



***Network for Irish
Educational Standards***

Paper 6

**A Case Study in Grade Disparity:
Grade Patterns among BSc in Nursing
Graduates**

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www.stopgradeinflation.ie

ABSTRACT

The paper is a case study of grading disparity in higher education - variation in the grades awarded for similar academic effort across examiners, disciplines and institutions – based on the first cohort of graduates from the *ab initio* BSc in nursing courses launched in 2002.

Eight schools of nursing, five from the Institute of Technology sector and three from the University sector, returned complete figures on the grades awarded to nursing graduates in 2006. In all, the final results for 711 graduates across three nursing specialisms, general, psychiatric and intellectual disability, were returned and included in the analysis.

A pattern of extreme variance is identified in the award of first class and 2.1 grades across the eight schools of nursing. The rate of first class awards range from 2% (GMIT) to 35% (Institute of Technology, Tralee) and the rate of combined first/2.1 awards ranged from 21% (Letterkenny Institute of Technology) to 98% (Waterford Institute of Technology). Waterford and Tralee and to a lesser extent UCC stand out as awarding exceptionally high rates of first and 2.1 awards. Waterford and Tralee awarded 4 and 5 times respectively the median rate of first class degrees across the eight schools. The remaining schools, though on average awarding far less high grades, show wide variance in grade patterns.

While some of the grading variance is attributable to educational sector, with higher grades on average in the Institute of Technology nursing schools as compared with the Universities, the main variance is at the level of the individual institution.

Across the eight nursing schools, rates of first and 2.1 awards are not predicted by the median CAO points on which students enter course groups. When the two educational sectors are examined separately there is evidence within the University but not within the Institute of Technology sector that median CAO points predict grade rates.

Given the extreme level of grade variance and the overall lack of correlation between evidence of graduate academic ability and rate of higher grades awarded, it is concluded that there is a high level of grading disparity across the nursing schools.

The nursing courses focused on in this analysis commenced across the country in 2002 and were developed and delivered within a tight regulatory framework designed to ensure common standards. In addition, it is to be expected that due to their highly applied focus, nursing courses should be comparable in terms of educational delivery and assessment. The failure, therefore, to achieve parity of standards across the nursing schools offers little grounds for confidence that parity of standards, either between institutions or, over time, within institutions, is achieved in other areas of higher education in Ireland. This finding mirrors closely the evidence of grade inflation and grade disparity identified by O'Grady and Guilfoyle (2007a, 2007b).

The findings of the study are discussed in terms of causes that also lead to grade inflation. It is concluded that, while there is a professional and moral onus on lecturers and examiners to strive for common objective standards, they in turn depend on institutional support to achieve such an outcome. Because of competing pressures on third level educational institutions, they will be unable or unwilling to extend this support in the absence of external regulatory intervention.

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1. Introduction

It is a widely held expectation that a first class honours degree or a 2.1 award in one college of higher education should be equivalent to a first or a 2.1 obtained in another college, at least within the same country and discipline. That significantly different standards for the award of given grades should pertain between higher educational institutions would rightfully be a cause for much concern. It is reasonable to expect that degree grades are tied to relatively objective standards appreciated throughout the educational community. If that were so, however, it should follow that examiners would apply those standards consistently over time. This certainly does not seem to be the case in Ireland, as indicated by the extensive evidence of grade inflation within both the Institute of Technology and the University sectors (O'Grady and Guilfoyle, 2007a, 2007b).

If grades are not tied to common standards over time, is it not also likely that significant disparities may exist between colleges in their grading standards? Evidence of such 'grading disparity' between different Institutes of Technology was presented by O'Grady and Guilfoyle (2007a.). They compared the CAO points on which students entered courses with the grades they obtained at graduation. The smaller provincial Institutes compared with their larger urban counterparts showed a pattern of awarding higher grades than would be predicted from the relatively weak CAO points' profiles among their student intakes. Disparities in grade patterns have also been identified in the University sector (O'Grady and Guilfoyle, 2007b).

A difference between educational institutions in the percentage of various grades awarded to graduates in similar disciplines does not automatically mean different standards. Small random differences inevitably arise and large differences may be perfectly justified when student intakes differ sufficiently in ability and motivation. Some differences may also be justified due to variations in the quality of the educational input. If however, the differences are large – larger than might reasonably be attributed to variation in the quality of education – and there is insufficient explanatory variance in student acumen, then questions about standards must be asked.

An obvious test bed for the existence of grading disparity would arise where there is a qualification that is common to a variety of institutions, where significant efforts are made to maintain commonality of curriculum and educational input and where differences between student intakes are either negligible or can be controlled for. Such a test bed presented itself with the introduction in 2002 of the Ab Initio BSc programmes in nursing.

The current study capitalised on this opportunity to conduct a case study analysis of grade disparities within both the Institute of Technology and the University sectors in Ireland.

2. Description of the study

An important consideration in choosing nursing for a case study on 'grading disparity' was that there are sound reasons to believe that a commonality of standards would, or at least should, be maintained across the various institutions involved. Among these reasons is the strong vocational focus of nursing courses with graduates within each speciality being qualified for exactly the same jobs. There are also the facts that all courses are approved by a single regulatory agency, An Bord Alltrannais, and that the graduates in this study comprised the first cohort emerging from the new *ab initio* BSc courses in nursing which had commenced nationally in 2002. The vocational focus of nursing courses should have a two pronged effect. It should in relative terms work in favour of commonality of course content and definition of required achievement standards. It should also favour relative homogeneity among intake cohorts from institution to institution given that the qualification has exactly the same status and leads to the same occupation irrespective of which institution makes the award. The novelty of the courses should have resulted in a recent standardisation across the various institutions with little time having elapsed for internal institutional factors to have caused grading disparities. Another benefit of focusing on nursing qualifications is that they allow for direct comparison of the University and the Institute of Technology sectors.

