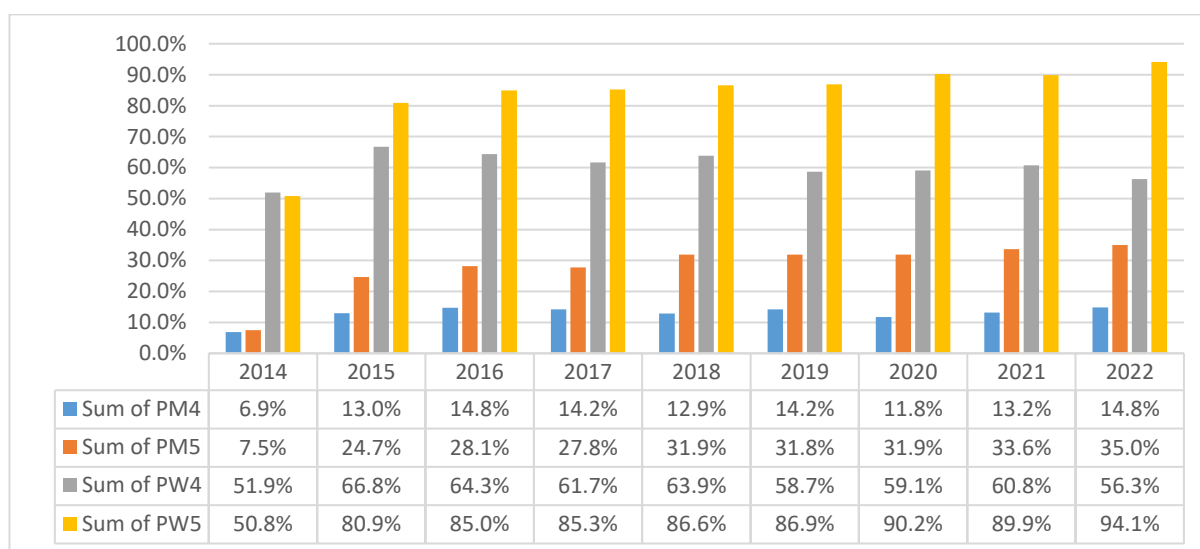
% Grade Distribution

	Grade A	Grade A-B	Grade A-C	Grade A-D	No Award
% of all entries	50.59%	74.09%	91.87%	96.83%	3.24%
% f only entries	58.26%	77.98%	92.66%	97.71%	2.75%
% m only entries	49.23%	73.40%	91.73%	96.67%	3.33%

Local Authority Schools Presenting Practical Woodworking / Practical Metalworking



Percentage of Local Authority Schools Presenting Practical Woodworking / Practical Metalworking



Recommendations

Education Scotland Actions

Share overview with local authority leads.

- Send local authority data to link person for verification purposes and for further completion from schools who have yet to respond.
- Update this report accordingly.

Identify target support groups and needs, including:

- Schools where CDEG is not being delivered.
- Investigate how National e Learning Offer (NeLO) or similar can be used/developed to support schools where CDEG is not being delivered in the Broad General Education (BGE), particularly schools with small pupil roles and remote/rural schools.
- Investigate how NeLO or similar can support and encourage more schools to deliver engineering science in BGE.
- Work with local authority/RICs to support the learning, teaching and assessment process in BGE CDEG.

Further Recommendations

Support further research the following areas:

- Identify a group to further analyse the data to look at future proofing CDEG.

Education Scotland

Denholm House
Almondvale Business Park
Almondvale Way
Livingston EH54 6GA

T +44 (0)131 244 4330

E enquiries@education.scotland.gsi.gov.uk

www.education.gov.scot

© Crown Copyright 2022

You may re-use this information (excluding images and logos) free of charge in any format or medium, under the terms of the Open Government Licence providing that it is reproduced accurately and not in a misleading context. The material must be acknowledged as Education Scotland copyright and the document title specified.

To view this licence, visit <http://nationalarchives.gov.uk/doc/open-government-licence> or e-mail: psi@nationalarchives.gsi.gov.uk

Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.