
**Manchester City Council
Report for Resolution**

Report To: Economy, Employment and Skills Overview and Scrutiny Committee – 14 December 2011

Subject: Graduate Employment and Retention

Report of: Sara Todd, Assistant Chief Executive (Regeneration)

Summary

This report looks at participation rates by Manchester residents in Higher Education, graduate employment and graduate retention. It presents figures on graduate employment from three Greater Manchester universities and discusses graduate retention rates within the region and city region. It shows the sectors of the economy which are most 'graduate hungry' and discusses what is being done to retain and attract graduates to Manchester and how this fits with the overall approach to the highly skilled set out in the Greater Manchester Strategy.

Recommendations

That the Committee note the report.

Wards Affected:

All

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Background documents (available for public inspection):

None

1.0 Introduction

- 1.1 Manchester city region is home to five universities (the University of Manchester, Manchester Metropolitan University, University of Salford, University of Bolton and University of Huddersfield, Oldham campus) giving a combined population of over 100,000 students. A large proportion of the 29,000 or more students graduating each year choose to remain in the conurbation. Manchester's high performing research and teaching institutions together with its growing creative, digital and media, financial and professional services, science and technology industries, make Manchester a good destination for graduates. The city region needs these graduates to ensure the workforce remains highly skilled and competent and continues to attract employers.
- 1.2 Outside London, Greater Manchester (GM) is one of a few places that has the potential to drive private sector growth at a nationally-significant scale. That was the conclusion of the Manchester Independent Economic Review (MIER) and the foundation of the Greater Manchester Strategy (GMS). Economic forecasts produced for Manchester suggest that Greater Manchester has the business base and private sector partnerships to create 75,000 (net) new jobs by 2015.
- 1.3 It is anticipated that over the next decade half of all job opportunities in the city region will require higher-level qualifications. Workers with high-level skills currently make up at least 40% of those employed within private sector Knowledge Business Industries (KBIs) in Greater Manchester. This is higher than any other city region outside London. Over the last decade, employment has grown significantly in sectors such as ICT Digital, Communications, Creative, Digital and New Media, and Professional Services and these remain target sector for growth promotion in GM. This has led to the development of well paid, distinctive career opportunities that continue to retain and attract young graduates at an early stage in their careers.
- 1.4 However, the GMS pointed out that the city region loses a substantial proportion of its highly skilled and mobile young workers to London and the Southeast and, though retention rates for graduates are higher than other provincial city regions, they are still lower than the capital. If Manchester is to be a leading knowledge economy it needs to compete globally for the best talent. For this reason the GMS set an objective to increase the proportion of graduates from Manchester city region's higher education institutions who stay in city region for two years after graduation. It urged that the main focus for this graduate retention must be on graduates from Science, Technology, Engineering and Maths subjects. This is a key component in the drive toward a 'knowledge economy' and will help provide the critical mass to the city region's science and technology needs. Graduates with these skills have a particularly high labour market premium.
- 1.5 This report gives some more detailed statistics gathered from some of the five Universities on graduate employment and retention within Greater Manchester. Though the city is home to two higher education institutes, the

economic, travel to work and travel to learn geography is Greater Manchester and therefore data in the report is based on Greater Manchester. The University of Manchester, University of Salford and University of Bolton were able to supply data but the others were unable to provide information in the time available.