All of the Universities and Institutes of Technology with designated schools of nursing in the Republic of Ireland were contacted by e-mail requesting the grade breakdown for their graduates in nursing disciplines in 2006. They were asked to differentiate between *ab initio* and ACCS qualifications for already qualified nurses and to differentiate between the various specialities, such as general and psychiatric nursing, in which awards were made.

The institutions contacted were:

Athlone Institute of Technology
Dublin City University
Dundalk Institute of Technology
Galway-Mayo Institute of Technology
Institute of Technology, Tralee
Letterkenny Institute of Technology
NUI Galway
University College Cork
University College Dublin

Trinity College Dublin
 University of Limerick
 Waterford Institute of Technology

Full returns were made by eight schools of nursing. Despite repeated e-mail requests and a letter to the Registrar in each case, Dundalk Institute of Technology, NUI Galway, University College Dublin and Trinity College Dublin failed to respond. The findings in this paper are, therefore, based on the remaining eight schools of nursing.

The number and rates of first class and 2.1 awards among *ab initio* BSc graduates in 2006 are tabulated for each school of nursing and for each of the three nursing specialities: general, psychiatric and intellectual disability. The rates are compared across nursing schools taking into consideration educational sector, academic ability of student entry cohorts and nursing specialism.

3. Findings

3.1 Variance Across Nursing Schools in Grade Rates

The grade figures on *ab initio* nursing degree graduates for 2006 returned by the eight schools of nursing are included in table 1. Table 2 summarises the percentage of graduates awarded each grade within each school.

Table 1: 2006 Grade Totals in Ab Initio BSc (Nursing) Degrees

School	Specialism	Total	N Firsts	N 2.1	N 2.2	N 3 rd	N Pass
UCC	Gen.	120	18	53	36	0	13
	Psych.	24	2	6	11	0	5
	Int. Dis.	13	2	7	3	0	1
	Total	157	22	66	50	0	19
UL	Gen.	49	2	16	22	9	0
	Psych.	27	1	8	14	4	0
	Int. Dis.	19	2	7	5	5	0
	Total	95	5	31	41	18	0
DCU	Gen.	73	1	17	37	10	8
	Psych.	28		6	10	3	9
	Int. Dis.	19	1	3	10	2	3
	Total	120	2	26	57	15	20
Waterford	Gen.	50	13	35	2	0	0
	Psych.	33	13	20	0	0	0
	Int. Dis.	14	1	13	0	0	0
	Total	97	27	68	2	0	0
Athlone	Gen.	31	2	14	11	0	4
	Psych.	22	1	6	13	0	2
	Total	53	3	20	24	0	6

Tralee	Gen.	52	15	13	20	0	4
	Psych.	17	9	3	4	0	1
	Total	69	24	16	24	0	5
Letterkenny	Gen.	26	0	5	12	0	9
	Psych.	29	4	3	16	0	6
	Int. Dis.	16	1	2	5	0	8
	Total	71	5	10	33	0	23
GMIT	Gen.	38	1	18	18	0	1
	Psych.	11	0	4	7	0	0
	Total	49	1	22	25	0	1

A cursory scan of table 1 is sufficient to identify that a very significant disparity in grade proportions exists among the eight schools of nursing. The degree of disparity becomes clearer in table 2. It should be noted that the absence of 3rd class awards in all of the Institute of Technology schools of nursing is due to the fact that this grade is not used in that sector. Graduates are divided into first class, 2.1, 2.2 and pass awards only.

Table 2: Grade Percentages by School of Nursing

School	Total	% First	%2.1	%combined 1 st / 2.1	% 2.2	%3 rd	% Pass
UCC	157	14	42	56	32	0	12
UL	95	5	33	38	43	19	0
DCU	120	2	22	24	48	13	17
Waterford	97	28	70	98	2	0	0
Athlone	53	6	38	44	45	0	11
Tralee	69	35	23	58	35	0	7
Letterkenny	71	7	14	21	46	0	32
GMIT	49	2	45	47	51	0	2
Mean		12.3	35.8	48.3	37.8	3.9	10.2
Median		6.5	35.5	45.5	44.0	0.0	9.0

There is a remarkable variation in the percentage of higher grades – firsts and 2.1s - awarded across the eight schools of nursing.

As a percentage of total nursing degree awards, the rate of firsts ranges from 2% to 35% and that for upper seconds from 14% to 70%. The percentage of combined first and 2.1 degrees range from a remarkable 98% down to 21%. While by far the greatest range exists in the rate of first class degree awards, the range in 2.1 awards is also very wide. The distributions of higher grades are inevitably mirrored by those for the lower grades of 2.2, third class and pass.

So as to enable comparisons of individual school figures with central tendencies or averages for the group of eight schools, mean and median figures are included in table 2 above. Because of the sharp upward skew in the distribution of firsts created by a few high figures that contrast sharply with the others, the mean is a misleading expression of the central

tendency of the entire group of schools. The median is a more appropriate figure, therefore, for use in making comparisons. For the 2.1 and the combined first/2.1 figures, the mean and median are reasonably interchangeable due to the lower impact of outlying figures.

