

Joint Validation Committee

REPORT FROM JVC TO CENTRES OF RADIOGRAPHY EDUCATION

MONITORING SCHEDULES

2002/2003

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1. Introduction

- 1.1 All 24 institutions operating pre-registration degree courses submitted completed schedules in time for inclusion in this report. The returns represent 24 diagnostic radiography and 15 therapeutic radiography courses and reflect activity during the academic year 2002/2003.
- 1.2 The Joint Validation Committee, following a thorough review of the monitoring schedule, introduced a revised system of data collection for the 1999/2000 academic year. Some data were collected via a revised form, while statistics relating to students commencing and continuing in training were collected on an individual student basis via student registration forms and retention forms. This is linked with the Society of Radiographers membership database.
- 1.3 The information collected via the various mechanisms will enable the JVC to obtain additional statistics about recruitment to radiography courses in the UK and to maintain a more accurate record of student retention and student attrition. It is, therefore, important that institutions provide complete and consistent information. If those responsible for completing the forms are unsure about what is required of them, they are strongly advised to contact their JVC Link Person or the JVC Secretariat for clarification. Feedback about the information being collected or regarding any ambiguity in the questionnaire is welcome and will enable us to continue with improvements to the system.
- 1.4 The JVC Link Person reviewed in detail the monitoring schedules submitted by the institutions for which he or she was responsible enabling identification of matters specific to individual institutions. The JVC Secretariat holds these in confidence. They, together with specific information from the data analysis, are reported to the institution in an institution-specific annex to this report. Institutions are asked to return a response or commentary where appropriate.
- 1.5 Scrutiny of the returns highlighted matters of concern that applied more generally and these are dealt with in this report.
- 1.6 Matters of good practice, both general and institution specific, are also identified in this report, and to the individual institutions concerned as appropriate.

2. Student intakes for the 2002/2003 academic year

- 2.1 Tables 1a, 1c and 1d provide information on actual intake figures compared with approved intake figures for the years 1996-2002 for all courses returning completed schedules. Table 1b provides data on commissioned numbers for 1999 to 2002.

Table 1a: Student Intakes for all UK Pre-registration Radiography Courses

<i>Intake Year</i>	<i>Diagnostic</i>				<i>Therapeutic</i>			
	<i>Actual</i>	<i>1st Nov</i>	<i>Approved</i>	<i>Actual/Approved</i>	<i>Actual</i>	<i>1st Nov</i>	<i>Approved</i>	<i>Actual/Approved</i>
2002	1112	1087	1084	102.6%	293	288	305	96%
2001	968	938	1048	92.4%	257	249	292	88%
2000	826	799	882	93.7%	205	202	258	79.5%
1999	715	705	817	87.5%	192	179	231	83.1%
1998	714		828	86.2%	190		240	79.2%
1997	702		831	84.5%	193		240	80.4%
1996	637		803	79.3%	181		240	75.4%

- 2.2 It was noted that, as the previous 3 years, the number of students in the intake had decreased between registration with the university and the 1st November (section 2.12 refers). The decrease in the 2002 intake was 25 diagnostic and 5 therapeutic students, which points towards early attrition from some courses. Losses were spread across 12 institutions with the greatest loss from a single institution being 3 diagnostic and 1 therapeutic. This is an improvement on 2001 when the decrease was 30 diagnostic and 8 therapeutic students with losses spread across 12 institutions with the greatest loss from a single institution being 7.
- 2.3 For the third time the number of student places commissioned/funded was requested and are shown in Table 1b.

Table 1b: Student Intakes for all UK Pre-registration Radiography Courses compared with commissioned number

<i>Intake Year</i>	<i>Diagnostic</i>			<i>Therapeutic</i>		
	<i>Actual</i>	<i>Commissioned</i>	<i>Actual/Commissioned</i>	<i>Actual</i>	<i>Commissioned</i>	<i>Actual/Commissioned</i>
2002	1112	1099	101.2%	293*	318*	92.1%*
2001	968	1011	95.7%	257*	290*	88.6%*
2000	826	870	94.9%	205*	248*	82.7%*
1999	715	723	98.9%	192*	222*	86.5%*

The JVC is well aware that the number of commissioned/funded places has not been keeping pace with workforce demands in recent years and welcomes the increase this academic year.

Table 1c: Student Intakes for England and Wales Pre-registration Radiography Courses (3 year programmes)

<i>Intake Year</i>	<i>Diagnostic</i>			<i>Therapeutic</i>		
	<i>Actual</i>	<i>Approved</i>	<i>Actual / Approved</i>	<i>Actual</i>	<i>Approved</i>	<i>Actual / Approved</i>
2002	956	960	99.6%	250	269	93%
2001	832	924	90%	210*	256*	82%
2000	711	762	93.3%	171*	222*	77%
1999	580	697	83.2%	155*	199*	77.9%
1998	591	712	83%	155	208	74.5%
1997	584	715	81.7%	165	208	79.3%
1996	536	687	78%	165	208	79.3%

*this figure includes the PgD at South Bank (2 year programme)

February 2003 Student Intakes

Three new programmes started in February 2003 with intakes:

University of Teesside PgD/MSc Allied Health professional Studies (with eligibility for Registration- Diagnostic Radiography. The intake number was 12; the same as commissioned numbers. JVC approved maximum intake is 15.

South Bank University:

BSc (Hons) Diagnostic Radiography (part-time in service). Intake number 8.

BSc (Hons) Therapeutic Radiography (part-time in service). Intake 12.

2.4 Table 1d: Student Intakes for Scotland and Northern Ireland Pre-registration Radiography Courses (4 year programmes)

<i>Intake Year</i>	<i>Diagnostic</i>			<i>Therapeutic</i>		
	<i>Actual</i>	<i>Approved</i>	<i>Actual / Approved</i>	<i>Actual</i>	<i>Approved</i>	<i>Actual / Approved</i>
2002	156	124	125.8%	43	36	119.4%
2001	136	124	109.7%	47	36	130.6%
2000	115	120	95.8%	34	32	106.25%
1999	135	120	112.5%	37	32	115.6%

- 2.5 It is important that the JVC is able to identify and draw to the attention of parent bodies trends in the provision of qualified radiographers across the United Kingdom. This is now possible but requires the continued prompt submission of accurate data from HEIs.
- 2.6 It is again encouraging to note that the actual intakes for the UK as a whole increased by 15% in diagnostic radiography and by 14% in radiotherapy.
- 2.7 The following tables show the range and average intake figures per centre for the academic years 1996 –2002.