2.0 Participation in Higher Education

- 2.1 Up until 31st July 2011 'Aimhigher', an initiative established under the previous Government, operated to widen participation in higher education in Greater Manchester and statistics were gathered on a regular basis to support this work. Funding for 'Aimhigher' has now ended and it is expected that higher education institutes will pick up this activity now, but a remnant of 'Aimhigher' is operational and supported by the Open University. In the absence of 'Aimhigher', information on higher education including graduate employment and destinations is more difficult to obtain and much of the data required for this report would need to be gathered at cost from the Higher Education Statistical Agency (HESA).
- 2.2 However, this report does contain data collected by the Core Cities Group sourced originally from HESA. Information on whether Manchester residents who attend university elsewhere return to the city after they have attended university elsewhere is particularly difficult to find. Identifying students (especially from deprived communities) who attend university and then return to Manchester after graduation is also problematic. However, information on participation in higher education by residents from more deprived communities is still available from the 'Aimhigher' website. .
- 2.3 According to 'Aimhigher' the number of applications to higher education from Greater Manchester residents continues to increase, despite the recession, and the rate of increase is greater and more sustained for the most deprived parts of the area. Greater Manchester shows a 47% increase in young (i.e. 17 years olds') UCAS (Universities and Colleges Admissions Service) applications from the 40% most deprived areas between 2003 and 2009, compared to a 37% increase for similar (40% most deprived) areas in England. Participation rates are increasing across all ten boroughs and all deprivation quintiles. The rate of increase is greatest for those who live in the areas with the highest deprivation levels, and this rate of increase is above the England average. 55% of applicants are female, although there was an increase in applications from male students in 2009. In deprived areas, the ratio of female to male applicants is higher.
- 2.4 The overall number of Greater Manchester undergraduate entrants to undergraduate courses at UK universities totalled just over 28,300 in 2008/09, 11% above the 2003/04 level. The biggest relative increase has been in the number of entrants to Foundation Degrees (especially part-time entrants), although Foundation degree entrants represent a small proportion of the total - 3% (all modes) in 2008/09. First degree entrants have increased strongly whilst entrants to other undergraduate qualifications have declined. The biggest growth has been in part-time and other modes of study with part time

study now accounting for 14% of all first degree entrants.

- 2.5 Levels of participation in higher education vary by local authority district in GM, Manchester and Salford have the lowest level of young participation, which reflects the extent of deprivation and relatively low attainment. The rate of Higher Education applicants varies within, as well as between, local authority districts. Below average rates of acceptances amongst young people map clearly to areas of deprivation and disadvantage. The proportion of Greater Manchester residents who were from deprived neighbourhoods reached 53% of all applicants in 2009 (compared to 48% in 2003). However, people from deprived neighbourhoods are still under-represented amongst Greater Manchester applicants given the large population in these areas
- 2.6 There has been an increase in uptake in Science, Technology, Engineering and Maths (STEM) subjects across GM's colleges and schools and year on year more of GM's learners have gone on to study STEM subjects at university across the country and at GM's universities.

3.0 Graduate employment and retention

- 3.1 After London and the South East the North West region has the third highest number of students coming from its own region. In 2009/10 64.2% of all GM domiciled students in higher education were studying in the North West. This amounts to 54,140 of the 84,300 students UK wide. For first degree students this figure is 63.2% or 27,705 of the total 43,865 GM domiciled first degree students. Some 29,000 students graduate from the five GM Universities every year. Data about employment rates from three of these Universities gathered from surveys of graduates are given in Table 1 below.

Table 1: Graduate and postgraduate employment and pay

Institution	% of first degree graduates in employment in 2009/10	% of postgraduates in employment in 2009/10	Average pay of first degree graduates in £	Average pay of postgraduates in £
University of Manchester	65.54	70.18	21.000	30.000
University of Salford	64.94 (UG&PG)	64.94 (UG&PG)	20.000	Not available
University of Bolton	65	80	20.000	27.000

- 3.2 As can be seen from the data, Manchester universities have relatively high success rates in terms of first job employment with 65% of undergraduates and up to 80% of postgraduates leavers achieving employment in 2009/10. If part-time work and study is included then graduate employability figures go up to 80-90%. Even though graduate unemployment is currently high it only amounts to 6-10% of the total graduate output. The average pay achieved by undergraduates was around £21,000. Postgraduates however achieved up to

£30,000. Though GM data is not available, Salford University report that for 2009/10, 77% of graduates were working in the North West.

- 3.3 From HESA data in 2007 (Table 2) it is estimated that 58% of graduates from the five GM universities enter employment in the local area. This equates to approximately 18,000 graduates from Manchester universities every year, with almost 10,000 looking for employment in the Manchester area. Bolton University estimate from their surveys in 2009/10 that 69% of undergraduate work destinations are within Greater Manchester and figures for previous years have been over 70%.