Three schools, Waterford, Tralee and to a lesser extent UCC, stand out for their high rate of first and 2.1 awards. Tralee is remarkable for its high rate of firsts. It awarded 17.5 times the rate of first class degrees of that awarded at either DCU or GMIT at the opposite end of the scale and over 5 times the median figure. Waterford is striking for both its high rate of first and 2.1 awards, restricting its classification almost entirely (98%) to those two grades. At the other end of the scale, only slightly over one fifth of Letterkenny nursing graduates obtained first or 2.1 awards. Waterford awarded over 4 times the median rate of first class degrees and close to double the median rate of 2.1 degrees. UCC, though awarding only half the Tralee rate of firsts, nevertheless, awarded double the Letterkenny rate, the next school in the first class rank order, The UCC rate was double the median rate. As regards 2.1 awards, UCC ranks at number three, behind Waterford and GMIT, but did not exceed the median rate to a marked extent.

3.2 Variance Across the Nursing Schools in Grade Rate Within Individual Nursing Specialisms.

In an effort to see if the very widely distributed grade rates are a feature of all three nursing specialisms (general, psychiatric and intellectual disability) the rates for the three graduate groups in each school are listed in Table 3 below.

The median entry CAO points for each group, as published on the CAO website, are also included in table 3 so as to enable a comparison of nursing group grade achievement with previous demonstrated level of academic ability. This comparison is explored in section 3.3 below

With respect to General Nursing, the rate of firsts varies from 0% to 29%, while upper seconds range from 19% to 70%. In psychiatric nursing, firsts range from 0% to 53% and upper seconds from 10% to 61%. In intellectual disability nursing, available in five of the eight institutions, the variance in firsts was from 5% to 15% and in upper seconds from 13% to 93%.

The high level of grade variance evident at the aggregate level across the schools is reflected in each of the three nursing specialisms. Indeed, the patterns show even greater extremes within those smaller graduate groups. Tralee and Waterford awarded first class honours to 53% and 39% of psychiatric nursing graduates respectively. At Waterford, no psychiatric

or intellectual disability graduate obtained less than a 2.1 degree. Letterkenny awarded a first class degree to 14% of psychiatric graduates.

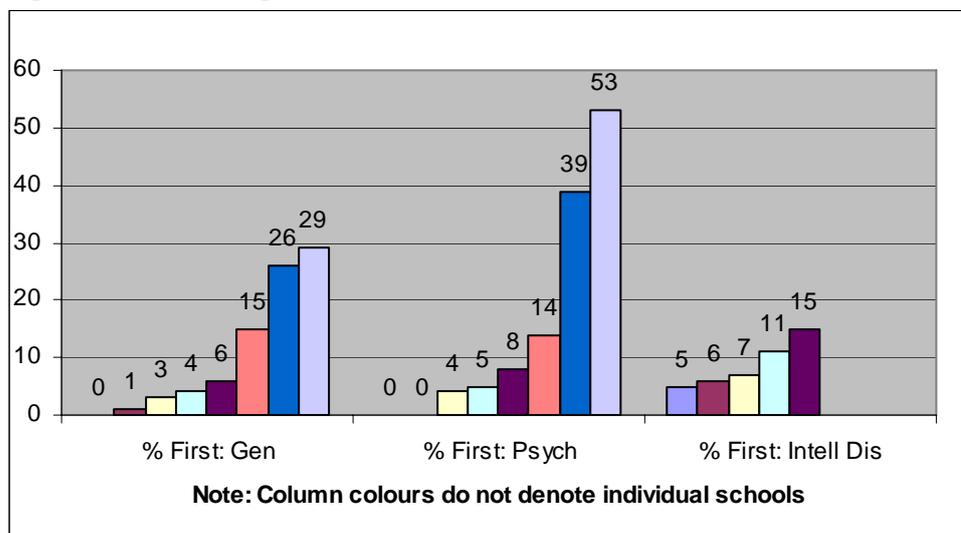
Table 3: BSc in Nursing Graduates 2006

		N	Median* Points	% First Class	% 2.1	% 1st + 2.1
UCC	General	120	425	15	44	59
	Psychiatric	24	410	8	25	33
	Intell. Disab.	13	405	15	54	69
	Total	157	421	14	42	56
UL	General	49	415	4	33	37
	Psychiatric	27	375	4	30	34
	Intell. Disab.	19	365	11	37	48
	Total	95	394	5	33	38
DCU	General	73	386	1	23	24
	Psychiatric	28	335	0	21	21
	Intell. Disab.	19	350	5	16	21
	Total	120	368	2	22	24
Waterford	General	50	420	26	70	96
	Psychiatric	33	375	39	61	100
	Intell. Disab.	14	345	7	93	100
	Total	97	394	28	70	98
Athlone	General	31	385	6	45	51
	Psychiatric	22	325	5	27	32
	Total	53	325	6	38	44
Tralee	General	52	390	29	25	54
	Psychiatric	17	375	53	18	71
	Total	69	375	35	23	58
Letterkenny	General	26	370	0	19	19
	Psychiatric	29	365	14	10	24
	Intell. Disab.	16	340	6	13	19
	Total	71	361	7	14	21
GMIT	General	38	365	3	47	50
	Psychiatric	11	380	0	36	36
	Total	49	368	2	45	47

* The median points 'Total' for each school of nursing is obtained by weighting (multiplying) the median points for each specialism by the number of graduates in that specialism and dividing the sum of the weighted totals by the overall number of graduates in the school.