Table 2a: Diagnostic Intake

<i>Intake Year</i>	<i>Lowest Intake</i>	<i>Highest Intake</i>	<i>Average Intake</i>
2002	19	96	46.3
2001	16	69	40.3
2000	16	57	34.4
1999	17	56	30.2
1998	19	52	29.75
1997	18	54	29.25
1996	18	46	26.54

Although the lowest intake number has remained about the same, the highest intake number has increased over the past 4 years with the average intake increasing steadily since 1996.

Table 2b: Therapeutic Intake

<i>Intake Year</i>	<i>Lowest Intake</i>	<i>Highest Intake</i>	<i>Average Intake</i>
2002	8	67	19.5
2001	4	31	16.1
2000	6	25	12.1
1999	8	26	11.3
1998	6	22	11.13
1997	6	22	11.31
1996	4	19	11.31

- 2.8 The average increase in intake size for both disciplines again increased in 2002. The lowest intake in radiotherapy was 8 which again raises questions about viability and the quality of the student learning experience.
- 2.9 Of concern, too, was the fact that 11 institutions showed intakes in excess of JVC approved numbers. Excesses for the 2002/2003 year, for 9 diagnostic programmes, ranged from 1.8% to 53% and, for the 5 therapeutic programmes 4% and 58%.

Excesses for the 2001/2002 year, for 6 diagnostic programmes, ranged from 4% to 31% and, for the 3 therapeutic programmes 10% and 58%. The JVC realise that some of the over-recruitment is as a result of pressure from commissioners in response to severe staffing shortages in radiography. However, over-recruitment can lead to overcrowding in the clinical placements and where there are staff shortages, insufficient radiographers to supervise student practice. This will result in dissatisfaction from both students and clinical staff, which could ultimately increase the attrition rates from radiography courses and deterioration in the quality of the learning experience for everyone concerned.

2.10 **Institutions are reminded that there is guidance in the JVC Handbook for Education Centres on the procedures for seeking approval for increases in intake levels and that it is prudent to consult with the JVC Link Person at the earliest opportunity.**

2.11 The following tables show the breakdown by academic qualification for those students entering programmes in the 2002 and 2001, academic years. The figures for Radiotherapy include entrants to PgD and BSc (Hons) programmes.

Table 3a: 2002 Intake

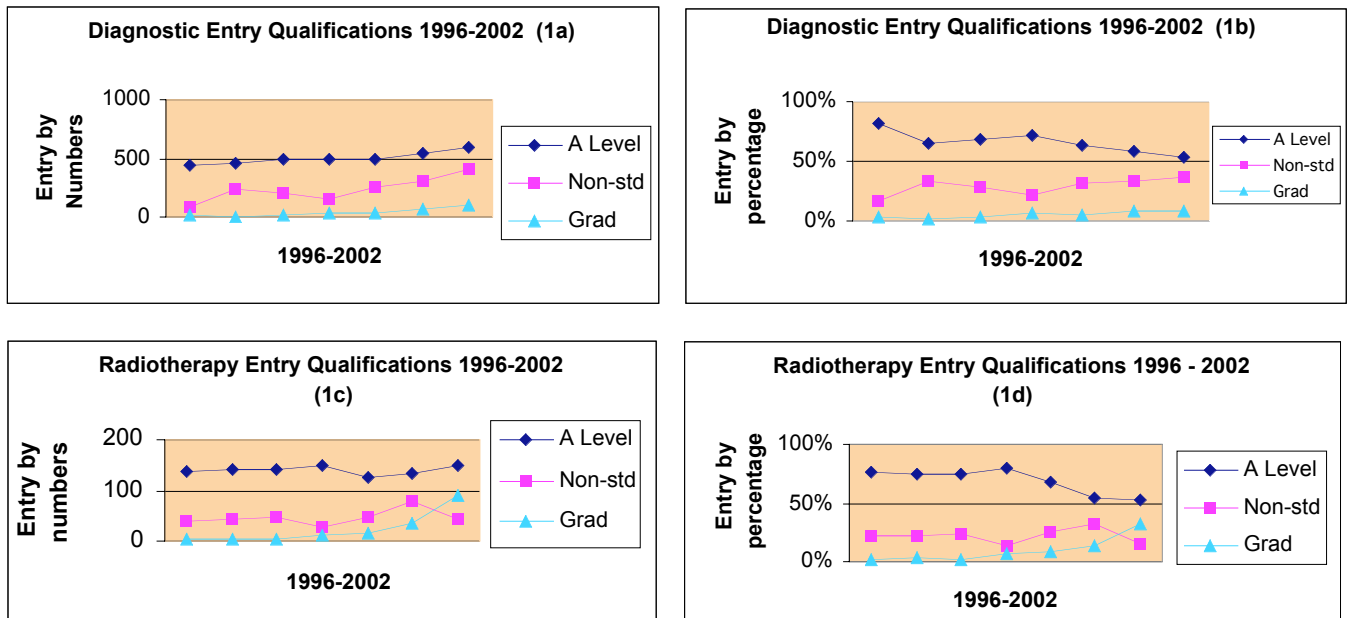
	Diagnostic			Therapeutic		
	Male	Female	Total	Male	Female	Total
Standard secondary and post 16 tertiary education entry qualifications including Scottish highers and Irish leaving certificate	129 11.7%	465 42.3%	594 54%	32 11.35	117 41.5%	149 52.8%
BTEC	35 3.2%	50 4.5%	85 7.7%	5 1.8%	18 6.4%	23 8.2%
Access to Higher Education Qualifications	53 4.8%	200 18.2%	253 23%	10 3.5%	44 15.6%	54 19.1%
Graduate Entry	41 3.7%	56 5.1%	97 8.8%	6 2.1%	36 12.8%	42 14.9%
Non standard (life work and other experience in lieu of qualifications) including overseas qualifications	31 2.8%	40 3.6%	71 6.5%	4 1.4%	10 3.5%	14 5%
TOTAL	289 26.3%	811 73.7%	1100	57 20.2%	225 79.8%	282

