Education group

Pankhurst-Fawcett Report

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GM4WOMEN 2028

EDUCATION GROUP

Scorecard - 2024

This brief focuses on two key indicators of women's education in traditionally male-dominated fields in Greater Manchester

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Indicator 1: Women in Engineering & Tech Undergraduates

Regionally disaggregated data is still unavailable without charge at the time of HESA Student Data publication. Since 2024, the data required to calculate this indicator has been out of reach for charities like GM4Women.

4%

Indicator 2: Women in Construction & Built Environment Apprenticeships

The number of apprenticeships in Greater Manchester has fluctuated between 630 and 720 from 2019/20 to 2023/24. When we examine women's participation, the number of female apprentices has gradually increased.

The data for the first Education Indicator has been delayed and will require payment for access (Higher Education Statistics Authority returns, student Data release). The data for the second indicator is the same as last year, no improvements (Department of Education, Apprenticeships and Traineeships Data).

Indicator 1: Women in Engineering & Tech Undergraduates

The release of HESA Student Data for 2023/24 has been delayed – **HESA website announced the data release in spring 2025**. Regionally disaggregated data is still not available without charge at the time of publication. Since 2024, the necessary data to calculate this indicator has been put out of reach for charities like GM4Women, as HESA asks for a substantial fee to access data that now belongs to its proprietary disaggregated HEIDI+ dataset, licensed under fee to Higher Education institutions.

Indicator 2: Women in Construction & Built Environment Apprenticeships in Greater Manchester

The number of apprenticeships in the construction, planning, and built environment sectors in Greater Manchester has fluctuated between 630 and 720 from 2019/20 to 2023/24. However, the number of starts is already at 570 in the first quarter of 2024/25.
When we examine women's participation, the number of female apprentices has gradually increased.

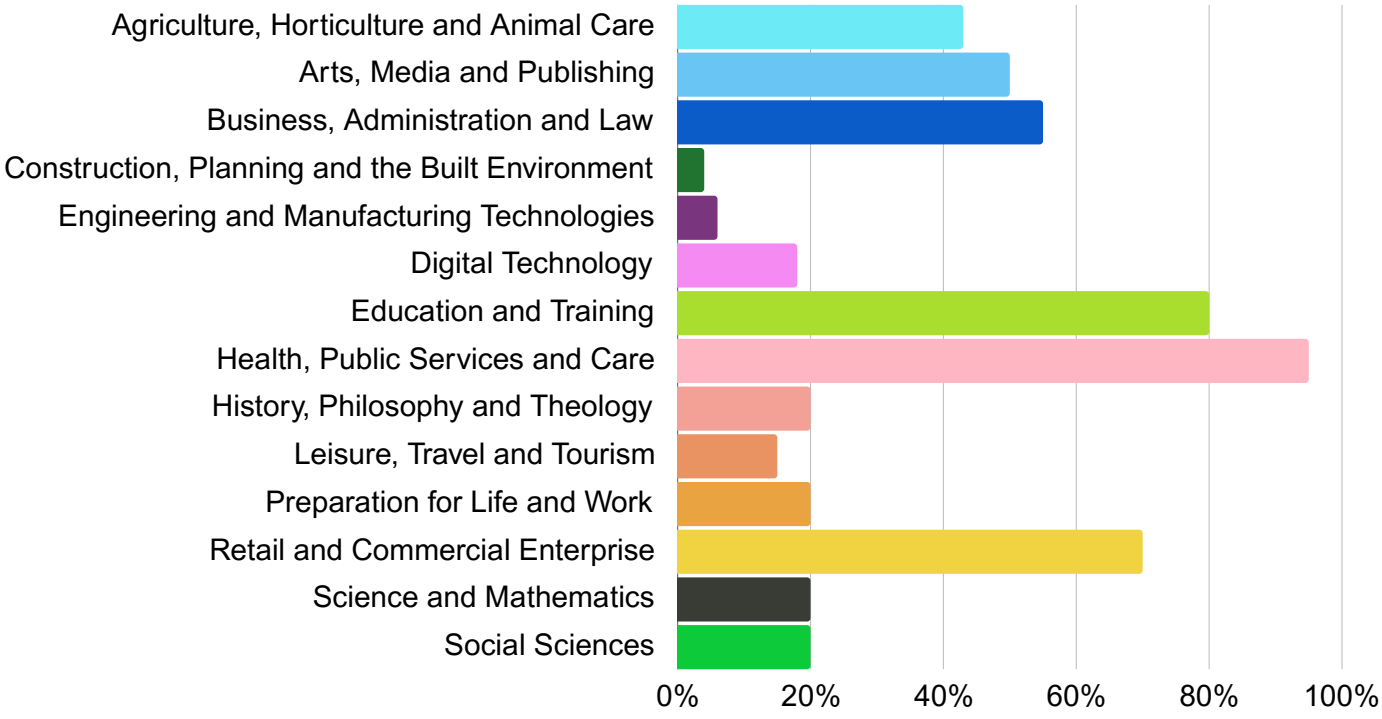
Figure 1: Apprenticeship by Women under 19 in Greater Manchester