Table 2: GM graduates achieving a 2i degree class or above 2007

	% Firsts and 2.i degrees	% Students drawn from same locality	% Students who stay in same locality	% Graduates entering Financial Services	% Graduates entering other businesses activities	% Graduates entering Computer Related Activities
University of Manchester	65%	25%	45%	8.0%	17.2%	2.8%
Manchester Metropolitan University	50%	40%	51%	4.4%	15.1%	1.8%
University of Salford	54%	60%	66%	4.2%	9.6%	2.2%
University of Bolton	52%	73%	71%	1.5%	12.1%	1.9%

Source: HESA 2006/7

- 3.3 In terms of destinations it can be seen from Table 2 that 4.5% of 2i graduates from four GM universities went into financial services jobs; 13.5% into business activities; and 2.1% into computer related activities. Whilst up-to-date data for GM is not easily accessible, data from Oxford Economics for the Core Cities Group (which includes Manchester) shows the sectors that recruit the most graduates. As can be seen in Table 3, 66% of all employees working in the higher education sector have at least a degree level qualification. The legal services sector, has a high graduate concentration of 56%, and employs 71,000 people in the Core Cities, which amounts to 41% of all employment in the sector excluding London.

Table 3: Graduate concentrations in employment sectors in Core Cities

	% grad concentration (UK)	Core Cities employees	Core Cities as % of GB
Higher education	65.8	90,100	19.1
R&D on natural sciences & enginring	62.4	2,600	2.3
Management consultancy activities	60.2	21,400	6.8
Secondary education	57.8	52,200	6.9
Computer programming and consultancy	56.2	30,900	6.9
Legal activities	55.7	43,600	17.0
Creative, arts and entertainment	52.8	8,000	12.3
Business and membership organisations	51.2	1,400	3.3
Architectural and engineering activites	49.5	32,500	9.0
Other membership organisations	45.2	15,300	9.1
Accounting and auditing activities	41.3	23,700	9.4
Primary education	40.7	75,200	7.6
Publishing of books and other publishing	40.1	6,900	4.8
Other education	36.9	22,400	11.0
Activities auxiliary to financial services	36.5	11,400	7.4
Other human health activities	36.5	26,200	7.7
Medical and dental practice acts	36.4	18,400	7.0
State admin and social / economic policy	36.2	102,000	11.4
Hospital activities	33.6	174,900	12.9
Social work without accommodation	29.8	51,200	7.8
Monetary intermediation	28.5	62,000	14.2
		Total as a %	8.4

Source: LFS (4 quarter average) 2009, BRES 2009

- 3.4 The Core Cities are the first destination for 23% of all architecture, building and planning graduates compared to 16% in Greater London (Table 4). They are also the first destination for 10 percentage points more medicine and dentistry graduates than Greater London and 8 percentage points more of subjects allied to medicine. The Core Cities attract a substantially higher share of biological sciences (15%) and computer sciences graduates (14%) than Greater London. However, despite the key role of business services in the Core Cities employment, business and administrative studies graduates are still more likely to take their first job in Greater London than in the Core Cities.

Table 4: Location of graduates' first job by subject in Core Cities and London

Subject of study	Location of first job (%)	
	CC: LEPs	Greater London
Architecture, building & planning	23%	16%
Medicine & dentistry	23%	13%
Subjects allied to medicine	23%	15%
Biological sciences	20%	5%
Computer science	19%	5%
Education	19%	13%
Social studies	18%	27%
Law	18%	21%
Mass communications & documentation	18%	13%
Languages	18%	20%
Business & administrative studies	18%	22%
Historical & philosophical studies	17%	21%
Physical sciences	17%	22%
Mathematical sciences	17%	28%
Creative arts & design	17%	23%
Combined	17%	22%
Engineering & technology	16%	26%
Agriculture & related subjects	10%	13%
Veterinary science	9%	12%

Source: HESA, Oxford Economics. Note: Blue shading = Core Cities have higher % than London.

- 3.5 The Greater Manchester Forecasting Model (GMFM) shows employment location quotients in top graduate-intense sectors for Manchester and Greater Manchester. Table 5 shows that Manchester has particular employment specialisms in the 'graduate hungry' education and research activities, law, finance, consultancy, and the creative industries. When compared with the target industry sectors in GM, there is clearly a close tie in on financial and professional services (includes management consultancy and legal activities); creative, media and digital; and research and development activities.