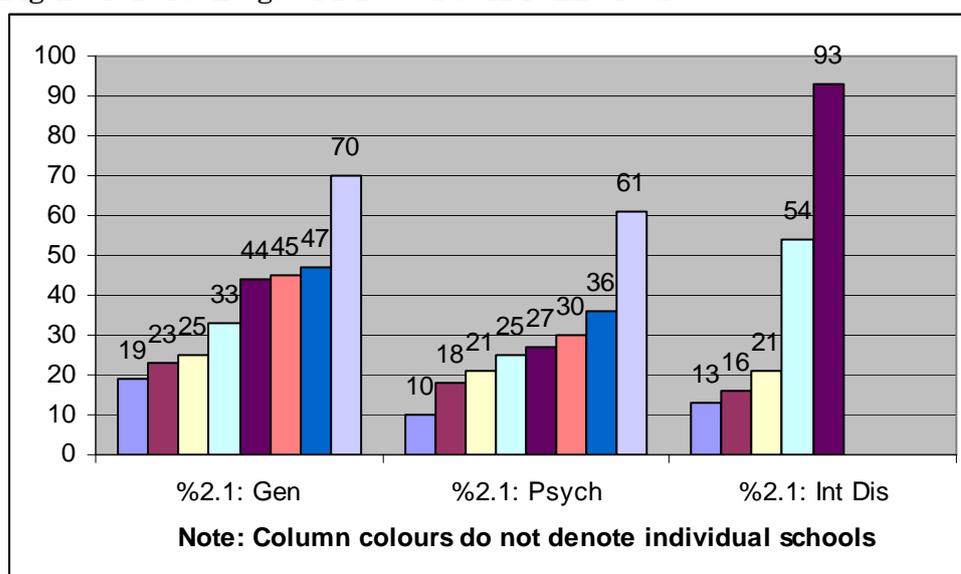
To illustrate the spread of grades across the eight schools, their rates are graphed in rank order for each of the three specialisms in figures 1 and 2 below. As indicated on the charts, the column colours are arbitrary and do not correspond with individual schools. The school order varies from one specialism to another and from first to 2.1. As evident in table 2, three schools, Athlone, GMIT and Tralee, do not have a course in intellectual disability nursing. Thus, figures 1 and 2 have only five columns for that specialism.

Figure 1: Percentage of first class awards in rank order



Looking across the rank ordered distribution of first class awards in each specialism, it is clear that the top ranked scores are outliers with some degree of clustering apparent at the lower end. If Waterford and Tralee were eliminated from the analysis, the four tallest columns in the table would disappear and the upper limit for firsts across all three specialisms would be 15%. Even then, the degree of scatter for each specialism would still be striking.

Figure 2: Percentage of 2.1 awards in rank order.



In figure 2, the elimination of Waterford and Tralee would remove three of the four tallest columns. Again, as with firsts, even with the two outlying schools removed, the rate of 2.1 awards remains remarkably scattered across the other six schools.

It is abundantly clear that very wide disparities in the award of the higher grades occurred across the eight nursing schools among the first graduate cohorts from the *ab initio* BSc courses in nursing. There are significant variations in grading across specialisms also with, for example, psychiatric nursing graduates being two thirds more likely to obtain a first than intellectual disability graduates. The variation across the nursing schools in the rates of grades awarded is not, in the main, a function of nursing specialism since there are wide variations within general, psychiatric and intellectual disability graduates when the eight schools are compared. If Waterford and Tralee were eliminated from the analysis, most of the differences between the specialisms would disappear. The important source of variance in grading is at the institutional level.

Given the high level of commonality that should – and surely must – exist in the education of nurses, it is surprising that such grade variations would exist. An obvious potential explanation is that the eight schools differ very considerably in their attraction of academically talented students. This hypothesis will be investigated in the next section.

3.3 Variance in Student Ability Among Nursing Schools

An analysis of the CAO points' profile of the students on admission should reveal if differing patterns of academic ability among students at the various schools of nursing account for the wide grade variations described above. While there is convincing evidence that the minimum points on which students are allowed to enter courses acts as a reliable indicator of average student ability on those courses (O'Grady and Guilfoyle, 2007a, p29; O'Grady and Guilfoyle, 2007b, p25), an even more accurate index of average student ability among students admitted to a course can be obtained from the median of their CAO points. The median points were published by the CAO for 2002 (the entry year of the graduate cohort under scrutiny here) for all *ab initio* nursing courses. Those figures are included in table 3 above.

Table 4 below rank orders the schools within each of the three specialisms in accordance with the student groups' median points at entry to the course. This allows for a visual analysis of the extent to which higher proportions of upper grades are matched by evidence of stronger academic ability at entry while taking account of any grading variance that exists across the three specialisms.

Table 4 Median CAO points* compared with percent of graduates achieving first class awards and percent achieving either first or 2.1 awards.

General				Psychiatric				Intellectual Disability			
Med Point	School	% 1st	%comb. 1 st /2.1	Med Point	School	% 1st	%comb. 1 st /2.1	Med Point	School	% 1st	%comb. 1 st /2.1
425	UCC	15	59	410	UCC	8	33	405	UCC	15	69
420	W'frd	26	96	380	GMIT	3	50	365	UL	11	48
415	UL	4	37	375	UL	4	34	350	DCU	5	21
390	T'lee	29	54	375	W'frd	39	100	345	W'frd	7	100
386	DCU	1	24	375	T'lee	53	71	340	L'kny	6	19
385	A'lonc	6	51	365	L'kny	14	24				
370	L'kny	0	19	335	DCU	0	21				
365	GMIT	3	50	325	A'lonc	5	32				

*In a few instances nursing schools admitted two groups with differing median points to a given specialism. In those cases the average of the two weighted for the number in each group is the figure used in this table.

