

REVIEW OF SCOTLAND'S COLLEGES

WORKING GROUP: STAFFING, LEARNERS & LEARNING ENVIRONMENTS

Profile of College Students

Introduction

1. The Working Group has been asked to examine disability, race, religion and belief, sexual orientation, age and gender of students in the college sector.
2. This paper looks at trends across this sector over a six year period (1999 - 2005) and makes some comparisons with students who attend Higher Education Institutions (HEIs). The statistics were obtained from the Scottish Funding Council's Statistics Department and from Analytical Services within the Scottish Executive.
3. Whilst this paper provides some helpful broad findings, it does not make any reference to sexual orientation, religion and belief of college students as we were unable to obtain the necessary information.

Summary of Findings

4. Key broad characteristics of students, as identified by these statistics, show that :
 - College students are generally older than students at HEIs. In colleges the largest age band of students is those aged between 25-59 while the largest age band for HEIs is students aged under 21.
 - The age and gender distribution of college students has remained fairly consistent since 1999/2000. For instance, the percentage of males aged between 25-59 was exactly the same in 2004/05 as it was in 2000/01.
 - As with HEIs, colleges have more female students than males. In colleges female students also tended to be older than their male counterparts.
 - With regard to ethnicity, the majority of both HEI and college students stated that they were 'white'. However, HEIs have more students who stated that they came under the 'other' category.
 - HEI students are more likely than college students to have no known disability.

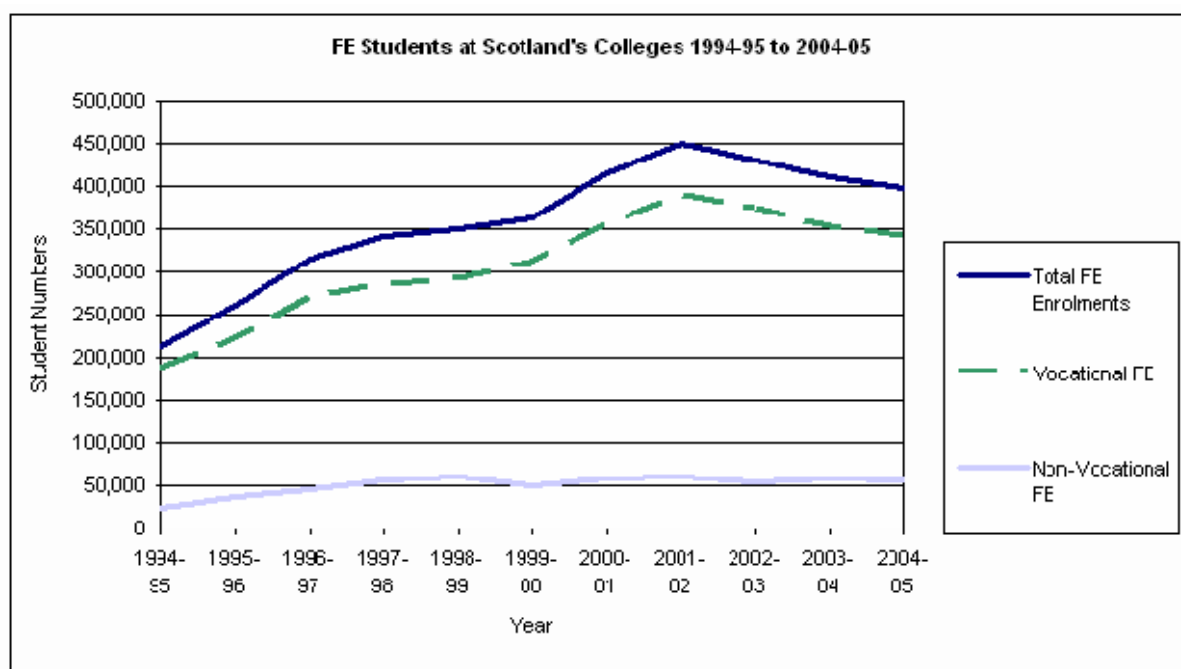
General Information about College Students¹

5. The number of enrolments at further education (FE) level in Scotland's colleges has increased dramatically since 1994-95. There are now 398,120 FE enrolments, an increase of 88% since 1994-95. The majority of these enrolments are for vocational courses. In 2004-05 vocational enrolments accounted for 86% of the total. Vocational enrolments have increased by 82% since 1994-95, but have fallen by 12% since 2001-02.

6. Part-time study accounts for 84% of enrolments and full-time accounts for 16% of enrolments².

7. Members will already be aware that enrolments do not always equate to the number of students as one student can have more than one enrolment. Some students enrol on several programmes in the same academic year.

Table 1³



8. Full-time courses account for 65% of all activity in 2004-05 as they did in 2003-04. However over the same period there has been a reduction of 3% in part-time activity. Analysis by dominant programme group (DPG) in 2004-05 shows that the three groups recording the highest levels of activity, Health (13%), Social Studies (13%) and Computing (11%), together account for over a third (36%) of total activity. Within the overall figures some DPGs have attracted more activity, whilst some have attracted less, than in 2003-04. Construction (up 8%) has most notably gained the most. The biggest reductions were in Science and Maths (down 14%) and Business and Management (down 13%).

¹ Source – Scottish Funding Council

http://www.sfc.ac.uk/statistics/fe_information/facts_figures/0405/students/students_0405.htm

² Association of Scotland's Colleges Fact sheet 2006

³ Source – Scottish Funding Council

9. Whilst females account for over half of overall SUMs activity in 2004-05, the percentages analysed by DPG highlight the traditional gender-related educational choices. For example, males account for more than 90% of activity in each of Construction (92%), Engineering (96%) and Transport (95%), while females account for more than 80% of activity in each of Health (90%), Social Work (88%) and Office and Secretarial (82%).

10. There is some evidence of some colleges trying to tackle the issue of gender-related course choices. For example in 'Unlocking Opportunity', which is due to be launched in October, there is a reference to Stevenson College, Edinburgh who attempting to attract male students into their early years education and childcare courses. The college is working in partnership with the 'Men in Childcare' project to attract and support male students and develop a positive view and understanding of working with children.

11. Although the choice of college subject and future job is entirely a matter for the individual, the Executive does recognise the need to ensure that there is a more gender balanced workforce. The gender uptake of courses has been a long running issue. One way in which to promote gender balance within subjects is to promote gender equality with school pupils via taster courses or Skills for Work courses. The SQA is currently reviewing their course arrangements to ensure that there is no gender bias and they are also considering how to promote gender equality, for instance, through publicity material.

12. Glasgow Caledonian University⁴ and Equal Opportunities Commission carried out research entitled "jobs for the girls and the boys", which looked into occupational segregation in the workforce. In response to this research and concerns raised by the Equal Opportunities Commission, the Executive recently set up a cross-departmental working group to identify the key issues which impact on and contribute to gender stereotyping in education, work and training, and to explore appropriate policy interventions..

13. The Scottish Funding Council⁵ recently published a report which examines the significant and rapidly growing gap between levels of participation in higher education (HE) among young men and women and investigates more closely gender issues for students and staff in HE.