Table 5: Most 'graduate hungry' sectors in Manchester and Greater Manchester

Rank	Industry (3 digit SClevel)	Manchester	Greater Manchester
	Most graduate intense sectors	LQ (UK=1)	LQ (UK=1)
1	R&D: Social science and humanities	1.6	0.5
2	Reproduction of recorded media	0.5	0.8
3	Financial activities related to trusts and funds	1.5	0.7
4	R&D: Natural sciences and engineering	0.4	0.2
5	Higher education	3.0	1.1
6	Mining of non-ferrous metal ores	0.0	0.0
7	Translation and interpretation activities	0.1	0.1
8	Management consultancy activities	1.5	1.0
9	Creative, arts and entertainment activities	1.6	0.7
10	Other professional, science and technology activities	0.6	0.6
11	Secondary education	0.7	1.0
12	Legal activities	3.1	1.4
13	Manufacturing of irradiation & electromed equipment	0.0	1.2
14	Radio broadcasting	0.1	0.7
15	Educational support activities	11.1	3.1
16	Actv of bus & prof membership organisations	0.7	0.3
17	Computer programming and consultancy	0.9	0.8
18	Tv programme & broadcasting activities	0.0	0.0
19	Fund management activities	0.4	0.2
20	Software publishing	0.3	0.5

Source: Oxford Economics, BRES

- 3.6 In terms of the Russell Group Universities (the 20 leading universities in the UK including University of Manchester), Greater Manchester is the location where the first job is attained for the largest number of Russell Group graduates outside London (Table 6).

Table 6: Location of first job for Russell Group university graduates

	Russell Group graduates	% of total (ex unknown)
Location of first job		
Greater Manchester	3770	5.3
West Midlands	2730	3.8
West Yorkshire	2960	4.2
Tyne & Wear	1500	2.1
Merseyside	1690	2.4
South Yorkshire	1920	2.7
Bristol	1690	2.4
Nottingham	2380	3.3
CC: LEPs	18640	26.2
Greater London	14270	20.0
Total (excluding unknown)	71210	

Note: The above are a combination of local authorities and wider city region geographies.

- 3.7 Whilst this presents a fairly positive picture of graduate employment in GM, it should be noted that labour market conditions are such that graduate unemployment remains relatively high nationally and locally and graduates in search of any employment are displacing less well qualified young people in the jobs market, perhaps exacerbating local youth unemployment.

4.0 What is being done to retain and attract graduates to Manchester

- 4.1 The city region already has a wealth of key urban assets in addition to the universities – it has a developing high quality housing offer, quality public services (such as good and improving schools and hospitals) and a well developed leisure, cultural and tourism offer. These all make Manchester an attractive location for talented people to study, work and raise families. These assets need to be enhanced, and this is a key focus of the Community Strategy and the Strategic Regeneration Frameworks. It is also important that whilst the city centre and city centre fringe housing offer is good for attracting and retaining young professionals, the housing offer to retain professional and higher earning families in the city also needs to be right. It is also critical to focus efforts on attracting the particular talent the city needs to thrive and improve the marketing of the city region's attractiveness as a location to live, study, work, invest and do business.
- 4.2 In order to keep talented people in the city region there need to be connections between talented people. The role of universities in building these communities of talent is central, providing a link between the nurturing and retention of new talent and the attraction of existing talent. The MIER report on *Innovation, Connectivity and Trade* highlighted the need to build on the universities role as social institutions so that they act as a facilitators of wider economic linkages and help connect the city region's community of talent. The current opportunity around the discovery of Graphene by professors at the University of Manchester brings with it significant commercial potential, but also the potential to develop a national research hub, inward investment and employment creation. Building on this there are opportunities to create a greater recognition of Manchester's role as a centre for science research, development and commercialisation. This opportunity sits within the Oxford Road Corridor which is Europe's largest concentration of knowledge assets, and the University of Manchester, is home to more Nobel Prize winners at present than any other UK university.
- 4.3 Part of the solution to graduate employment and retention is to develop the linkages with the wider community that that the MIER and the GMS suggest. Each of the five universities have their own careers service providing advice to students and also offering recruitment solutions to businesses in the area and beyond, ensuring the link between prospective graduates and industry is upheld. Organisations are now able to recruit graduates for full-time permanent positions or even internships such as the innovative Manchester Graduate Internship Programme (MGIP) run by the University of Manchester