Table 3b: 2001 Intake

	Diagnostic			Therapeutic		
	Male	Female	Total	Male	Female	Total
Standard secondary and post 16 tertiary education entry qualifications including Scottish highers and Irish leaving certificate	104 11.3%	443 48.1%	547 59.4%	18 7.2%	117 46.8%	135 54.1%
BTEC	30 3.3%	73 7.9%	103 11.2%	1 0.4%	15 6%	16 6.4%
Access to Higher Education Qualifications	37 4%	127 13.8%	164 17.8%	10 4%	44 17.6%	54 21.5%
Graduate Entry	28 3%	39 4.2%	69 7.3%	7 2.8%	28 11.2%	35 14%
Non standard (life work and other experience in lieu of qualifications) including overseas qualifications	14 1.5%	26 2.8%	40 4.3%	2 0.8%	8 3.2%	10 4.0%
TOTAL	215 23.3%	706 76.71%	921	38 15.2%	212 84.8%	250

2.12 These figures are compiled directly from the College of Radiographers Student Registration forms. Yet again there is a discrepancy between the number of student registration forms received by the College (1100D and 282T) and those numbers stated in the Annual Course Monitoring reports as registering with the University (1112D and 293T). The returns show that between registration with the University and 1st November 2002, 25 diagnostic students had left and 5 radiotherapy students had withdrawn. The number of first year students quoted on Monitoring Forms differed from the actual number of registration forms received by the College of Radiographers though some quoted more and some less than were registered. The net result was that the monitoring return numbers was less the actual numbers registered by 4 in diagnostic and exceeded the actual numbers by 12 in therapeutic radiography. The figures given on the returns as the number of first year students registered with College of Radiographers probably includes some students who registered in 2001 and are repeating a year.

2.13 Figures 1a to 1d show the entry qualifications both by number and percentage of students commencing in the years 1996 to 2002. For diagnostic radiography (Fig 1a) the entry numbers continue to increase. In radiotherapy (Fig 1c) there is an increase in A level entry students from 2000 but the figure remains lower than 1999. Students with non-standard qualifications show an increase for both diagnostic and therapeutic radiography with graduate entries also showing an increase. Shown as a percentage (Fig 1b & 1c), students who offer qualifications other than standard secondary and post 16 tertiary education qualifications increased in the last two intakes for each branch of the profession. This suggests that widening initiatives access to HE are beginning to pay dividends. However, analysis of progression is necessary before conclusions are made on the impact and success of widening access.



(Therapy figures include 4 graduate entrants and 1 non-standard/overseas entrant to a PgD in 1999, 7 graduate entrants in to this PgD programme in 2000, 13 graduate entrants in 2001 and 9 graduate entrants in 2002).

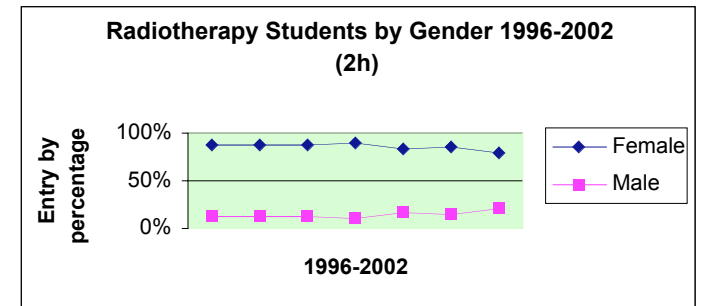
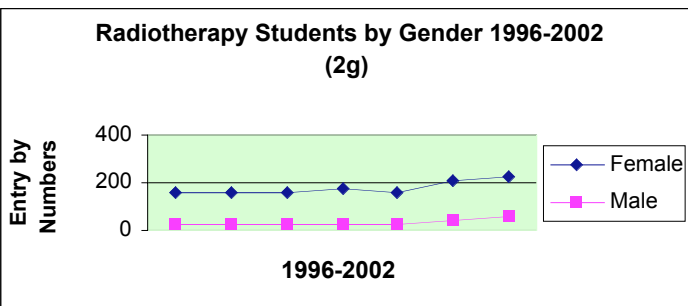
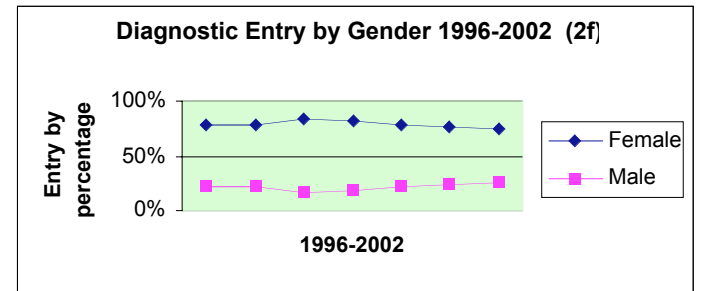
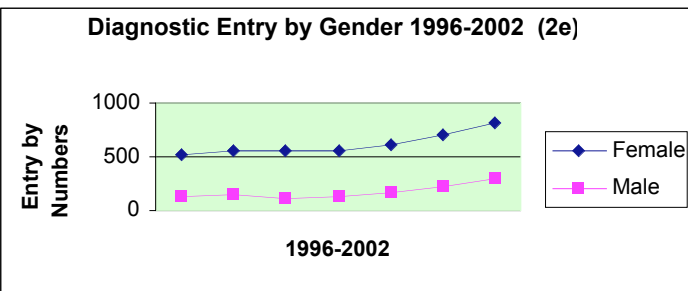
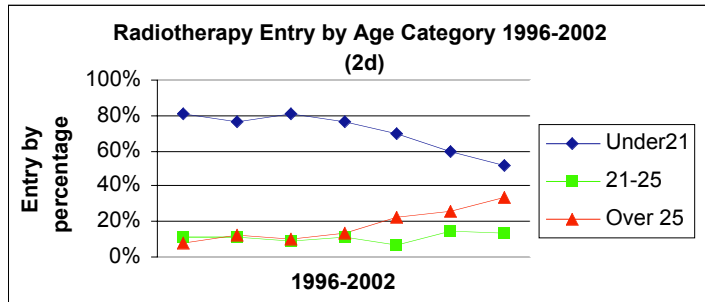
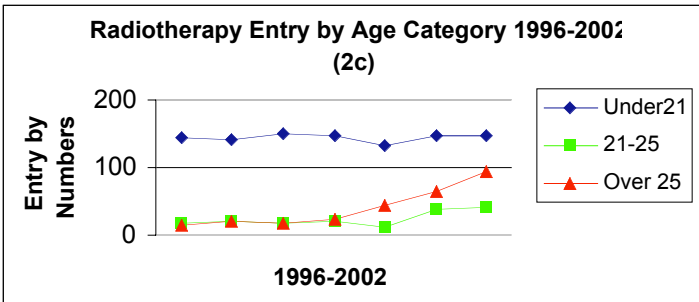
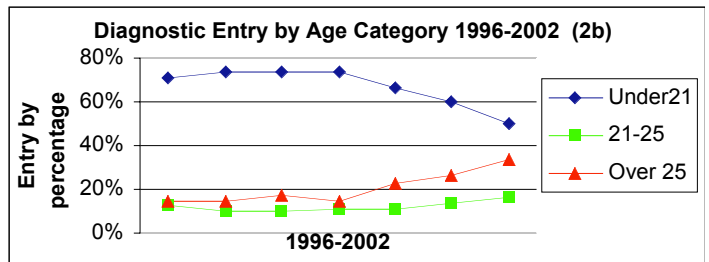
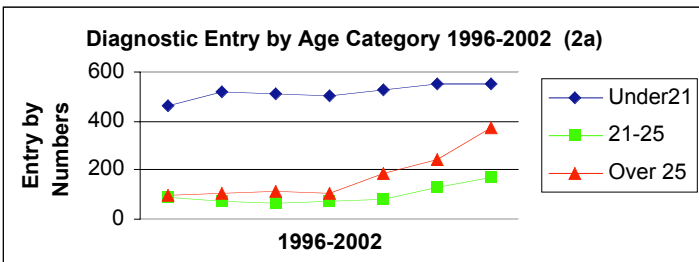
2.14 The following tables 4a and 4b provide the breakdown by age and gender for those students entering programmes in the 2002 and 2001. Figures 2a to 2h graphs illustrate the breakdown by age and gender by number and percentage for students entering programmes in the 2002,2001, 2000, 1999, 1998, 1997 and 1996 academic years.