⁴ http://www.eoc.org.uk/PDF/occ_seg_scotland_final_report_feb_2005.pdf

⁵ Gender in Scottish Higher Education– What's the issue?, Scottish Funding Council, July 2006
http://www.sfc.ac.uk/publications/SFC_Gender_Report_July_2006.pdf

DETAILED FINDINGS⁶

Figures on the age distribution of college students.

14. There has been no real change to the age distribution of college students across the six year period. Table 2 shows that according to headcount figures there has been a slight increase in the number of students aged 65 and over since 2001. Meanwhile, Table 3 shows that according to student SUMs there has been a slight increase in the number of students aged 16-18 and a slight reduction in those aged between 25 and 59.

Table 2

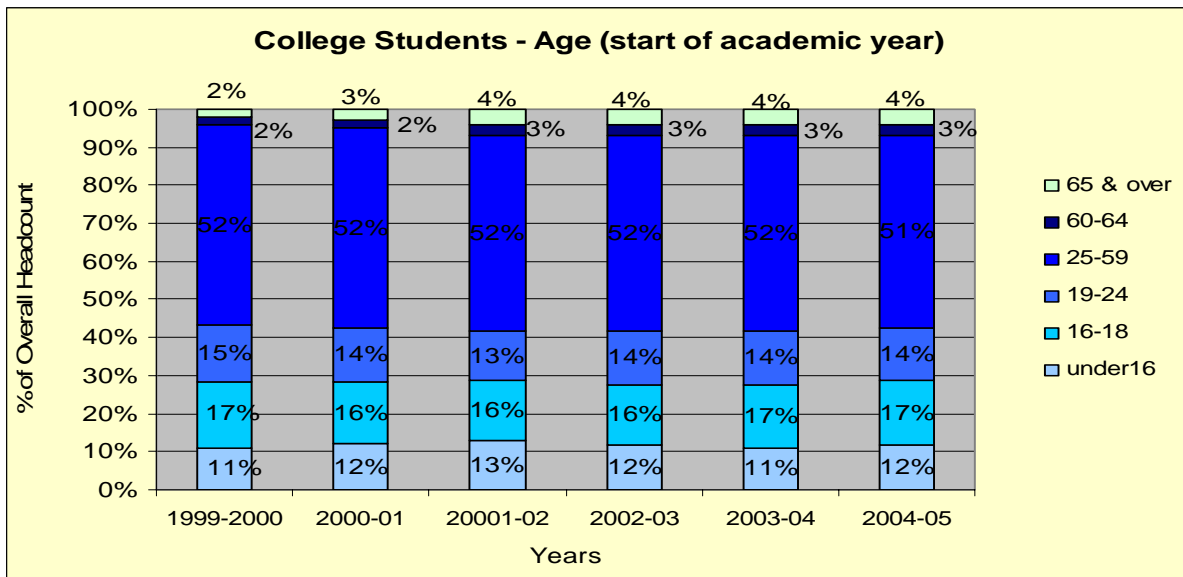
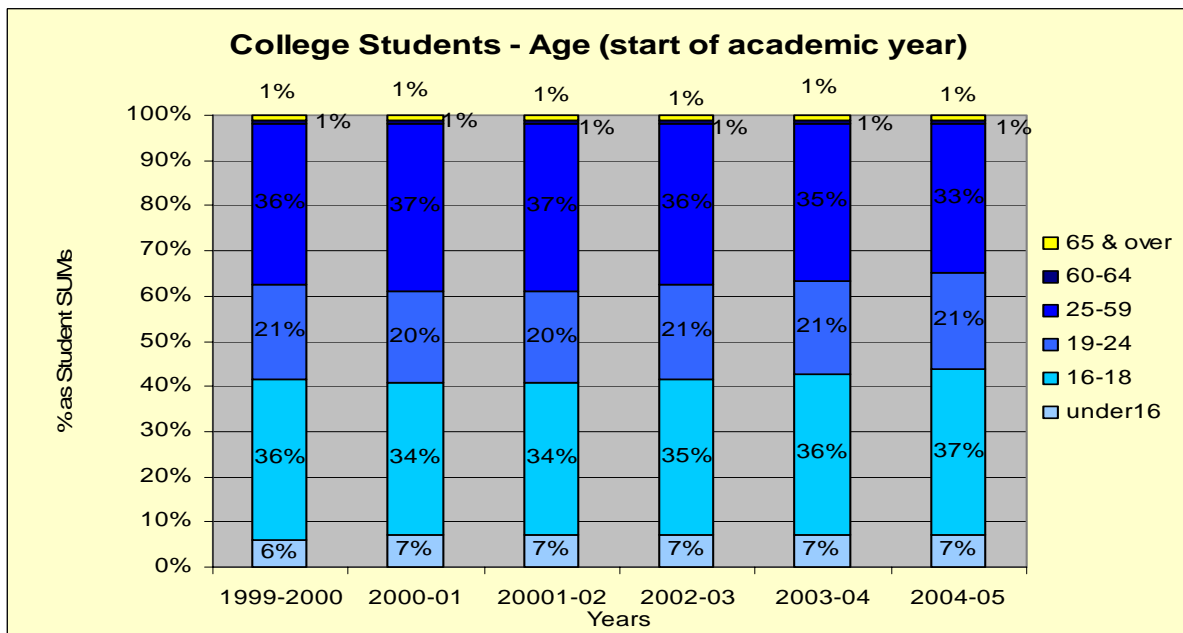


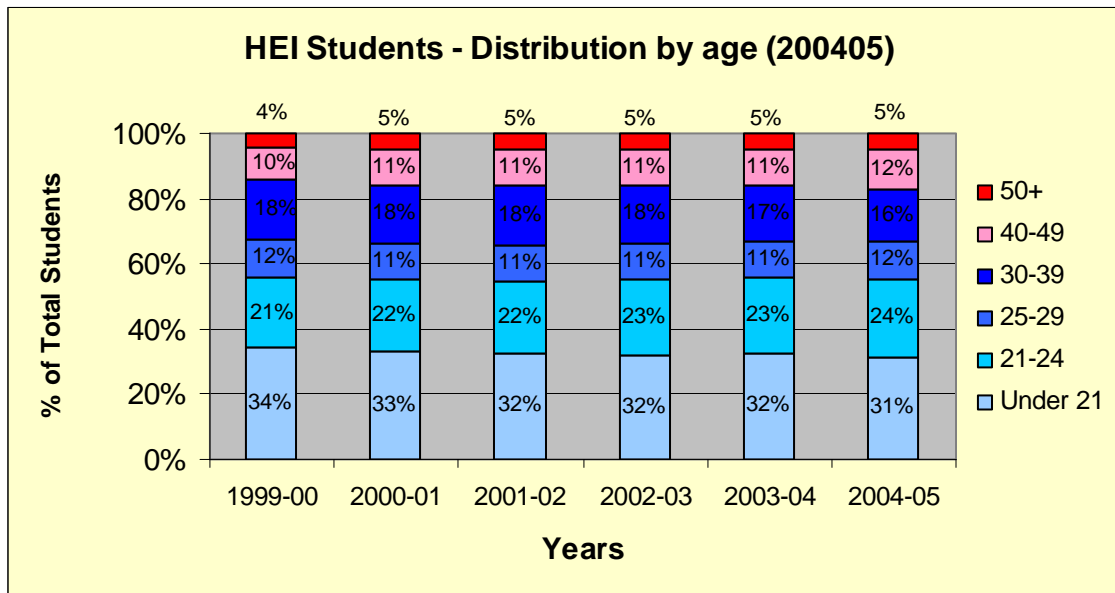
Table 3



⁶ Please note that the totals contained in the tables may not match due to rounding of data.