A reasonable but by no means extreme variation in median CAO points is evidenced across intakes in all three nursing specialisms. The range for general nursing is 370-425. For intellectual disability, it is slightly larger at 340-405. The largest range is in psychiatric nursing at 325-410. In Leaving Certificate terms, a CAO points' score of 325 equates to 5 D1 grades and 1 D2 grade on higher level papers. A points' score of 425 requires the equivalent of 5 C2 and 1 C1 grade on higher level papers. Such variations in the demonstrated ability at entry to courses might be expected to be subsequently matched by significant variations in graduate performance. An unpublished study within constituent colleges of the NUI found a strong positive association between CAO points and grades at graduation. (NUI, 2005)

Do the better grades at graduation go together with the higher median points? An examination of table 4 reveals the pattern to be far from what might be expected. Given the very large excess of first class and 2.1 awards at Waterford and Tralee over all other schools of nursing, the prediction would be that they would both show strikingly high median points. On the contrary, neither of them ranks highest in any of the three groups. In general nursing, UCC students had higher median points than Waterford with UCC and UL both ranking higher than Tralee. In psychiatric nursing, UCC, GMIT and UL outrank both Waterford and Tralee on median points and in intellectual disability nursing, UCC, UL and DCU all outrank Waterford. Tralee does not have a course in this specialism. There is nothing at all in the data to suggest that Waterford and Tralee attract a disproportionate number of academically talented students into their nursing courses.

A more general examination of table 4 reveals no evidence that median points predict the rate of firsts and 2.1 awards across the schools. In general nursing, three graduate groups (UL, Waterford and UCC) had very similar median points – ranging between 415 and 425. Nevertheless, their rates of combined firsts and 2.1 awards were, respectively, 59%, 96%

and 37%. In psychiatric nursing UL, Waterford and Tralee had identical median points of 375. Despite this, their rates of combined first and 2.1 grades were 34%, 100% and 71%. The UCC psychiatric nursing group, with the highest overall median points (410), had a lower rate of combined first and 2.1 grades than the equivalent groups at UL, Waterford and Tralee. The UCC group achieved a rate of 33%, almost identical to that achieved by the Athlone group, which had the lowest median points (325). Among the intellectual disability graduates, Waterford reported a 100% level of combined firsts and upper second awards with an intake group showing a median point of 345. Only a fifth of the DCU group, despite having higher median points (350), achieved a first or a 2.1 award.

A similar lack of correspondence is evident between the rate of firsts (when analysed separately) and the median points for both the general and psychiatric nursing groups. In general nursing, the three courses with points ranging from 415-425 (UL, Waterford and UCC) showed in excess of a six fold variation in the rate of firsts, having rates of 4%, 26% and 15% respectively. The general nursing group with the highest median points (UCC: 425 points) obtained little over half the rate of firsts of that achieved by the Tralee group with median points of 390. They were also outdone by a very wide margin in this respect by Waterford with a slightly lower median points tally.

In psychiatric nursing, the top ranking median points group, UCC at 410 points, achieved a little over one seventh the rate of firsts of that achieved by Tralee with median points of 375. Tralee had a 53% rate of firsts as compared with rates of 39% and 4% by Waterford and UL, graduate groups entering on identical median points.

The intellectual disability nursing graduates demonstrated a reasonable match between median points and rates of firsts with a roughly similar rank order on the two variables. Their rates of firsts did not show the extremes evident in general and psychiatric nursing. The top rate for an intellectual disability group was 15% as compared with 29% and 53% for general and psychiatric respectively. That said, the range of firsts in intellectual disability was 5-15%, a range that would hardly be predicted by the 55 point difference in median points between the two groups. The small numbers in the graduate groups involved, 13 and 19 respectively, may well be sufficient, however, to explain such unexpected outcomes.

In an effort to identify if a visual analysis of the figures might be failing to pick up on an underlying trend of grade percentages being matched by median point scores, three Pearson correlation coefficients were computed. General, psychiatric and intellectual disability courses were included together for each correlation resulting in a total of 21 course groups (8 schools with graduate groups in general nursing, 8 with psychiatric and 5 with intellectual disability graduates) being analysed in each case.

As the hypothesis in each case was for a positive correlation, with those course groups having higher median points being expected to get a higher percentage of better grades, the less stringent one-tailed test of significance was employed for all three correlations.

The results of those analyses are recorded in table 5 below

Table 5: Correlation between median points and rate of firsts, 2.1 and combined first/2.1 awards across the eight nursing schools based on general, psychiatric and intellectual disability nursing degrees.

Correlation	N	Pearson r	One Tailed Significance
Median Points by % First	21	.246	.142 (N.S.)
Median Points by % 2.1	21	.225	.163 (N.S.)
Median Points by % First + 2.1	21	.305	.089 (N.S)

None of the three correlations was significant. It is fair to conclude that variance in academic ability at entry, as estimated through the median CAO points for groups at admission, does not explain the variance across the nursing schools in the rates of higher grades awarded.

3.4 Grade Variance and Educational Sector

The fact that nursing schools are distributed across the two sectors in Irish higher education raises the possibility that grade rate differences might be attributable to sectoral differences. The Universities and the Institutes of Technology have separate educational histories and traditions and differ significantly in terms of their general student bodies and mix of courses. It is important, therefore, to explore if there is evidence of differences in grade rate between the two sectors.

Tables 6 and 7 below summarise the means and ranges for the two sectors based on a combination of general, psychiatric and intellectual disability nursing graduates. It should be noted that the mean first class and mean combined first/2.1 figures are the averages of the figures for the schools in the respective sectors and do not take account of the variation in student numbers in the individual schools. As evident from the ranges, all schools contributing to the figures have a substantial number of graduates and it would, therefore, not be expected that the averages would be distorted as they might be if a few schools in either sector had very few graduates.

