



Central Applications Office

Submission in response to *‘Transition or Transaction?’*

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Central Applications Office

Response to ‘*Transition or Transaction?*’

Introduction:

‘*Transition or Transaction?*’ was a conference organised by the Higher Education Authority and the National Council for Curriculum and Assessment. Held in UCD on 21st September 2011, the conference focused on the interface between second and third level education, the readiness of those leaving second level, and the effect of ‘points’ on both systems.

The Central Applications Office (CAO) welcomes the recent discussion that is taking place among the public and among stakeholders in education. Issues surrounding selection for entry to higher education are extremely important.

Education is a valuable cultural and economic resource in any 21st Century society. How access to Education is distributed and managed is a question of importance to students and potential students, their families, educators, employers and policymakers.

Education in Ireland has grown in importance as the State has developed both as a society and an economy since independence. Indeed, education has played an important part in contributing to that development.

It is important that all organisations and sectors regularly take time to review procedures to ensure they are appropriate and suitable for purpose, and to be willing and ready to change, if change is required. The education sector is especially well equipped to carry out such reflection and to employ an evidenced based approach to such important issues.

The Higher Education Institutions retain full control over their admissions policies and the matter of determining admissions policies is not a matter for CAO. CAO is a small operational unit, not a policy unit. However, the Institutes of Technology Ireland and the Irish Universities Association have made submissions to ‘*Transitions*’



and, based on CAO's decades of experience in dealing with applicants, parents, teachers, Principals, Guidance Counsellors, and Admissions Officers, the CAO has been encouraged to provide some insight. The IUA submission treats some options in great detail and we will comment where we feel we can provide some additional contribution.

Central Applications Office:

The Central Applications Office (CAO) was established by the Universities in 1976 and is controlled by Higher Education Institutions (HEIs). The purpose of the CAO is to process centrally applications for entry to the first year of undergraduate courses in HEIs in the Republic of Ireland, to issue offers only when instructed by HEIs, and to record acceptances.

CAO meets the three main aims of the Universities in establishing the company:

- 1.) The central application service means that applicants are not required to submit multiple applications if they wish to apply to more than one HEI.
- 2.) Application and qualifications data is collected and processed at one office, rather than multiple offices collecting and processing the same application and qualifications data.
- 3.) Using the applicants' expression of preference, HEIs can ensure that they offer applicants the best position that they are entitled to (this is regardless of the selection mechanism employed by a HEI).

The CAO application process provides applicants with an opportunity to apply for up to 10 courses on the Level 8 list (Honours Bachelor Degrees) and 10 on the Level 7/6 list (Ordinary Bachelor Degrees and Higher Certificates).

The average number of course choices submitted on a level 8 application is 6.

The average number of course choices submitted on a level 7/6 application is 4.4.

The average total number of course choices submitted is 8.2.



Selection mechanisms and CAO

Principles:

It is important to note that HEIs determine how they will select applicants, not CAO. The CAO application system, developed by the participating HEIs, merely requires that HEIs assess an application and supply a decision in respect of each course choice that an applicant submits. This decision may take the form of a binary ‘offer’ or ‘do not offer’, or it may take the form of a score which is used to rank applicants in order of merit.

HEIs determine what scoring mechanism they will employ for each category of applicant and for each course. HEIs may interview, assess a portfolio, hold an audition, carry out an aptitude test etc. HEIs participating in the central applications system retain full control over their own admissions policies. The HEIs have agreed that places offered through the CAO system should be dispensed in accordance with formally-adopted and pre-published procedures. The participating HEIs agree that application and selection procedures must meet the following general principles: transparent, equitable, impartial, and efficient.

Points:

There is no such thing as ‘CAO points’. The phrase ‘CAO points’ is a common conflation of two separate mechanisms: the CAO application system established by Universities in 1976, and the Common Points Scale agreed by HEIs in 1992. The CAO application system and the Common Points Scale are separate to and independent of one another.

The Common Points Scale was introduced in 1992 as a response to public and media criticism of the multitude of scoring mechanisms that were in place up to this time. Before agreeing the Common Points Scale, HEIs differed on the scores they allocated to grades, on the number of subjects counted for scoring purposes, on the number of sittings of the Leaving Certificate allowed for scoring purposes and, in some cases, on the score allocated to a subject depending on the faculty or course on the application. Since 1992, for most but not all applicants and courses, the HEIs use the Common Points Scale to place qualified applicants in an order of merit listing.



Whilst the HEIs agreed the Common Points Scale for scoring purposes, differences remained in the minimum entry requirements for HEIs and for individual courses within HEIs.

Minimum entry requirements explained:

Every course in every participating HEI has minimum entry requirements. This means that a certain level of achievement is required before an applicant may be considered for entry to a course. The minimum entry requirement is usually expressed as a set of particular required subjects, levels and grades in the Leaving Certificate (e.g. a particular level 6 Higher Certificate course may require 5 ordinary D3 grades to include Irish or English plus Mathematics, whilst a Level 8 Honours Bachelor Degree course might require 4 Ordinary D3s plus two Higher C3s to include a science subject and a language).

Leaving Certificate sub-grades and Random Selection:

Another development for 1992 was the introduction by the Department of Education of sub-grades, e.g. an A grade would now be expressed as an A1 or an A2. This allowed HEIs to introduce greater ‘granularity’ in their selection of applicants and to allow a reduction in the number of applicants selected at random. This was a response to the great anguish expressed by applicants and their parents at ‘missing out’ on a place as a result of random selection. Greater granularity means that less applicants are selected at random.