15. It is quite difficult to compare the age distribution of college students (headcount figures) with HEI students as the age bands are different for the two sectors. However the statistics in Table 4 do show that, as with college students, there have been no dramatic changes over the six year period. While the largest age cohort of students attending college is those aged between 25 and 59, the largest age cohort for HEI students is those aged under 21.

Table 4



Figures on the gender distribution of college students.

16. The statistics in Tables 5 and 6 indicate that over the past six years there have consistently been more female students than male students attending college. Using headcount figures the proportion of female to male students has changed from 55:45 to 57:43 in recent years. In terms of SUMs, the difference between the sexes has increased from 2% in 1999-2000 to 6% since 2001.

17. Both tables show that the proportion of males attending college has decreased over the six year period by 2%. Meanwhile the proportion of females attending college over the same period has risen by 2%.

18. Tables 5 and 6 also highlight that males are more likely than females to undertake a course which involves more intensive activity for example a full time course.

Table 5

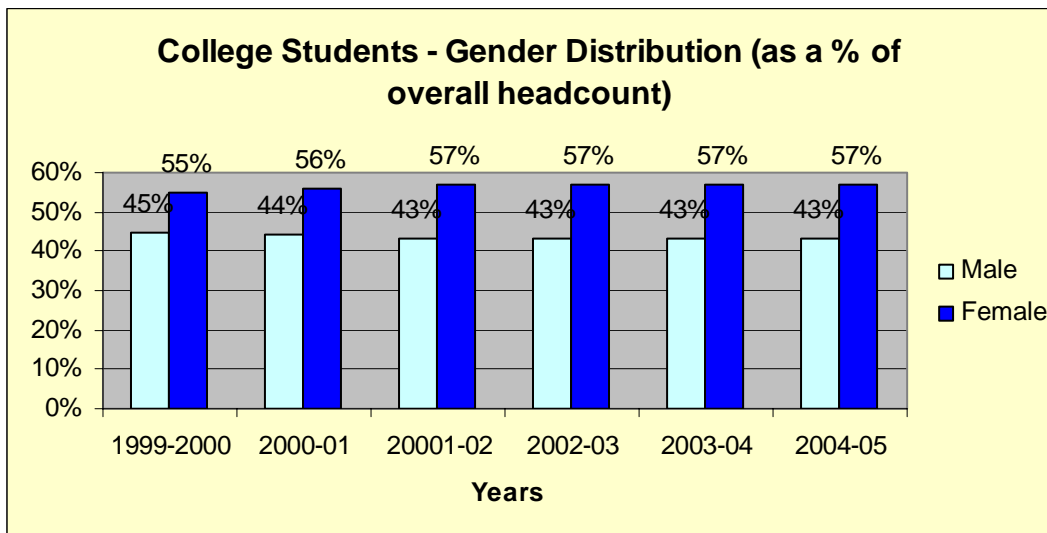
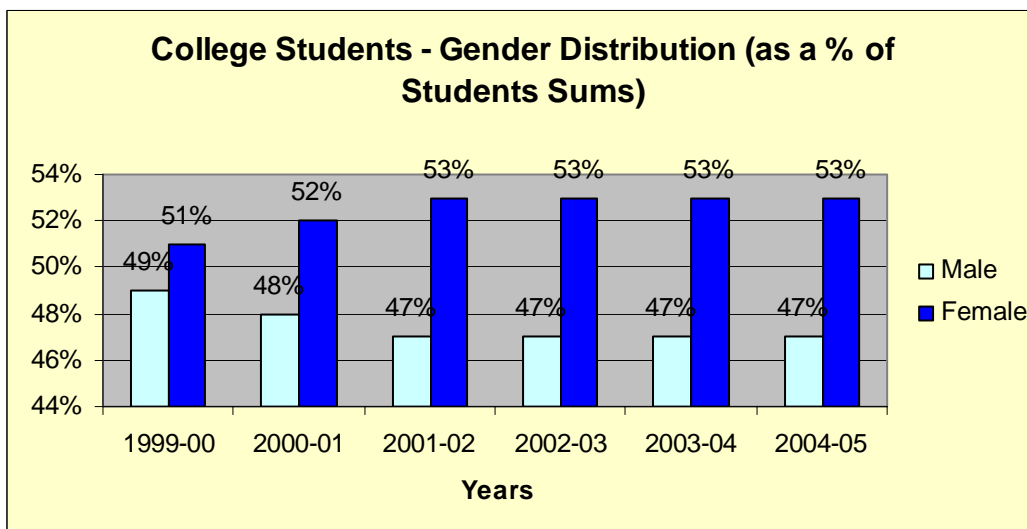
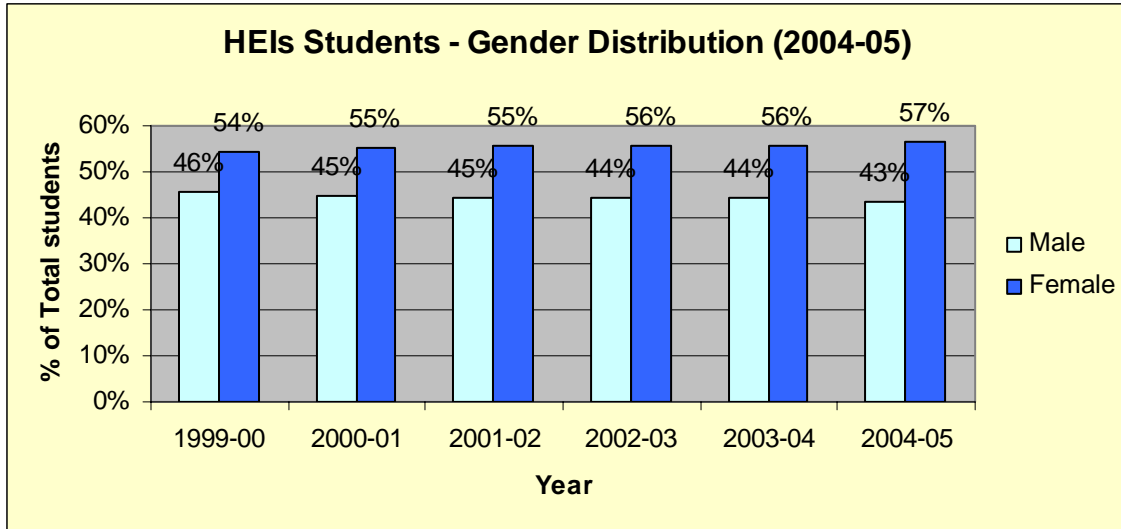


Table 6



19. When comparing the gender distribution of college students (headcount figures) with HEI students the statistics show that as with college students, there are more females than males who attend HEIs and that the gaps appears to be slowly widening.

Table 7



Figures on the age and gender distribution of college students.

20. Using the overall headcount data when comparing the data from 2000-01 and 2004-05, Tables 8 and 9 show that there has been very little change to the overall age of students. In both 2000-01 and 2004-5, female students tended to be older than their male counterparts.