Table 4a: 2002 Intake

<i>Discipline</i>	<i>Under 21 years</i>		<i>21 - 25 years</i>		<i>Over 25 years</i>		<i>Totals</i>	
	<i>female</i>	<i>male</i>	<i>female</i>	<i>male</i>	<i>female</i>	<i>male</i>	<i>female</i>	<i>male</i>
2002								
Diagnostic	447 40.6%	104 9.5%	120 10.9%	53 4.8%	244 22.2%	132 12%	811 73.7%	289 26.3%
Therapeutic	116 41.1%	30 10.6%	32 11.3%	9 3.2%	77 27.3%	18 6.4%	225 79.8%	57 20.2%

Table 4b: 2001 Intake

<i>Discipline</i>	<i>Under 21 years</i>		<i>21 - 25 years</i>		<i>Over 25 years</i>		<i>Totals</i>	
	<i>female</i>	<i>male</i>	<i>female</i>	<i>male</i>	<i>female</i>	<i>male</i>	<i>female</i>	<i>male</i>
2001								
Diagnostic	457 49.6%	95 10.3%	90 9.8%	37 4%	159 17.3%	83 9%	706 76.7%	215 23.3%
Therapeutic	128 51.2%	18 7.2%	36 14.4%	2 0.8%	48 19.2%	18 7.2%	212 84.8%	38 15.2%



For the 1996, 1997 and 1998 cohorts, discrepancies meant that total numbers were not consistent with intake figures (See table 1a). To some extent this may have been due to a lack of recording of these details for students that withdrew close to commencement of the course, as figures were slightly below the actual intake number. This may also suggest that more care needs to be taken when completing the returns so that where figures should match with others that have been quoted this occurs. Gender balance in both disciplines remains the similar to the previous year although the numbers of male entrants to both disciplines increased and has improved this year. As in previous years, the gender ratios are not consistent throughout the three age bands. All centres had male students in their 2002 intake of diagnostic and therapeutic students.

2.15 Since 1999 the data on ethnic origin of students has been collected though student registration forms; however, information has only been presented for 3 years due to incompleteness of the data for 1999. Data has supplemented that collected on qualification when graduates enter membership of the Society of Radiographers. Though the categories are slightly different the data, the tables below provide a breakdown by ethnic origin of student entering programmes in 2002, 2001 and 2000.

Table 5a: 2002/2003 cohort

Total student cohort by count - ethnic origin/gender/discipline

Ethnic Origin	Diagnostic			Therapy			Overall Total
	F	M	Total	F	M	Total	
Black Caribbean	10	4	14	1	0	1	15
Black African	26	24	50	5	4	9	59
Black Other	0	0	0	1	1	2	2
Chinese	8	2	10	4	1	5	15
Indian	23	7	30	13	0	13	43
Other Asian	10	0	10	1	2	3	13
Other	27	17	44	7	2	9	53
Pakistani	20	8	28	5	3	8	36
Unknown	3	2	5	0	0	0	5
White European	677	221	898	188	45	233	1131
Grand Total	804	285	1089	225	58	283	1372