Table 6: Means and ranges for Institute of Technology Schools

	Graduate N	First Class	Combined First/2.1
Mean	68	16%	54%
Range	49-97	2%-35%	21%-98%

Table 7: Means and ranges for University Schools

	Graduate N	First Class	Combined First/2.1
Mean	124	7%	39%
Range	95-157	2%-14%	24%-56%

The Institute of Technology schools have on average over twice the rate of firsts and substantially higher combined first/ 2.1 rates than do the University schools. This is not matched by a difference in the median points of courses in the two sectors. The average of the median points for the 12 courses in the IOT sector, weighted for the number of graduates on each course, was 377 which fell some way short of the equivalent average figure of 397 for the University courses. The nursing graduates from the Institute of Technology schools obtained significantly better grades despite evidence of a somewhat lower average ability on admission.

This latter finding suggests the possibility that the relationship between points and grades might differ between the two educational sectors. Separate correlations for the two sectors, reported in tables 8 and 9 below, were therefore computed.

Table 8: University Schools of Nursing - Correlation between median points and rate of firsts, 2.1 and combined first/2.1 awards based on general, psychiatric and intellectual disability nursing degrees.

Correlation	N	Pearson r	One Tailed Significance
Median Points by % First	9	.557	.059 (N.S.)
Median Points by % 2.1	9	.599	.044 Significant
Median Points by % First + 2.1	9	.608	.041 Significant

Table 9: Institute of Technology Schools of Nursing - Correlation between median points and rate of firsts, 2.1 and combined first/2.1 awards based on general, psychiatric and intellectual disability nursing degrees.

Correlation	N	Pearson r	One Tailed Significance
Median Points by % First	12	.390	.105 (N.S.)
Median Points by % 2.1	12	.201	.266 (N.S.)
Median Points by % First + 2.1	12	.383	.109 (N.S)

The expected difference between the sectors is in evidence. While, in the Institute of Technology analysis no correlation approached significance, in the University sector the median CAO points of intake groups did predict

grades at graduation. Both the correlations for upper second and for combined first and upper second were significant, though that for firsts alone failed narrowly to reach significance.

Since only one school from the Institute of Technology sector (Dundalk) is missing from the analysis, it is fair to conclude that variance in academic ability at entry, as estimated through the median CAO points for groups at admission, does not explain the variance in the rates of higher grades awarded within that sector.

Hesitancy is required, however, in drawing conclusions about the University schools. Only three of the six schools of nursing in that sector were included in the analysis. While there is evidence that a genuine link exists between academic ability and grades awarded among those three schools, it is not possible to predict what the picture might have been had the other three schools been included.

Apart from the potential lack of representativeness of the three University nursing schools analysed, there is a further reason also for hesitancy in concluding that the differences found between the combined University and Institute of Technology schools are in fact a product of differences between the two educational sectors, with higher grades inevitably awarded in the IOT sector regardless of student ability. The problem is that there is considerable variance in grades awarded within each of the two sectors. It is clear from tables 1-4, figures 1-2 and the related discussion above that the five IOT schools comprise two contrasting groups: Waterford and Tralee on the one hand and Athlone, Letterkenny and GMIT on the other. The contrast is largely based on the level of first class awards with Waterford and Tralee showing exceptionally high rates. In the Universities, there is significant contrast too with the three institutions evidencing widely contrasting rates of higher grades.

Table 10 below compares the University and the Institute of Technology schools when the more outlying schools in each sector – Waterford, Tralee and UCC – are eliminated from the analysis.

Table 10: First Class and Combined First and 2.1 Awards after the Elimination of Figures from Waterford and Tralee Institutes of Technology and UCC

Sector	Total N	Total 1st	% 1st	Total Combined 1st/2.1	% Combined 1st/2.1
IOT	173	9	5.2 %	61	35.2 %
University	215	7	3.25 %	64	29.8 %

A comparison of table 10 with tables 6 and 7 above shows that much of the contrast between the two sectors disappears with the elimination of the outlying schools. Nevertheless, the Institute of Technology sector still shows a pattern of awarding appreciably more first and 2.1 grades, a

pattern that does not seem justified by the academic calibre of the students at entry. The weighted median points of UL graduates was 394, significantly higher than for the three IOT schools, where weighted median points ranged from 360-368. DCU graduates had weighted points of 368, equivalent to GMIT and marginally ahead of both Athlone and Letterkenny.

Overall, the figures suggest that the chances of gaining a higher grade in a nursing BSc are determined to a minor extent by educational sector with somewhat higher grades being awarded in the Institute of Technology schools of nursing. Much greater grade variance, however, occurs at the level of individual institutions. This is particularly so in the Institute of Technology sector where there is no evidence of grade variance being correlated with the average academic ability of students entering the various schools. In particular, Waterford and Tralee have rates of higher grades that dwarf the averages of the other three schools. Tralee had close to seven times the rate of firsts of the other three Institutes and Waterford over five times as many. As for combined first/2/1 awards, Waterford had over two and a half times the rate of the other three and Tralee had over once and a half their average rate.

3.5 Comparison of Grades in Nursing with other Honours Degrees

O'Grady and Guilfoyle, (2007a, 2007b) reported the average rates of all first class and upper second awards within the University sector and within the Institute of Technology sector for each year between 1994 and 2004. In both sectors, significant grade increase was reported over the period. For the years 2002-2004 the average rate of firsts across the universities was 13%. For the same three years the average rate of firsts in the Institutes of Technology (excluding DIT) was 15%. For combined firsts and 2.1 awards the 2004-2006 average was 52% in the universities and 46% in the Institutes of Technology. The combined schools' rates of firsts and combined first/2.1 awards in nursing at 13% and 49% are remarkably similar to the overall rates. Across the country as a whole nursing graduates have a very similar likelihood to the generality of graduates of emerging with a first or a 2.1 award. The chances however vary enormously from institution to institution.