Table 8

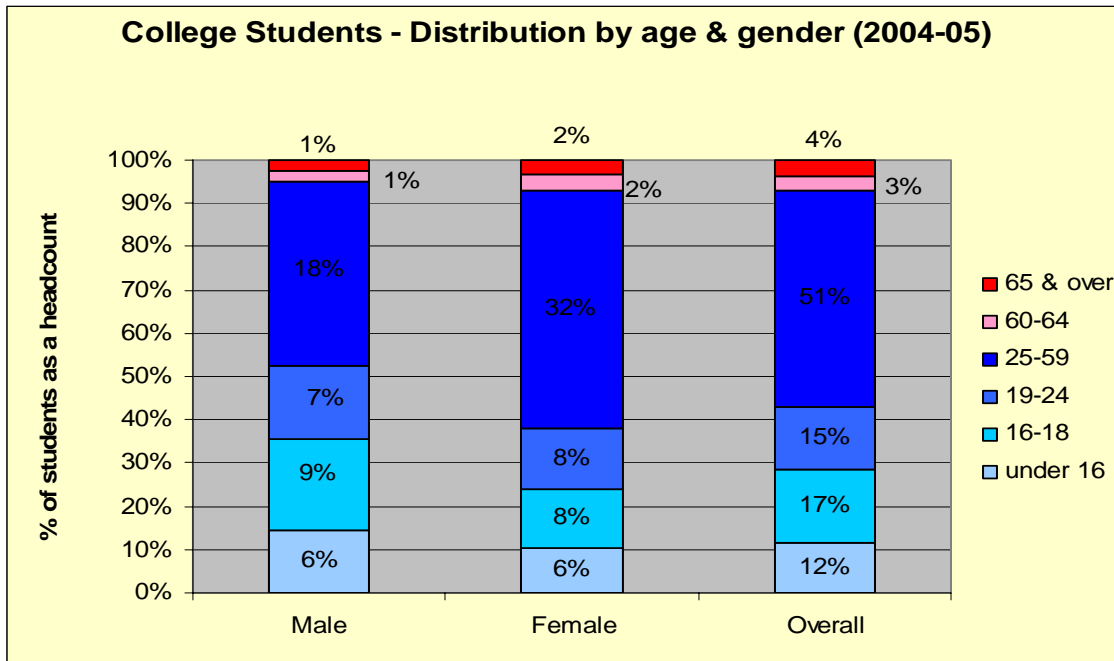
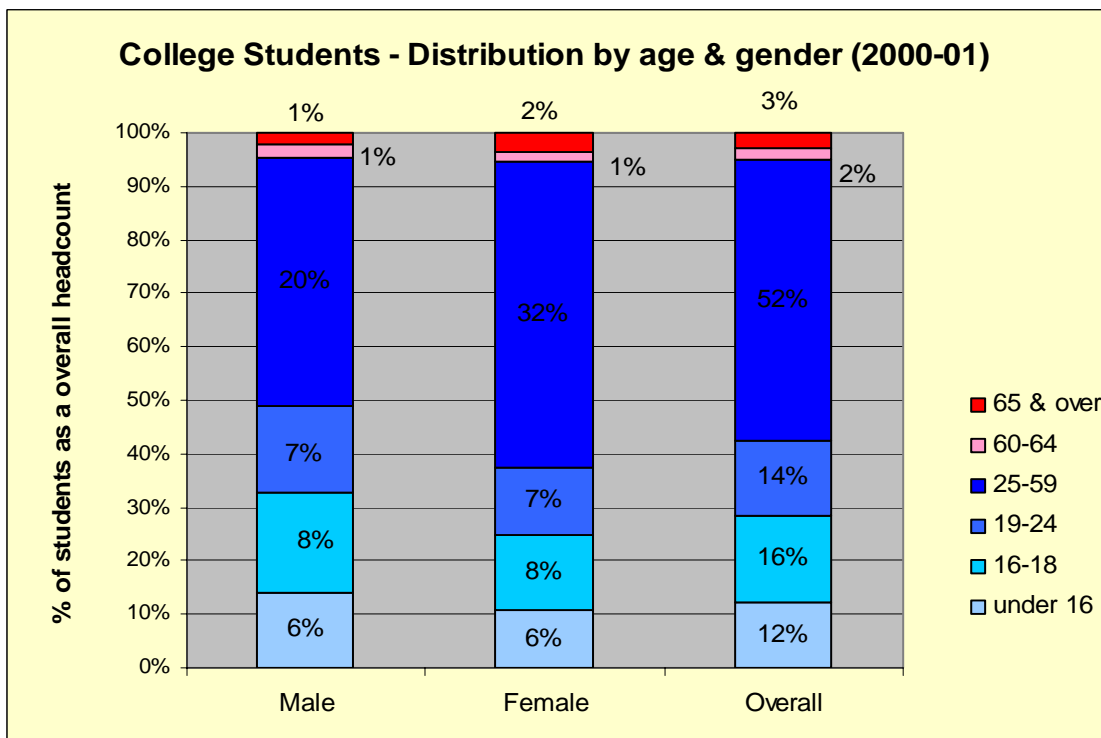


Table 9



21. Similarly, using the SUMs data when comparing the data from 2000-01 and 2004-05, there has been very little change to the overall age of students. There has only been a slight reduction since 2000-01 in the percentage of students aged 16-18 and 25-59. Again, in both 2000-01 and 2004-05, female students tended to be older than their male counterparts.