	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Total	630	610	710	720	700	570
Female	**20**	**20**	**20**	**30**	**30**	**40**
Male	610	590	680	690	670	530

Figure 1 shows that female apprentices rose from 20 in 2019/20 to 30 in 2023/24, although we see a promising start to the most current academic year with 40 in a single quarter. Despite this growth, the proportion of women remains low compared to men. In 2023/24, there were 670 male apprentices, **which highlights the continued dominance of male** participation in the sector.

Looking at Figure 2 the data reflects a clear trend in engineering and construction where female participation is significantly lower than in other fields like business and administration, with many of these sectors having female apprenticeship numbers closer to or above half of the total apprenticeships. This underscores a need for more significant efforts to attract and retain women in these technical, male-dominated fields.

Figure 2: Apprenticeship by Women under 19 in Greater Manchester 2023/24



6%

Engineering and Manufacturing Technologies

4%

Construction, Planning and the Built Environment

Regional Breakdown

Looking at the data regionally, the total number of apprenticeship starts across the **North West** is significantly higher (2,850) than the individual areas within Greater Manchester, where the numbers are much smaller.

Figure 3: Apprenticeship in Great Manchester by Boroughs

	Total	Female	Male	Not App/know
North West	2850	300	2550	low
Bolton	110	10	110	low
Bury	70	10	60	low
Manchester	90	10	80	low
Oldham	70	10	70	low
Rochdale	80	10	70	low
Salford	120	10	100	low
Stockport	110	10	100	low
Tameside	90	10	70	low
Trafford	60	10	60	low
Wigan	230	10	220	low

Apprenticeship starts are notably lower in Greater Manchester, Bolton, Bury, Manchester, Oldham, and others. In the North West region, women represent 10.5% of the total apprenticeship starts, with 300 female apprentices out of 2,850. However, when we break down the data for specific areas in Greater Manchester, the female representation is far more limited. For example:

Bolton

Of 110 total apprenticeships, only 10 (approximately 9%) are female.

Manchester and Wigan

Women represent around 10% of the total apprenticeship starts in both areas, which aligns with the broader regional trends.

This **consistently low female representation across Greater Manchester** suggests that women remain underrepresented in construction apprenticeships throughout the region.

Local Initiatives and Lessons Learned

Public Sector Actions

The **Greater Manchester STEM Framework** is designed to ensure that residents of all ages and backgrounds know the STEM opportunities available in the region. It highlights significant projects, including HS2 and Northern Powerhouse Rail, alongside broader infrastructure and construction plans. The GM Good Employment Charter also promotes diverse and inclusive workplaces, focusing on fair pay, opportunity, and progression for all employees.