Figure 3a

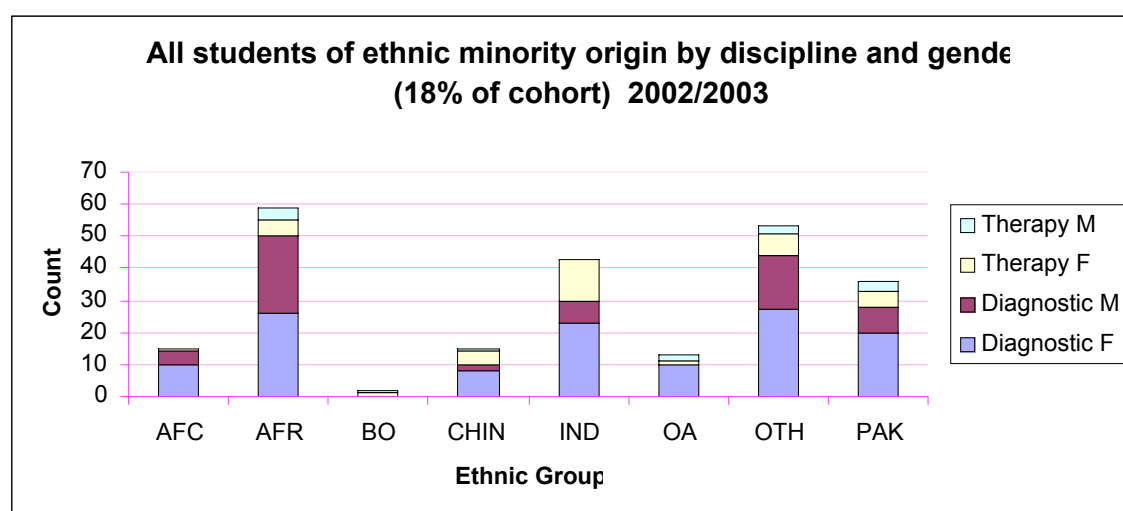


Table 5b: 2001/2002 cohort

Total student cohort by count - ethnic origin/gender/discipline

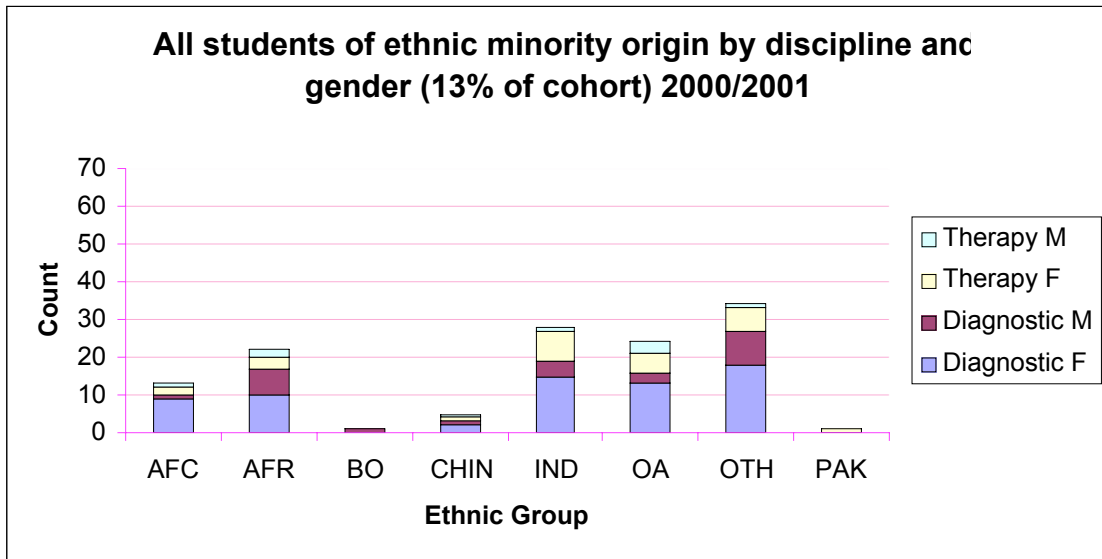
Ethnic Origin	Diagnostic			Therapy			Overall Total
	F	M	Total	F	M	Total	
Black Caribbean	6	3	9	3	0	3	12
Black African	12	13	25	7	4	11	36
Black Other	1	1	2	0	0	0	2
Chinese	4	0	4	0	2	2	6
Indian	46	5	51	13	2	15	66
Other Asian	7	4	11	5	0	5	16
Other	16	7	23	3	2	5	28
Pakistani	4	0	4	0	1	1	5
Unknown	22	4	26	1	0	1	27
White European	563	156	719	165	22	187	906
Grand Total	681	193	874	197	33	230	1104

Figure 3b**Table 5c: 2000/2001 cohort**

Total student cohort by count - ethnic origin/gender/discipline

Ethnic Origin	Diagnostic			Therapy			Overall Total
	F	M	Total	F	M	Total	
Black Caribbean	9	1	10	2	1	3	13
Black African	10	7	17	3	2	5	22
Black Other	0	1	1	0	0	0	1
Chinese	2	1	3	1	1	2	5
Indian	15	4	19	8	1	9	28
Other Asian	13	3	16	5	3	8	24
Other	18	9	27	6	1	7	34
Pakistani	0	0	0	1	0	1	1
Unknown	179	51	230	45	13	58	288
White European	403	116	519	102	12	114	633
Grand Total	649	193	842	173	34	207	1049

Figure 3c



3. Student Population

3.1 At 1/11/2002 there was a total of 2670 diagnostic and 658 therapeutic students undertaking pre-registration courses in radiography. These figures compare with previous years as follows:

Table 6: Total Radiography Student Populations

	D	T
2202/03	2670	658
2001/02	2289	555
2000/01	2088	496
1999/00	1984	492
1998/99	1963	484
1997/98	1943	470
1996/97	1916	425
1995/96	1911	458

4 **Student Completion and Wastage**

4.1 The numbers of students reported as graduating over the past 8 years are shown in the following table.

Table 7a: Total Number of Graduates

Total Number of Graduates		
<i>Year of Graduation</i>	Diagnostic	Therapeutic
2003	604	128+ 4PgD
2002	529	116+1 PgD
2001	545	138+2 PgD
2000	557	135
1999	544	126
1998	525	115
1997	543	138
1996	582	92

4.2 The tables below show the degree classification for those graduating in 2003,2002, 2001 and 2000 and 1999.

Table 7b (D): Degree Classifications for Diagnostic Radiography

Classification	1	2.1	2.2	3	Pass
2003	67	247	252	34	6
2002	58	231	192	33	15
2001	37	201	243	36	28*
2000	33	206	253	44	21*
1999	37	219	237	35	16*

* These figures include students from Queen Margaret University College, Edinburgh who had the option of exiting at 3 years with an ordinary degree or completing an additional year for an Honours degree.

Table 7c: Degree Classifications for Therapeutic Radiography

Classification	1	2.1	2.2	3	Pass
2003	14	47	49	16	2
2002	12	64	37	3	1
2001	11	55	48	12	12*
2000	7	58	56	10	4*
1999	12	53	44	10	7 *

N.B. These figures include students from Queen Margaret University College, Edinburgh who have the option of exiting at 3 years with an ordinary degree or completing an additional year for an Honours degree.

As in previous years the majority of graduates in both disciplines obtained a second class honours degree (Figures 3a and 3b).