How do grades in nursing compare with grades in other *similar* degree courses? In the IOT sector, nursing is classified along with other degrees in 'Science and Technology.' Using the database of grades from 1994-2004 drawn up by O'Grady and Guilfoyle (2007a) (available on www.stopgradeinflation.ie) it was possible to compute the rate of firsts and 2.1 awards in Science and Technology in the combined Institutes of Technology (excluding DIT) for those years. The rate of firsts ranged from

11-18% and the combined first /2.1 rates ranged from 33-53%. Again the aggregate nursing rates fell squarely within those ranges.

For the Universities, the Higher Education Authority classifies nursing within the category of 'Health and Welfare' and reports annual figures on grades for each institution. HEA figures were not yet available for 2006 graduates at the time of writing so 2005 graduates are used for present comparison purposes. In that year, the rate of firsts in each of the six Universities in 'Health and Welfare' primary degrees were 3%, 5%, 6%, 7%, 13% and 31% with an average rate for all such graduates of 10% . NUI Maynooth did not have any graduates in that category. The six universities' rates of combined first class/2.1 awards were 3%, 26%, 33%, 54%, 55% and 69% with a cross country average of 40%. The average 2006 university school nursing rates of 13% (firsts) and 49% (combined first/2.1) are therefore on the high side compared with other graduates in the 'Health and Welfare' category. It is notable that, similar to the nursing rates discussed above, there is considerable variance in rates across the universities in this category of qualifications. It is not possible to say if the variance in this case is due to variance in the ability of students, due to variance in the different courses catered for by the different institutions or due to other institutional factors such as variance in standards.

Looked at in aggregate, the rates of firsts and 2.1 grades in nursing do not seem particularly out of line with the rates for other degrees in the IOT and University sectors. However, so great is the variance in rates across the various nursing schools that it is doubtful if aggregate figures tell us very much. In an abstract sense, nursing graduates in Ireland appear to have a roughly similar chance as other graduates of obtaining a first or an upper second degree. In reality, however their chances of so doing appear to be largely dictated by the nursing school from which they happen to graduate.

4. Discussion

4.1 Grade Disparity in Nursing as a Function of Institution

Among the first cohort of *ab initio* BSc graduates in nursing that emerged in 2006, there is a pattern of extreme grade variance across the eight nursing schools studied. Rates of first class honours degrees range from a low of 2% to a high of 35%. Rates of combined first and upper second degrees range from 21% to 98%. While there is evidence that the academic ability of nursing students at entry, as measured by median CAO points, does help to predict graduate grade rates in the Universities but not in the Institutes of Technology, the wide variance in grade percentages is not a simple function of educational sector. Only a relatively small proportion of

the variance between schools appears to be a product of differences in outcome or standards between the two sectors. Neither is it the case that the variance in grade percentages is a function of variance in ratio of different nursing disciplines across the schools.

The clear picture that emerges from an analysis of the figures is that grade variance is largely a function of differences between institutions or schools that in the main does not have to do with the ability of students at entry to the courses. In particular, two Institutes of Technology, Waterford and Tralee, show rates of firsts and upper seconds that are extraordinarily high. UCC, though not nearly so extreme, particularly when student ability is taken into account, has rates that are also on the high side. Waterford and Tralee had rates of first class degrees of 28% and 35%, respectively, as compared with rates of 2%, 6% and 7% in the three other Institute schools and 2%, 5% and 15% in the University schools. The same two Institutes had combined first and upper second rates of 98% (Waterford) and 58% (Tralee) as compared with 21%, 44% and 47% in the other Institutes and 24%, 38% and 56% in the three Universities. Clearly those Institutes' rates, particularly at first class, are dramatically higher than those at other nursing schools.

Leaving aside the two outlying Institutes and the one University showing a higher percentage of upper grades, there is still considerable grade variance among the remaining five schools of nursing. Their rate of firsts range from 2-6% and combined firsts and upper seconds from 21- 47%.

There is nothing in the figures to suggest that comparable standards are maintained across nursing schools. It simply stretches credibility too far to suggest that one school can so educationally transform students as to produce over seven times the rate of first class graduates in general nursing when compared with another school with a superior median CAO point score among a very similar number of students at entry to the course. Many such direct comparisons can be drawn from the figures listed above. The only reasonable conclusion is that there is extreme variance in educational and assessment standards from one nursing school to the next.

4.2 Expectation of Common Standards in Nursing

Given that the nursing courses involved were developed and launched at the same time, that they were each approved by An Bord Altranais, each guided by the practical and academic demands of the nursing profession, a high degree of comparability of curricular content and educational focus should have been achieved across the various nursing schools. An Bord Altranais (2005) in the third edition of its 'Requirements and Standards for Nurse Registration Education Programmes' points out

“that third level institutions and health care institutions shall meet the requirements specified in this document(p.5).”

It goes on to specify those requirements as

“a statement of the standards that must be met by these institutions and the educational programmes”

divided into five sections:

”(1) The third level institution and health care institution, (2) Curriculum design and development, (3) Clinical practice experience and the clinical learning environment (4) Assessment process and (5) External examiners (p.5).”