Table 10

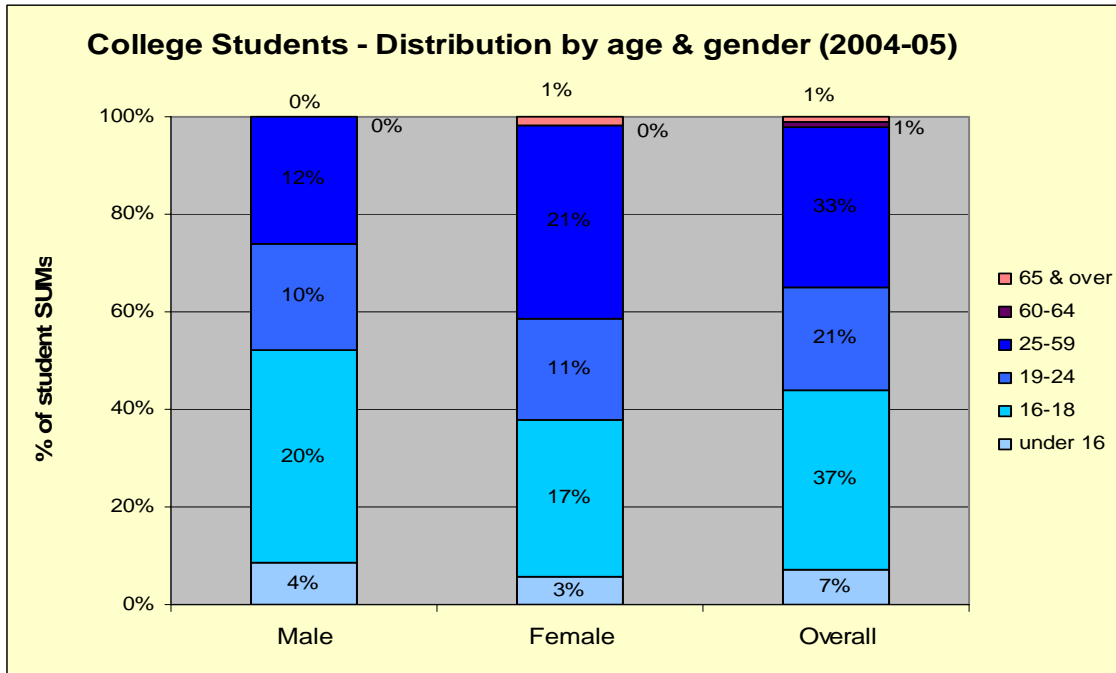
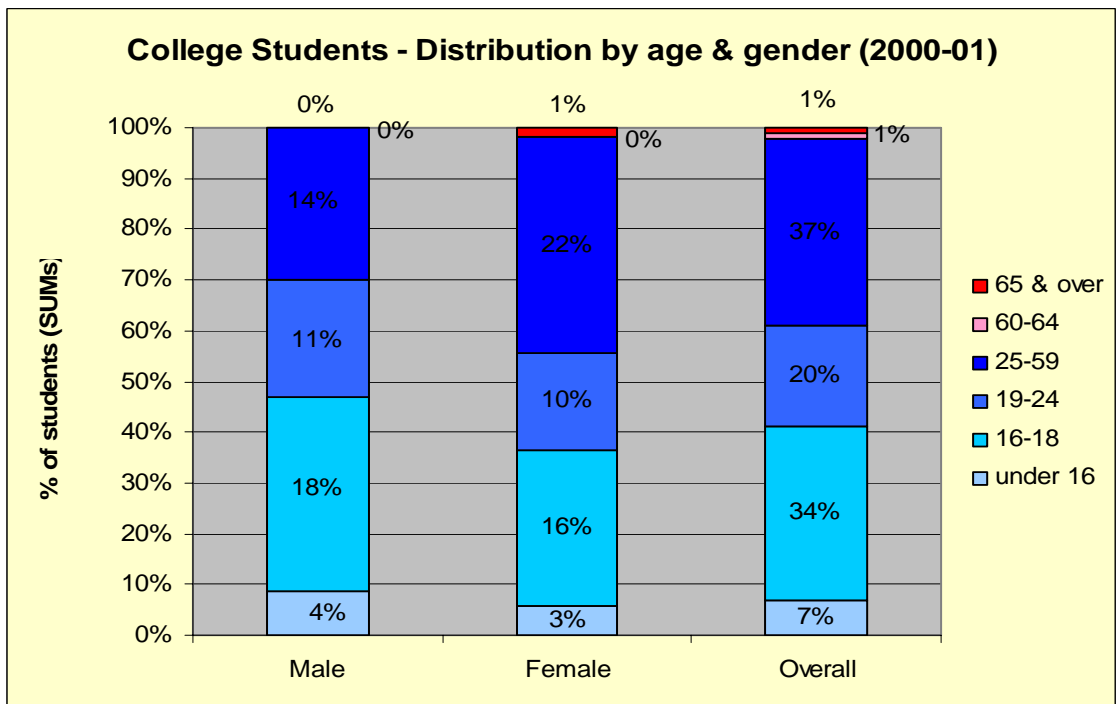


Table 11



Figures on the ethnicity distribution of college students.

22. The figures contained in both Tables 12 and 13 show that over the six year period the majority of students have been from the white ethnic group. The Tables show that there has been a steady reduction since 1999-2000 in the percentage of information which is either unknown or refused. The data in both these tables also indicates that there has been a steady increase in the number of students who are non-white/other.

Table 12

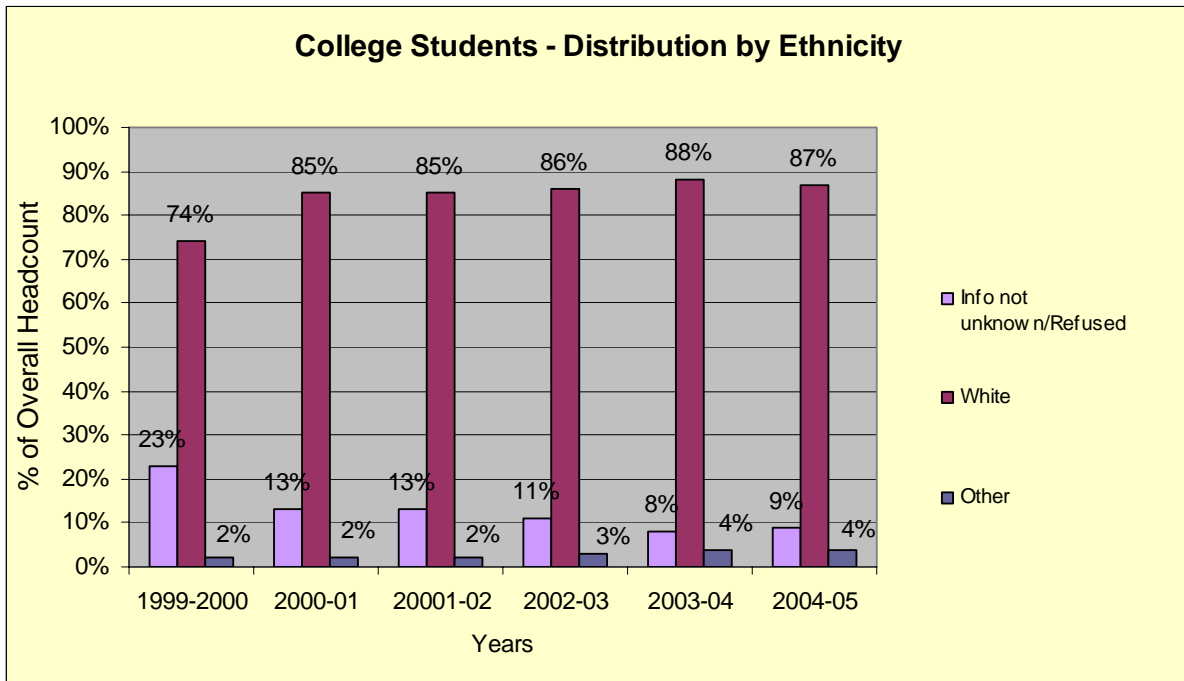
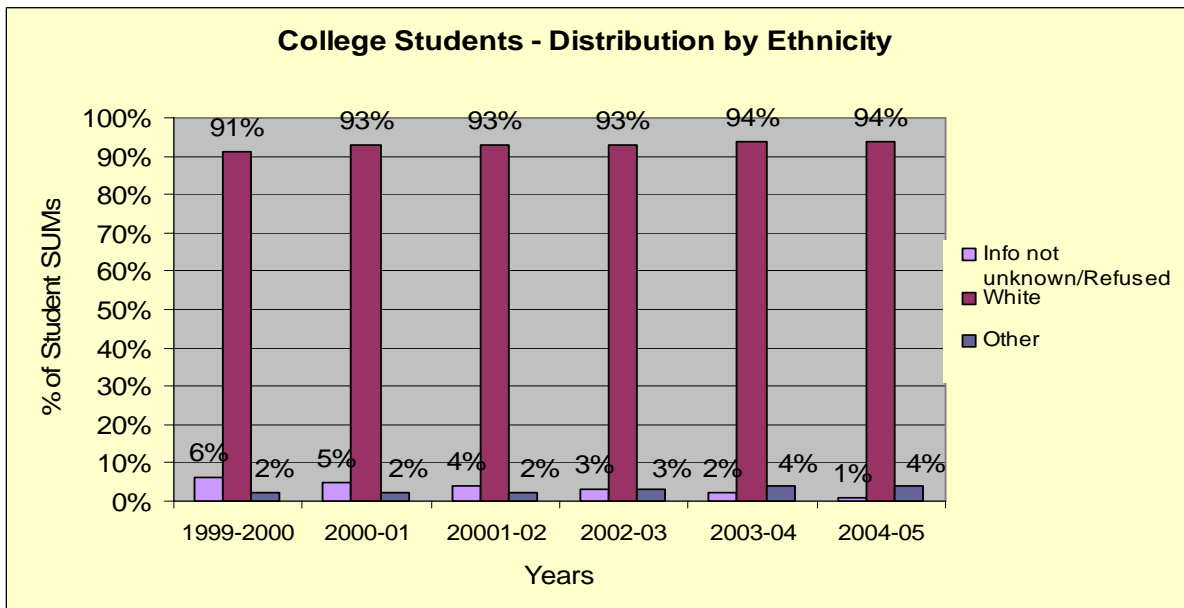