which helps businesses with short-term graduate opportunities. The universities also support the brokerage of students for businesses with part-time opportunities, vacation work and placements to fill. Other initiatives developing out businesses from universities such as 'Innospace' at Manchester Metropolitan University which provides business incubator for start-ups and new enterprises, can help keep intellectual capital in the city. University of Manchester Innovation Centre (UMIC) and Manchester Science Park serve similar purposes.

- 4.4 All Universities promote work placements and internships, either paid or unpaid, and generally lasting anywhere from 2 weeks up to 12 months. Many large, local and national employers now have structured programmes in place for such placements. Work experience for students at Bolton, is supported by their 'Unite with Business' programme. This scheme is open to final year students and graduates including postgraduate students. Institutions such as the University of Salford already draw a large number of students from the North West and GM areas and have good links with the local community and local employers. Recently, with money from the Higher Education Funding Council (HEFCE) Salford were able to offer 150 placements within companies in the construction, financial and professional services and creative and digital sectors. Salford also have very close links with and a building based at Media City with a view to supporting the future needs of companies in the creative and digital media sector and greatly increasing the number of students making the transition from study into work in the sector.
- 4.5 Competition for graduate positions is stronger than ever, and each University is keen to ensure that their students are as employable as possible. Performance data for graduate recruitment will soon have to be produced for all university courses from September 2012. It is likely that future reports like this will find it easier to source the data required as the universities improve their performance data in advance of these new reporting requirements.

5.0 Conclusions

- 5.1 Encouragingly, the number of applications to higher education in GM continues to increase and the rate of increase is greater and more sustained for the most deprived areas, though Salford and Manchester still have the lowest young participation rates in higher education of the 10 GM districts. The North West region attracts a high number of students from its own region, and is third highest after London and the South East. Whilst it remains to be seen what the full impact of the university fees set to treble to £9000 in 2012 will be, the latest figures from on applications are not good. Applications from UK students are down by 15.1%, according to statistics published by Ucas. But while fewer UK students are applying to university, the number of applicants from overseas, outside of the EU, has risen by 11.8%, the data shows.
- 5.2 Manchester universities have high success rates in terms of employment with 65% of undergraduates (49% nationally) and 80% of postgraduates (66% nationally) achieving full-time employment in 2009/10. If part-time work and study are included then graduate employability figures go up to 80-90%. The

average pay achieved by undergraduates is around £21,000. From previous data it is estimated that 58% of graduates from GM universities are entering employment in the local area though more recent figures for Bolton University graduates are around 70%. Evidence from the Core Cities suggests that the eight English cities including Manchester are the key employers in 'graduate-hungry' sectors outside of London. Given that GM is the key growth hub outside London with existing strengths in innovation, creative industries, financial and professional services, biomedical, health and science sectors, prospects for Manchester graduates seem good. Greater Manchester also has the critical mass of universities, public research institutions and research-intensive companies to become a hub of fast-growing research-led businesses similar to that between London, Oxford and Cambridge.

- 5.3 Efforts to retain and attract graduates to the city region focus on the strategic and the local – maintaining a high quality housing offer, good schools and a well developed leisure, cultural and tourism offer. These all make Manchester an attractive location for talented people to study, work and raise families. At the local level, each of the five universities develop close relationships with the local community and local institutions. Each have their own careers services providing advice to students and also offering recruitment solutions to businesses in the area and beyond. Many have specific work placement or internship programmes with local or national employers in addition to the usual careers or employability fairs. Other initiatives developing innovative new businesses from universities can help keep intellectual capital and qualified graduates in the city.
- 5.3 The graduate output from these institutions provides GM employers with the high calibre graduates they need for their businesses. This becomes self-reinforcing, with the dynamic labour market offering high-level opportunities that encourage graduates to stay within Greater Manchester to work, further reinforcing the attractiveness of Greater Manchester as a business location. The retention of graduates is therefore a key indicator of how the city region is performing as a thriving knowledge economy.