In addition, it specifies that:

“Third level institutions and health care institutions involved in the education and training of nurses are required to submit a detailed curriculum document to An Bord Altranais for approval.”(p.5)

The absence among the first cohort of graduates of anything vaguely approximating comparability of grading percentages across the nursing schools can only mean that entirely different assessment yardsticks were employed. If this is the case in nursing, where for the regulatory and other reasons outlined above the challenge ought not to be so great, there is very poor grounds for expecting inter institutional commonality of standards in any other discipline either.

The absence of commonality of standards across degree programmes has given rise for concern elsewhere, even to the extent of the possibility of abolishing the existing grading system being mooted. (Universities UK/SCOP; HETAC, 2007)

4.3 Causes of Grade Disparity

O’Grady and Quinn (2007) discuss the causes of grade inflation in higher education. It is broadly the same factors that inevitably lead to grade disparities between educational institutions. It is worth reflecting on what those factors are. They identify three sets of influences: firstly, the impact of social and economic changes, secondly, institutional choices about educational policies and, thirdly, the operation of the educational awards process.

In the context of social and economic changes, O’Grady and Quinn (2007) highlight the tendency for increasingly less talented and motivated students to advance to third level education exerting a downward pressure on standards. It is doubtful if differences in this respect can explain the extent of the grade disparities among the nursing schools in that the effect of academically weaker student intakes on standards should be broadly similar, at least within the two third level sectors. It is also likely that

nursing courses would have some degree of insulation from the impact on standards of the slide in ability of the student body at large within each institution. This is because they are new courses serviced by a great many new academic staff, who would not have had exposure to students outside the nursing arena. It is, of course, possible that messages about standards filter through very quickly to new staff in new departments. This does not, however, explain why such different messages about standards would be filtering through in otherwise similar institutions.

Other social factors suggested by O'Grady and Quinn (2007) as leading to grade inflation are declining social distance between students and lecturers leading to examiners being under greater pressure to satisfy student expectations coupled with 'muddled aspirations of egalitarianism,' among examiners as a consequence of which they are uncomfortable with making the grade differentiations that student performance merits. Again, such factors might be expected to have a similar impact across the different nursing schools.

It should be kept in mind, however, that the social factors described above impact on grading decisions through the individual and collective responses of examiners. This inevitably introduces a large measure of the subjective and the random into the process which could potentially produce very different outcomes in different institutions.

The second class of factors identified by O'Grady and Quinn (2007) as leading to grade inflation comprises 'institutional policy choices.' The key factor here is the drive towards growth of third level educational institutions. There is ample evidence that, institutions are happy to dilute standards so as to feed the growth in student numbers by dropping entry points to recruit them in the first instance and then filtering them through to higher level courses of longer duration. As with social and economic factors, there is no obvious reason why such institutional factors would result in the kind of standard's differences between institutions that might explain the extreme variance in grading described in this paper. Again, however, the possibility of subjective and random impacts must be kept in mind.

Whatever the ultimate origin of the differences in the grading patterns among the nursing schools, its proximate origin almost inevitably lies in differences between the nursing schools in how they operate the grading process. How the grading process operates at third level is the third explanation for grade inflation offered by O'Grady and Quinn (2007). They enumerate the various points in the process at which standards are set and in which wide variations in practice are possible between examiners, courses and institutions. Differences can emerge at the level of setting the syllabus in the first place or at the point of its interpretation for teaching purposes by individual lecturers. Differences in standards can equally arise in the setting and marking of assessments and examination papers.

Finally, differences can arise in the regulations applied by boards of examiners in arriving at final grades and in the leniency or stringency with which such regulations are interpreted. The opportunities for subjectivity and standards variance are manifold. Why such opportunities lead to the award of so many higher grades in one institution and so few in another is difficult to discern. That the variance is down to factors operating at the level of the individual institution seems evident from the data presented in this paper.

4.4 Implications

As indicated above, it might be expected that degrees in nursing would benefit from a relative commonality of standards arising from the strictly vocational orientation of the qualifications and the regulatory framework within which the courses were developed and continue to operate. That such extreme contrasts in grading are in evidence from school to school must surely lend weight to the view that the system, as it currently operates in higher education, is seriously failing to achieve commonality of standards.

The objective should not be to eliminate the symptoms by dispensing with the whole grading system for degrees, a view that is gaining currency (Universities UK/SCOP; HETAC, 2007), but should instead be to address the cause of the malaise in higher education. A concerted attempt should be mounted by the regulatory agencies such as the NQAI, HETAC and the HEA to develop and insist on mechanisms that anchor qualification grades to standards that are rendered as objective as is humanly possible. If grades were anchored to reasonably objective criteria, then not only would they possess far more shared meaning from institution to institution and from discipline to discipline but also from one year to the next. Declining standards could not then be obscured behind inflated grades. Poorer academic performance, whether in a comparison between one institution and another or within a given institutions over time, would emerge as lower grades.

There is a professional and moral onus on individual lecturers and examiners to strive for objective standards. They in turn, however, require institutional support in the form of systems, training, monitoring and encouragement. This support will not be forthcoming within higher educational institutions in the absence of external regulation because of the competing pressures and vested interests within them, factors that are discussed in detail by O'Grady and Quinn (2007). Institutions with inflated grades will not take active steps that will result in higher failure and lower progression rates, outcomes that will act as brakes on their growth and perhaps even lead to declining graduate numbers. Effective external regulation is crucial. The alternative is to allow the current laissez faire market in qualifications to continue and leave it to consumers – employers and society at large – to discriminate between identically packaged credentials that in reality denote widely varying levels of ability and achievement. That is hardly a wise or a sustainable option.

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