Table 13

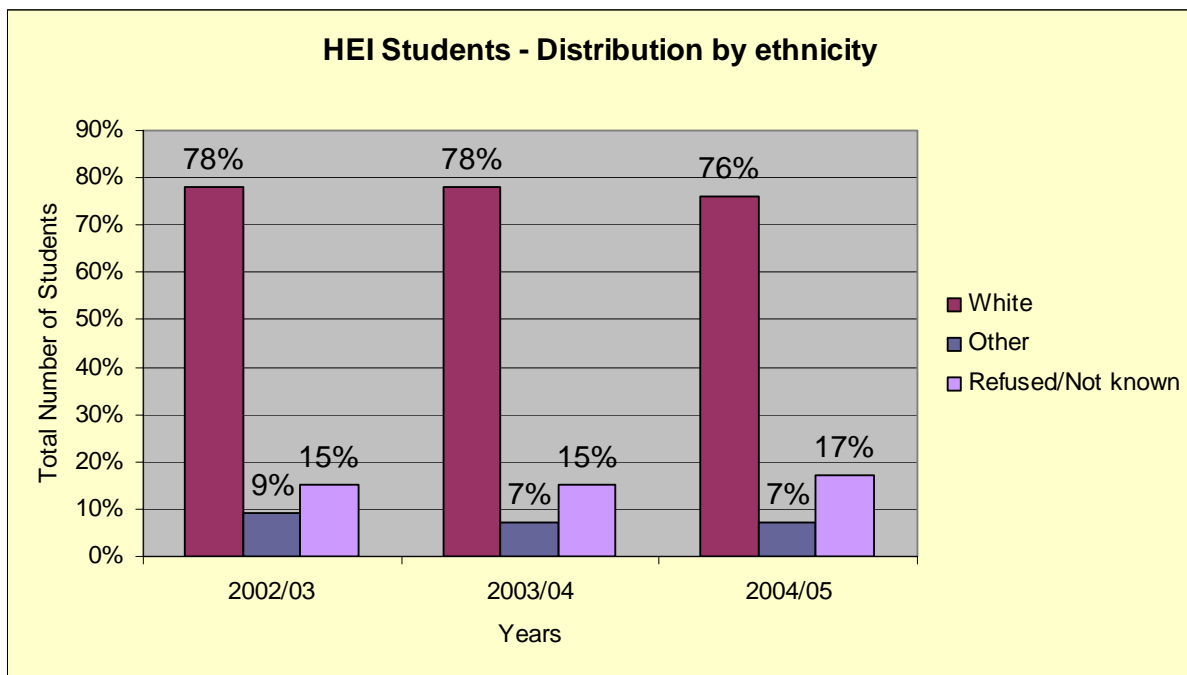


23. A snapshot comparison between the two sectors shows that as with college students, the majority of HEI students are 'white' but unlike colleges, there has been a slight decrease since 2003/04 in the number of 'white' students attending HEIs.

24. The statistics also show that while there is a higher percentage of HEI students than college students who fall under the 'other' category, the number of 'other' students attending HEIs is decreasing while the number of 'other' students at colleges is steadily increasing.

Note: these statistics maybe slightly skewed as more HEI students than college students fell into the category of 'refused/not known'.

Table 14



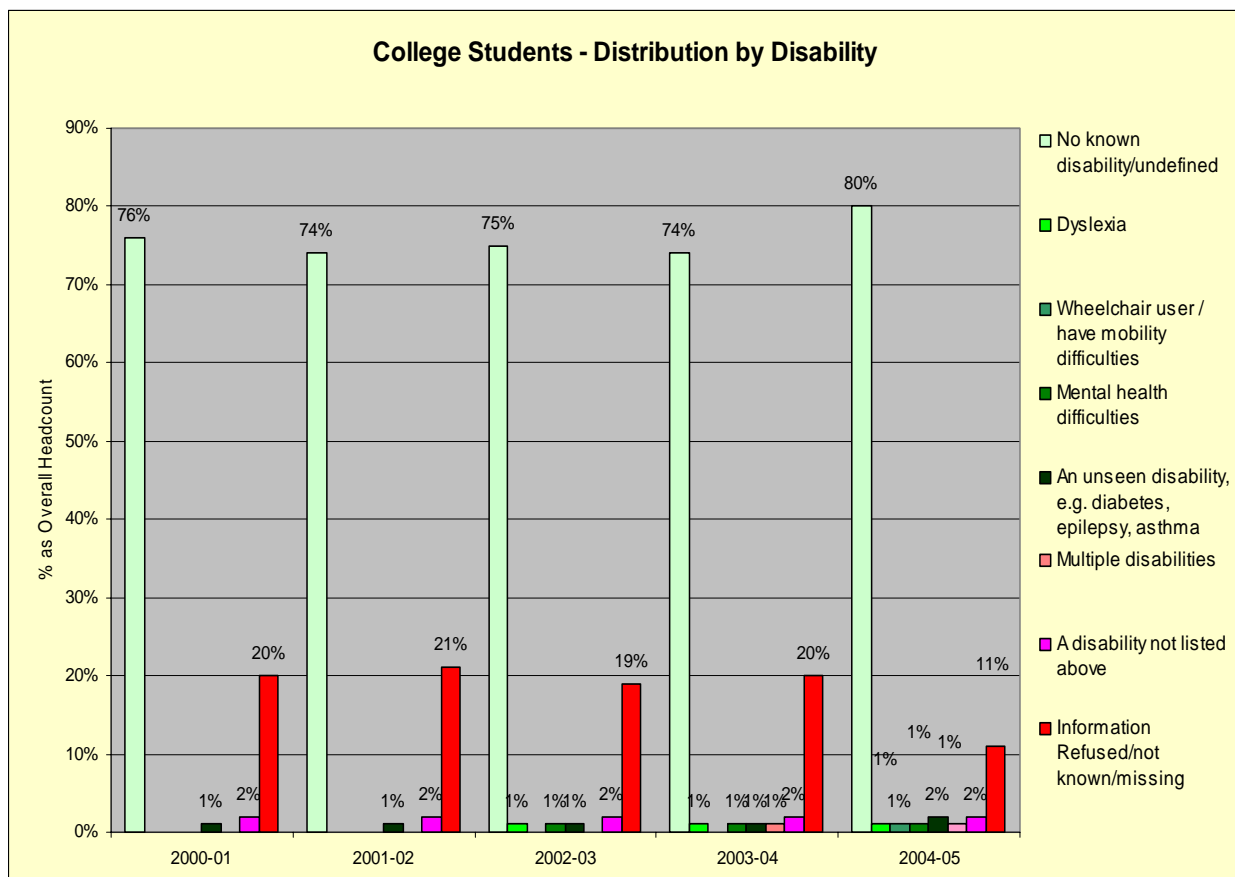
Figures on the disability distribution of college students.