University-Level Initiatives

Research reveals that many women still view construction as a male-dominated field. According to Morgan Siddall's Are we Gen Z ready? Report, 57% of women and girls are discouraged from pursuing a construction career. Data from the Women's Engineering Society shows that only 12.37% of engineers in the UK are women. However, the University of Salford's research on barriers for women in leadership roles in construction suggests that improving work-life balance, offering flexible working practices, and providing career break schemes could help remove obstacles for women in the industry. At the University of Manchester, the Manchester Student Society of Architecture (MSSA) has established a forum to promote gender equality in architecture studies and careers. Meanwhile, Manchester Metropolitan University's *Rise* programme helps enhance students' employability by focusing on women in STEM, offering opportunities like workshops, coding courses, and career networking events to empower women in the field.

School-Level Initiatives

The STEM Ambassadors initiative provides opportunities for ambassadors to engage with under-16 students in STEM subjects. However, while some cities like Liverpool and Sheffield have more school-based activities in construction and engineering, Greater Manchester lacks initiatives for younger students in these areas. This gap presents an opportunity for the STEM Ambassadors Programme Northwest to encourage more school activities to engage young girls in these fields. Additionally, the *Make Space for Girls*, a collaboration between Manchester Metropolitan University and local schools, empowers teenage girls to contribute to the design of public spaces. This initiative helps inspire girls to consider urban planning and engineering careers by incorporating their ideas into park designs.

Community-Level Support

Community initiatives also play a crucial role in empowering women in STEM. The Boilerhouse workshop offers hands-on training in construction skills such as woodwork, painting, and using power tools, fostering confidence and connection among women. Community initiatives like Ladies That UX and Digital Her offer support and networking opportunities for women in tech and digital industries. Additionally, STEM Women hosts recruitment events to connect female STEM students with employers, helping them grow their skills and access job opportunities.

Bridging the Gender Gap in STEM and Construction

While female participation in construction apprenticeships in Greater Manchester has gradually increased, **women still make up a small portion of the workforce in this male-dominated sector.** Bridging this gender gap requires more concerted efforts across various levels, from public sector initiatives to university and community programs.

These initiatives demonstrate the importance of providing women support, resources, and opportunities at every stage of their education and career journey.

By building on **successful local programs, Greater Manchester can continue to bridge the gender gap in STEM and construction**, creating a more inclusive and diverse workforce.

Education group call to actions 2024

1

Increase Transparency and Accessibility of Data: Efforts should be made to ensure that regional data on women in engineering and tech, as well as construction apprenticeships, is more widely accessible, particularly to organisations trying to promote gender equality in these sectors. More women must engage with data that impact their advancement. While data initiatives are growing in Greater Manchester, leadership remains male-dominated. Increasing training, mentoring, flexible jobs, and collaboration can help women transform this sector, as in construction and engineering.

2

Affirmative action: To bridge the gender gap in STEM and construction, we must take intentional, gender-sensitive actions. Research highlights key areas to focus on when encouraging women in these fields (WES,2024; ECITB,2024; Pearson et al., 2015). Encouraging early STEM exposure, showcasing female role models, and fostering inclusive learning environments help women pursue careers in STEM and construction. Challenging gender bias and boosting self-efficacy through mentorship and support further empower women to succeed in these fields.

3

New technologies and gender perspective. Women remain underrepresented in AI, holding only 26% of data and AI roles and 16% of tenure-track faculty positions. Many face credibility challenges and workplace inequality, leading to high attrition. Gender diversity is crucial for building fair, effective AI systems that reflect the populations they impact. Therefore, encouraging female students in the AI sector is critical.

4

We advocate for a multisectoral consultation on women in STEAM and construction in Greater Manchester. Identifying attraction factors, barriers, and ways to improve accessibility from school age is key. Collaboration among leaders can amplify impact, and we recommend GMCA Women and Girls Panel sponsor this initiative.