Figure 4a: Diagnostic Degree Classifications by Percentage in 2002 and 2003

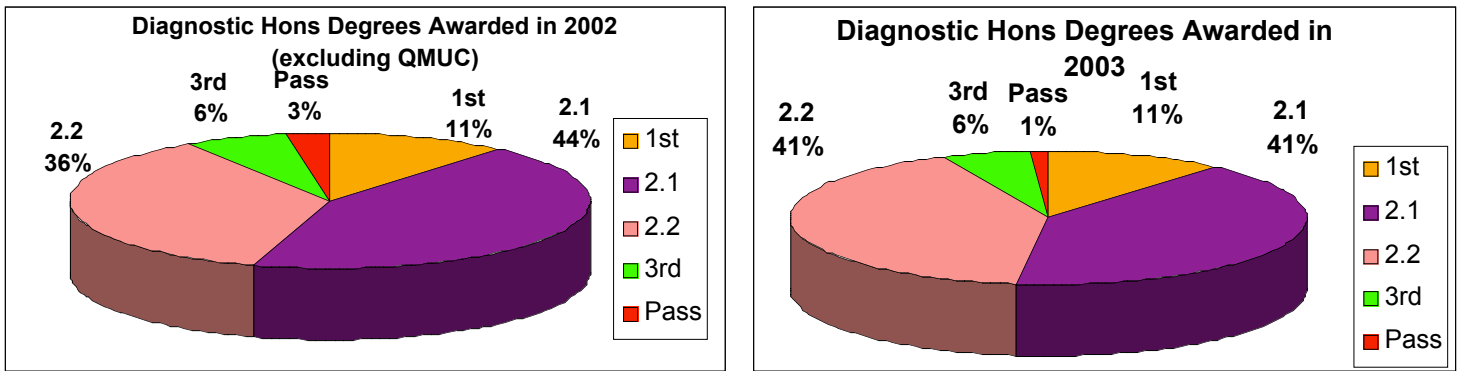
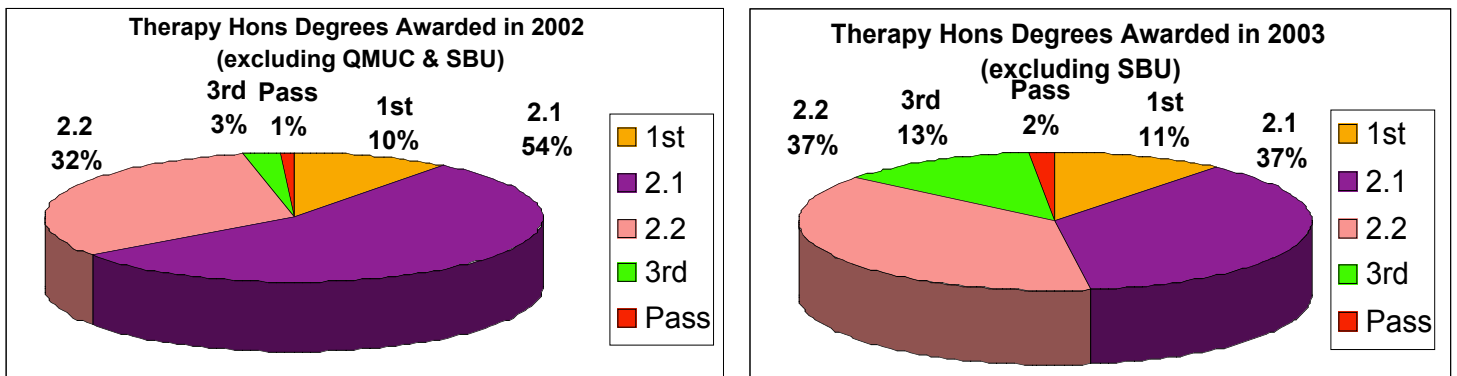


Figure 4b: Therapeutic Degree Classifications by Percentage in 2002 and 2003



The distributions of degree classifications are similar for both disciplines. There has been little change over the three years in the percentages of diagnostic and therapeutic classifications, which have remained broadly similar.

4.3 Table 7a demonstrates output of qualified radiographers and wastage (students not graduating). Radiotherapy students completing a two year PgD programme with eligibility for registration are only included under all programmes

Table 8a: Attrition Rates Calculated Using Year 2003 Outputs

2003	Three year programmes England and Wales		Four year programmes Scotland and Ulster		All programmes	
	Diagnostic	Therapeutic	Diagnostic	Therapeutic	Diagnostic	Therapeutic
Actual Intake	711	164	135	37	846	206
Output	498	102	106	26	604	132
	70%	62.2%	78.5%	70.3%	71.4%	64.1%
Wastage	213	62	29	11	242	74
	30%	37.8%	21.5%	29.7%	28.6%	35.9%

Table 8b: Attrition Rates Calculated Using Year 2002 Outputs

2002	Three year programmes England and Wales		Four year programmes Scotland and Ulster		All programmes	
	Diagnostic	Therapeutic	Diagnostic	Therapeutic	Diagnostic	Therapeutic
Actual Intake	580	150	95	23	675	180
Output	455 78.5%	102 68%	74 77.9%	15 65.2%	529 78.4%	118 65.5%
Wastage	125 21.5%	48 32%	21 22.1%	8 34.8%	148 21.6%	62 34.4%

Table 8c: Attrition Rates Calculated Using Year 2001 Outputs

2001	Three year programmes England and Wales		Four year programmes Scotland and Ulster		All programmes	
	Diagnostic	Therapeutic	Diagnostic	Therapeutic	Diagnostic	Therapeutic
Actual Intake	587	155	98	18	713	190
Output	451 76.8%	111 71.6%	74 75.7%	21* 116.6%	545 76.4%	140 73.7%
Wastage	136 23.2%	44 28.4%	24 24.5%		168 23.6%	50 26.3%

* This is probably due to students commencing prior to 1997 completing in 2001

Wastage unfortunately remains high overall and in diagnostic radiography there was a 7% increase from 2002. In radiotherapy there was a slight increase in attrition. Note that these figures do not take into account students who are resting or referred/deferred; however, they would include students graduating from previous intakes.

- 4.4 The following tables (8a and 8b) show for each cohort the number of students completing each academic year as a percentage of the actual intake. Attrition figures are based on College of Radiographers student registration data and rely on the accuracy of completion of student retention forms. Unfortunately, at the time of compiling these data some centres had not submitted the required information.