25. The data in Table 15 shows that the majority of students between 2000 and 2005 had no known disability. Over the five year period there was a significant reduction in the percentage of information which was either refused, not known or missing; a slight increase in the percentage of students who had an unseen disability; and a slight increase in the percentage of students who were wheelchair users or had mobility difficulties.

26. A further breakdown of the data shows that:

- since 1999-2000 there has been a consistent percentage of students who have a disability not listed;
- since 2002-03 there has been a consistent percentage of students who have dyslexia or mental health issues; and
- since 2003-4 there has been a consistent percentage of students who have multiple disabilities.

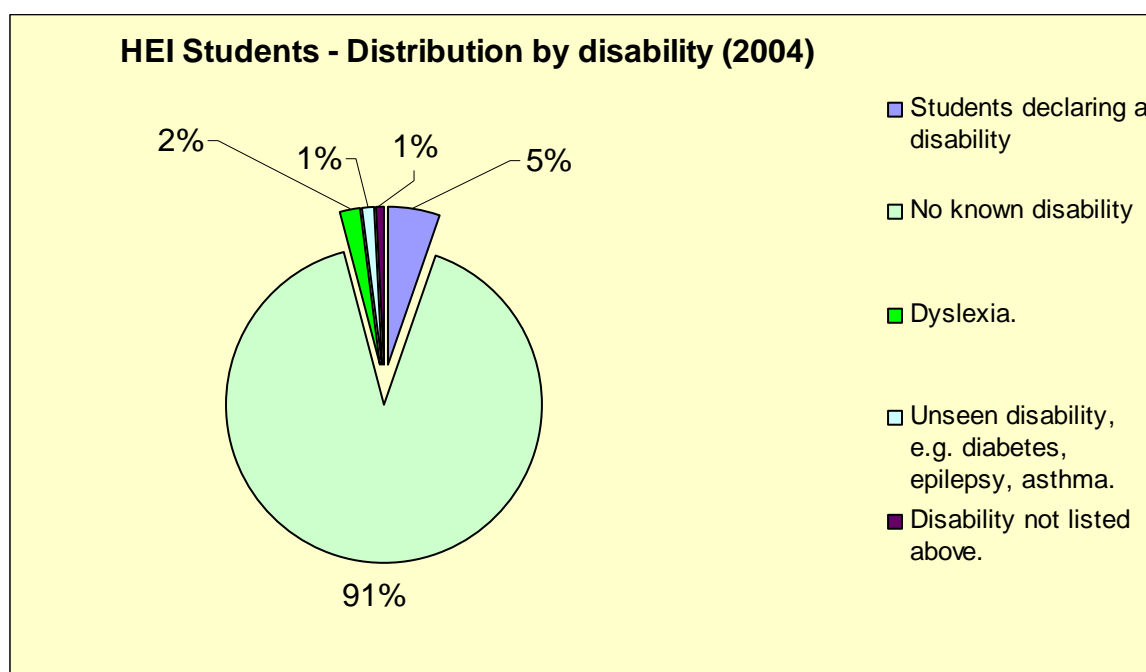
Table 15



27. When comparing the distribution of college students with HEI students by disability over the 2004/05 session the statistics indicate that:

- HEI students are more likely than college students to have no known disability;
- colleges have a slightly higher percentage of students with an unseen disability or one which is not listed in the questionnaire;
- HEIs have a slightly higher percentage of students who have dyslexia.

Chart 1



Discussion

28. Members are invited to note these broad findings and to discuss:

(a) whether or not the Group should ask Equalities Forward to consider undertaking a statistical analysis into the disability, sexual orientation, religion and belief of college students; and

(b) whether or not the Group should share this paper with the Executive's Cross-Departmental Group with a view to informing its deliberations.

29. The Executive's Analytical Services Division has prepared a paper, see **Annex A**, which provides an outline about the possible effect demography will have on the future of HE and FE participation. Having discussed the current and past profile of college students, members may wish to discuss the results contained in this paper and the impact this may have on the college sector.

Reviews Team
Scottish Executive
August 2006

Effect of Demography on Future HE and FE Participation

Overview

There are a considerable number of factors that will affect the participation of Scottish people in Further and Higher Education in the coming years. One issue that will certainly influence participation is that of demographics. Demographics can be described as the characteristics of human populations and population segments. It is accepted that Scotland's population is ageing. The number of people in the country over the age of 65 is expected to rise considerably in upcoming years while at the same time the number of people under the age of 21 is expected to fall. This poses an important question – How will these changes affect participation in Higher and Further Education by Scottish students?

Methodology

Participation in HE and FE can fluctuate from year to year. Participation from the latest academic year 2004-05 was taken as the baseline for estimating future participation, although we may adopt a more robust approach in the future by taking into account participation over a number of years as a baseline. The number of Scottish students at each age that were in HE (both in HEIs and FECs) and separately FE in FECs in 2004-05 was extracted. Population projections for Scotland from mid-year 2005 estimates from the Government Actuarial Service were then used to give a percentage figure for participation for each age group. For example, the percentage participation for 17 year olds in FE would be calculated by dividing the number of 17 year olds in FE in 2004-05 by the projected number of 17 year olds in Scotland in 2005. The proportion of Scottish domiciled people that participated in HE and FE in 2004-05 is indicated below.

Age	Proportion of population in HE	Proportion of population in FE
Total	4.05%	7.72%
16 and under	0.05%	6.37%
17	8.23%	38.73%
18	32.16%	27.47%
19	33.64%	18.48%
20	29.78%	14.08%
21	26.70%	11.29%
22	16.43%	10.78%
23	11.89%	10.20%
24	9.38%	10.58%
25	8.17%	10.55%
26	7.28%	10.71%
27	6.77%	10.28%
28	6.65%	9.73%
29	5.66%	9.79%
30	5.44%	9.59%
31	5.38%	9.11%
32	5.13%	8.78%
33	4.92%	9.02%
34	4.63%	9.37%
35	4.43%	9.15%
36	4.15%	9.18%

37	4.20%	8.95%
38	4.13%	9.17%
39	4.16%	8.97%
40	4.09%	9.33%
41	3.71%	9.12%
42	3.76%	8.98%
43	3.54%	9.01%
44	3.59%	8.71%
45	3.25%	8.00%
46	3.30%	8.45%
47	3.07%	8.08%
48	2.87%	7.84%
49	2.70%	7.77%
50	2.40%	7.43%
51	2.26%	7.57%
52	1.91%	6.83%
53	1.67%	6.82%
54	1.53%	7.18%
55	1.28%	6.00%
56	1.07%	5.76%
57	0.98%	5.36%
58	0.65%	6.05%
59	0.62%	4.59%
60	0.73%	4.97%
61	0.59%	4.93%
62	0.54%	4.70%
63	0.47%	4.06%
64	0.44%	4.23%
65	0.42%	3.94%
66	0.39%	3.81%
67	0.36%	3.63%
68	0.31%	3.25%
69	0.32%	2.83%
70	0.35%	2.90%
over 70	0.16%	1.54%

These percentage participation rates were taken as the baseline for projecting student numbers in the future years. This means that an assumption is made that the same proportion of people in their relative age brackets will continue to participate in HE and FE and that only changes in demographics will affect the number of students participating. This is obviously extremely unlikely but for the purposes of this study the assumption will be held.