Table 9a: Three Year Programmes (England & Wales)

Cohort	Retention at 1 year relative to actual intake		Retention at 2 years relative to actual intake		Completion at 3 years relative to actual intake	
	Diagnostic	Therapeutic	Diagnostic	Therapeutic	Diagnostic	Therapeutic
1994					81.5%	72.5%
1995			85%	74.3%	85%	73.8%
1996	90.9%	78.8%	85.3%	74%	85.3%	71.3%
1997	90.5%	82.4%	82%	77.7%	82.4%	71.5%
1998	86%	74.8%	87.1%	78.1%	76.8%	71.6%
1999	87.6%	83.3%	83.5%^	69.9%**	78.5%	68%
2000	80.6%	67.1%**	72.4%^	62.7%^	70%	62.2%
2001	82.3%^	78.6%^	76.2%	71.3%		
2002	81.1%	72.7%				

^^Data missing from 1 HEI

^ Data from 18 out of 20 offering 3year BSc(Hons)

** Data from 11 of the 13 offering 3 year BSc(Hons)

Most of the attrition from programmes continues to occur during the first year although it is still occurring, albeit to a lesser extent, in the second and final year.

The completion rates are still a cause of concern. They are showing a continuing deterioration for both diagnostic and therapeutic programmes. **The continuing deterioration will be brought to the attention of parent bodies.**

Table 9b: Four Year Programmes (Scotland & Ulster)

Cohort	Retention at 1 year relative to actual intake		Retention at 2 years relative to actual intake		Retention at 3 years relative to actual intake		Completion at 4 years relative to actual intake	
	D	T	D	T	D	T	D	T
1994							83%	50%
1995			87%	88.9%	85%	83%	85%	84.2%
1996	87.2%	88.2%	83.7%	82.4%	90%	81.25%	77.5%	81.25%
1997	89.8%	94.4%	85.7%	94.4%	85%	83.3%	75.7%	83.3%
1998	90.6%	69.6%	84.2%	65.2%	75.8%	69.6%	77.9%	65.2%
1999	92.6%	100%*	83%	75.5%	80%^	69%^	78.5%	70.3%
2000	87%	85.3%	80.3%^	81%^	80.3%^	81%^		
2001	83%^	77.4%^	78.9%^	80.6%^				
2002	83.5%^	79.2%^						

^ Data missing from 1 HEI *one centre lost and another gained a student during the year

Queen Margaret University College is only included in figures from the 1999 cohort, as this marked the introduction of a 4-year honours programme for all students.

The Robert Gordon University is not included in the figures for the 1994 intake as this cohort was the last to follow a three-year BSc programme.

5. **Staffing**

5.1 The JVC seeks to ensure that courses are staffed appropriately in relation to approved student numbers.

5.2 As of 1st November 2002 the returns show that in the 24 centres there were 267.98 fte (196.8 fte diagnostic, 66.18 fte therapeutic and 5 dual qualified) radiography staff (including those based in clinical locations) employed in the delivery of undergraduate programmes of study. This compares with 255.4 fte in 24 centres as of November 2001, 253.6 in 24 centres as of 1 November 2000, 249.8 as of 1 November 1999, 246.7 as of 1 November 1998, 248.9 in 27 centres as of 1 November 1997, 253.3 in 31 centres as of 1 November 1996, 280.32 fte as at 1 November 1995 and 267 fte as at 1 November 1994.

The information collected this year and the previous three years regarding staffing levels differed from previous years. This was an attempt to have more explicit details of the disciplines of lecturing staff and of their workloads outside delivery of the pre-registration programmes. The maintaining of staff numbers is of concern to the JVC particularly when many institutions are under pressure to accept significant increases in student numbers.

5.3 Analysis of the staff student ratios (SSR) quoted in the returns based on actual numbers as of 1st November 2002 showed an average of 1: 12.5 with a range from 1:7.5 to 1:28.7. Those from the 2001/2002 monitoring schedule showed an average of 1:12.2, the 2000/2001 monitoring schedule showed an average of 1:11.2, with a range from 1:6.25 – 1:32.1 and for 1999/2000 an average of 1:12, with a range from 1:6.24 – 1:23.

Calculation of staff student ratios (SSR) from the 1998/99 monitoring schedule returns, based on the approved intake numbers, showed an average SSR of 1:14. (range: 1:8.3 - 1:30.4). Using actual intake numbers, the average SSR was 1:11.8 (range: 1:7.4 – 1:22.8). These compare with an average SSR of 1:12.7 (range 1:6.6 – 1:24.6) and 1:12.6 (range: 1:6.7 - 1:26.4) based on figures for approved student numbers and, using actual intake numbers, an average SSR of 1:11.1 (range: 1:6.9 – 23.4:), and 1:11.6 (range: 1:5.7 - 1:21.9) for the previous two years.

5.4 The JVC in its response to “Meeting the Challenge” required an SSR of 1:12 from September 2002. Only half the returns showed compliance with this requirement. **This concern will be highlighted to parent bodies.**

6. Staff Development

The returns indicate that 94% of radiography staff hold, or are registered for, higher degrees. This compares with the figure of 93.1% for the 2001/2002 academic year, 91.3% for the 2000/2001 academic year, 91.5% for the 1999/2000 academic year, 80.4% for the 1998/99 academic year, 77% for the 1997/98 academic year, 74% for the 1996/97 academic year and 79% for the 1995/96 academic year. It was difficult to calculate exactly as staffing levels were quoted in full time equivalent, rather than total number of staff so the actual percentage of staff either holding or registered for, higher degrees is probably lower. However, the above figures represent considerable development over the 1994/95 figure of 43%.

There were 13 centres where all staff either held or were registered for higher degree, which is one less than for the previous 3 years, comparing favourably with 9 for the 1998/99 academic year.

18 staff from 10 centres hold doctorates.

7. Clinical Education

- 7.1 Prior to last year, centres were asked to list for each clinical placement the maximum approved intake and the number of students in each intake placed there. In this and the previous return, centres were asked for the total; maximum approved number and the maximum and minimum number placed in each clinical department during the academic year.

A total of 223 major clinical placement hospitals or groups of hospitals compared with 204 during 2001/2002, 181 during 2000/2001 and 177 during 1999/2000 provided clinical education for diagnostic radiography students. In several instances the JVC maximum approved number for the placement appeared to have been exceeded, however, this was because the figure given the maximum approved number per cohort rather than the maximum at any one time.

- 7.2 The maximum number of students in a single placement at any one time was 26. It was noted with concern that in several instances a single student was placed in a clinical placement and that with some programmes the use of clinical placements was close to capacity while for others clinical placements were under-utilised.
- 7.3 The clinical education of therapeutic students was provided by 56 major clinical placements compared with 52 in 2001/2002, 48 in 2000/2001 and 49 in 1999/2000. The maximum number of students in a placement at any one time was 26. It was again of concern that in several instances a sole student was placed in a clinical department.
- 7.4 Provision of a sufficient number of high quality clinical placements is of fundamental importance. This is a matter that also needs to be addressed by those commissioning radiography education and provider educational institutions.

8. Curriculum development and delivery

- 8.1 Details of major changes to curriculum development and delivery were requested.
- 8.2 Only seven HEIs did not report any changes to the curriculum. Several reported implementation of changes approved at review or of programmes being revalidated.
- 8.3 Four centres reported changes reflecting increased shared or interprofessional components to the programme. Another had made curricula changes to incorporate new technical advances. One centre had moved to a block time-table.
- 8.4 Three schedules reported changes to the methods of assessment of the research element, in part due to new ethics requirements. One University reduced the volume and complexity of its module assessments. Another had introduced a poster as a new form of assessment within its programme.
- 8.5 Several institutions were expanding e-learning and the use of virtual learning environments. One centre reported that its programme was now a fully integrated problem-based learning programme.
- 8.6 There were several additional clinical placements that had been approved and brought on line and. Two centres had developed their clinical assessments expanding their use of a portfolio and OSCE, another had introduced a revised assessment scheme. One HEI had introduced a new clinical audit tool, one had revised the first year of the programme so student first placements were earlier, so there was earlier integration of theory with practice and avoided overlap of cohorts.
- 8.7 Development of resources to support programme delivery was reported by all except two institutions. Many of the HEIs reported changes in teaching staff, as well as the creation of additional posts and increases in the hours of part-time staff, a frozen post was released and a temporary post made permanent. As well as additional lecturer posts, two returns reported creation of lecturer/practitioner posts and one the appointment of practice development facilitators.

Several institutions had increased technical support mostly in IT to help develop and maintain initiatives relating to the introduction or increased use of e-learning and virtual learning environments. One schedule reported an additional AV technician and one reported using agency support as required rather than replacing a Technical Support Officer.

Only one institution reported an increase in clerical secretarial support of 0.5 fte whilst another reported that administrative support had been reorganised and reduced.

- 8.8 One institution reported a move to new purpose built accommodation, another the relocation of a radiography specific teaching room and two reported upgrading of existing teaching accommodation. Two centres had installed digital x-ray rooms, one a manual handling teaching room and at another a skills lab was being installed. One centre reported the removal of old superficial and orthovoltage therapy x-ray units and the installation of a general diagnostic unit.

- 8.9 The biggest area of development was in equipment and learning facilities with the acquisition of new and updating of existing computer and other ICT and AV facilities. Four centres reported the purchase of data projectors and several acquired additional or replacement computers and another a digital. Two centres report acquisition of new radiotherapy treatment planning systems and two other had systems upgrade one with additional software and workstations. One centre reported purchase of an X-Ray film scanner and an ultrasound unit with Doppler. Purchases of bones, skeletons and anatomical models were reported in two instances, dose measuring devices in two and a phantom in one.

Eight centres reported improved library/learning resource facilities, with increased provision of books, journals including on-line provision and upgrading of IT facilities.

- 8.10 Improvements in university-wide facilities concentrated mainly on enhanced IT provision. Use of IT for communicating with student was increased. One had installed a new network infrastructure while others had introduced or developed virtual learning environments including StudyNet and Blackboard. In one University this included provision of 2 computers specifically for students with special needs and another had a new student learning and support centre. One institution had appointed a fulltime adviser for students with special needs.

One centre provided new sports facilities for students.

9. Conclusion

- 9.1 The 2002/2003 report continues to show similar trends as in previous years. The increase in annual intakes across the UK for all pre-registration courses in both disciplines is encouraging; however, the increase in annual intake has to be considered against rising attrition. Since 2000 there has been a 135% increase in the actual diagnostic intake and in therapy a 143% increase. The increase in commissioned places has not kept pace with work force demands but it does appear that this is being addressed at last.
- 9.2 There still remains a problem in some centres where recruitment was in excess of JVC approved numbers. Whilst it may be difficult to 'hit' a target exactly, a small increase can be justified but increases in the order of 58% cannot and reveal an irresponsible and cavalier attitude to students on the part of those institutions involved. On the other extreme the question is again raised over the viability and the student experience of therapy intakes of 8.
- 9.3 The proportion of non-standard entry qualifications is increasing and reflects the widening access initiatives in higher education and the increasing number of students of 21 and over entering courses.
- 9.4 The number of graduates is increasing in diagnostic radiography but in therapy the 2003 graduates were less than in 2001 and in 1997. However, for both disciplines wastage is increasing and is the greatest cause of concern. Centres will need to review their recruitment strategies especially and wonder whether their efforts are paying dividends where wastage is high and greater than the national average. There is little point in investing time and resources on strategies that are not paying dividends. It is one thing to see recruitment increasing but with attrition also increasing there are serious issues to be addressed.

- 9.5 The number of teaching staff has increased over the year and the average SSR of 1:12.5 is close to JVC requirements. However, there are still centres well over the required ratio; the JVC has been active in discussing the shortfall with the institutions concerned.
- 9.6 On the curriculum development and delivery front it was evident that curricula continue to evolve with emphasis of some centres on inter professional learning and e learning in others. In general there were many reports of upgraded IT facilities.
- 9.7 This is the last report to be submitted by the JVC to education centres. Whilst data has been collected for 2003/2004 it is by no means certain in what format this will appear.

This and earlier reports have been able to bring to the attention of education centres and the parent bodies trends in radiography education. The disbandment of the JVC could leave a void as there do not seem to be any plans to continue the joint exercise by parent bodies after the 2004. It is essential for the profession that key data on recruitment, retention and graduate output etc continue to be collected and disseminated.