The number of people expected to participate in future years in HE and FE can then be calculated by multiplying the above participation rates (based on 2004-05 figures) for an age bracket by the projected number of people in that age bracket for the given year. For example, the projected number of 30 year old HE students in 2019/20 would be obtained by multiplying the participation rate of 30 year olds in HE in 2004-05 by the projected number of 30 year olds in Scotland in 2020. This enabled estimates for the total number of Scottish students in HE or FE to be produced for each academic year until 2019/20.

Key Results Further Education

Total Enrolments

- The projected total number of Further Education Enrolments falls every year. From 393,468 in 2005-06 to 369,248 in 2019-20. This represents a fall of 6.2% in the total number of projected Further Education Enrolments in that period.
- Due to expected reductions in the number of people in the country, FE Enrolments for people of any age under 27 were expected to fall by 2020. The same could be said for people between the age of 34 and 48 and for 59 year olds.
- The age brackets expected to witness the largest decline in FE Enrolments were for those between the age of 41 and 45 with each age expected to have at least a 25% drop in enrolments between 2004-05 and 2019-20. Indeed, enrolments from 43 year olds would drop 33.1% if current participation rates continued.
- There would also be large reductions for those between 17 and 21, 35 and 40 and 46 and 47. Expected enrolments all drop by more than 10% between 2004-05 and 2019-20 for people of these ages.

- However, due to expected rises in population for people of certain ages, FE enrolments for people between 27 and 33, 49 and 58 and people over the age of 60 were expected to rise by 2020.
- The age brackets that were expected to witness the largest rises were those over the age of 60, with 28, 29 and 56 to 58 year olds also witnessing large increases.
- Despite these changes, young people will continue to offer the biggest contribution to FE enrolments. In 2004-05 35% of all enrolments came from people aged 21 or younger. In 2019-20 this would drop to 31%.
- Conversely, the contribution offered by people aged 50 and above would increase from 19% to 24%.

Mode of Study

- There are likely to be differences in the length of courses that students enrol on at different stages in their life. Younger students are perhaps more likely to embark on full-time study than older students are so the effects of demography on both full-time and part-time Further Education study was considered.
- There were 46,603 full-time FE enrolments in 2004-05 from Scottish students. This is projected to increase to 46,681 in 2005-06 before steadily declining over the years to 40,800 in 2019-20. This means that the reduction in the projected number of full-time Scottish students enrolling in FE courses is 12.6% between 2005-06 and 2019-20.
- The reduction in enrolments can be traced to the expected drop in the number of people aged under 21 in Scotland in upcoming years. The vast majority of full-time FE enrolments come from students under 21 resulting in a large drop in the number of projected enrolments.
- There were 345,291 part-time FE enrolments in 2004-05 from Scottish students. This is projected to increase to 346,786 in 2005-06 before falling to 328,228 in 2019-20. This represents a 5.3% decrease in part-time enrolments in FE courses from Scottish students
- This indicates that full-time enrolments are likely to be more susceptible to change than part-time enrolments. The age profile of part-time enrolments is more even and spread out than it is for full-time enrolments. This means that the expected reduction

in the number of young people in future years will have a more considerable effect on the number of full-time enrolments than part-time ones.

Student Headcounts

- It is common for individual students to enrol on more than one Further Education course in a given year. This means that the numbers relating to total enrolments in Further Education for a year will contain an element of double counting. Therefore the effects of demographic changes on the number of student headcounts is worth considering
- Unfortunately the data matching process that is used to establish whether a student has enrolled more than once cannot be used for students who did not receive funding from the Scottish Funding Council due to insufficient records so these students were eliminated from the analysis at this point. In 2004-05 just over 20,000 enrolments came from such students.
- There were an estimated 290,162 different Scottish students who enrolled in Further Education courses in 2004-05. This is projected to increase to 291,156 in 2005-06 before falling steadily to 272,463 in 2019-20. This represents a 6.4% reduction in the number of different Scottish students who enrol in FE courses between 2005-06 and 2019-20.
- This is largely the same as the projected 6.2% reduction in the total number of FE enrolments in the same time period indicating that student headcounts are not likely to fluctuate significantly differently than student enrolments.

Higher Education

Total HE Students

- After increasing slightly each year in 2005-06 and 2006-07, the projected total number of Higher Education students subsequently falls every year to 2019-20. The projected number of Scottish students in Higher Education in Scotland in 2005-06 was 208,059 this is expected to fall to 186,778 in 2019-20, a decrease of 10.2%.
- The age brackets expected to witness the largest decline in numbers of Higher Education Students were 17-20 year olds and 37-46 year olds with projected numbers expected to drop by close to 20% for each group between the projected numbers of 2005-06 and 2019-20.
- The age brackets that can be expected to herald the largest increase in the number of Higher Education students are 28-29 year olds, 53-56 year olds and all those aged over 60.
- Despite these changes, young people will continue to offer the biggest contribution to FE enrolments. In 2004-05 43% of all Higher Education students were aged 21 or younger. In 2019-20 this would drop to 40%.

Students in Higher Education Institutions

- Higher Education students in Scotland contain students from both Higher Education Institutions (HEIs) and Further Education Colleges (FECs). The effects of demography on HE student numbers should be considered for both of these sectors.
- There were 156,166 Scottish HE students in HEIs in 2004-05. This number is projected to increase to 157,558 in 2005-06 and remain fairly constant until 2010/11 before falling sharply to 141,581 in 2019-20. This represents a 10.1% reduction in projected numbers between 2005-06 and 2019-20.

Students in Further Education Colleges

- There were 50,331 Scottish Higher Education students in FECs in 2004-05. This is projected to increase to 50,501 in 2005-06 before eventually falling to 45,197 in 2019-20, a 10.5% reduction in that time.

There is not a considerably large difference between the expected reductions in the number of Scottish Higher Education Students from HEIs than there is from FECs. This would indicate that the age profile of Scottish HE students is fairly similar between HEIs and FECs.

Summary

It should be stressed that the results outlined above are not definitive and would not be expected to be closely replicated over the years. However, the results do emphasise that demography is an issue that could potentially have a significant effect on the number of Higher Education students and Further Education Enrolments in upcoming years and that action may have to be taken to combat its effect on participation in Higher and Further Education.

This exercise was designed more to give an initial impression of the effect that demography will have on future FE and HE numbers and there is some scope for developing this further.