Random selection explained:

For each course choice on an application, the applicant is assigned a random number. In the event of a tie on points, e.g. five applicants competing for the last 3 places on a course, then the random number of the applicants is taken into account. In effect, the order among the five with the same points score is set by their random number; the applicant with the highest random number goes first, followed by the one with the next highest random number, etc., and the applicant with the lowest random number goes fifth. The three with the higher random numbers are offered the 3 available places and the other two applicants are placed at the top of the waiting list.



Other selection mechanisms used:

HEIs receive applications through the CAO system from school-leavers presenting school leaving qualifications from Ireland and other EU and Non-EU countries, mature applicants, applicants presenting Further Education qualifications (e.g. FETAC level 5) and applicants presenting previous Higher Education qualifications. CAO also processes applications for schemes to take account of socio-economic disadvantage (e.g. Higher Education Access Route) and schemes to take account of disability/specific learning difficulty (e.g. Disability Access Route to Education). See Appendix 1 for some more details.

Mature applicants are assessed by HEIs (assessment processes are usually organised and controlled by the HEI Admissions Office) and a decision is made (usually to offer or not to offer). This decision is then transmitted to CAO. Should the applicant apply to two HEIs and be successful in the assessment process for both, she will be offered her highest preference.

Before 1992, all applications were scored by HEIs. CAO did not calculate any scores. When the RTCs were considering entry to the system (1991) CAO was asked to carry out Leaving Certificate scoring on their behalf and under their instructions, Universities continued to calculate their own scores, but according to the newly agreed Common Points Scale for 1992. Since then, all participating HEIs, including the Universities, have asked CAO to carry out scoring on their behalf and under their instructions.

On instructions from HEI Admissions Offices, CAO now scores applicants presenting Leaving Certificate, British and Northern Ireland GCE/GCSEs and FETAC level 5.

All other applications are assessed individually and scored by HEIs, with the HEI Admissions Offices organising this process.



Many courses have entry mechanisms that combine a score in school leaving examinations with another selection mechanism and these are accommodated by CAO processes.

For example, a HEI may carry out a portfolio assessment for entry to a course in art and design and this score may be used as the sole scoring mechanism, or it may be submitted to CAO to be used in combination with a score for a school-leaving examination.

Another example is the recent development in selection of undergraduates for entry to medicine. The Leaving Certificate is scored on a modified version of the Common Points Scale (the modified scale reduces the level of reward for scores above 550) and this score is added to an applicant's score in the Health Professions Admission Test (which *'measures a candidate's logical reasoning and problem solving skills as well as non-verbal reasoning and the ability to understand the thoughts, behaviour and/or intentions of people'*¹).

Consideration of some proposed selection mechanisms:

As well as conflating 'CAO' and 'Points', it is also quite common in public discourse to see 'Points' and the 'Leaving Certificate' conflated. While 'Points' and the 'Leaving Certificate' are likely to affect one another in certain circumstances, it is important not to overstate the effect based on anecdote.

This issue calls for evidence based studies of, for example:

- a) the second-level curriculum, the Leaving Certificate examination, and the educational outcomes being measured by the examination and,
- b) the mechanisms employed by HEIs to select students from among applicants presenting the Leaving Certificate, the effects on behaviour and educational outcome at second level, and the effects on educational outcome at third level.

¹ <http://www.hpat-ireland.acer.edu.au/>



Dr. Emer Smyth, ESRI presented *Transition or Transaction* with evidence from the Post-Primary Longitudinal Study which suggested that, while entry requirements were a consideration when making senior-cycle subject choices, ‘Points’ have limited influence over subject choice. There is previous evidence to suggest that points have a limited impact on choices, e.g. in *Association rule analysis of CAO data*, McNicholas reports “No evidence is found to suggest that students are selecting courses based on points status.”².

The influence of selection mechanisms on subject choice may have received excessive attention because it was a particular feature with students taking repeat sittings of the Leaving Certificate for applications for entry to ‘high points’ courses such as medicine. This is a case of a small number of courses gaining a disproportionate amount of attention and distorting the general picture. (In the case of medicine, this subject-choice effect appears to be reduced, as applicants must now present all entry requirements in the same sitting as their points.)

76,698 applications have been submitted to CAO in 2011. 44,937 of these applicants presented 2011 Leaving Certificate. (Note: this document was produced before the close of the 2011 season.) Approximately 45,000 places have been taken up.

With demand growth projected into the next decade, it is clear that Irish Higher Education requires selection mechanisms that are transparent, equitable, impartial, efficient, and that enjoy the confidence and support of the public.

² McNicholas, P. D. 'Association rule analysis of CAO data'. - Dublin: Journal of the Statistical and Social Inquiry Society of Ireland, Vol. XXXVI, 2006/2007, pp44-83



1. Expansion of Supplementary Entry Routes

These include entry routes for mature applicants, applicants from socio-economically disadvantaged backgrounds, applicants with disabilities, and applicants presenting Further Education qualifications.

CAO Management Remarks: These routes have been developed in the light of evidence that demonstrates that certain groups have low participation rates in higher education, and to open up opportunities for lifelong learning.

Supplementary entry routes have the strength of being well developed, established, and have the confidence of the public and the higher education sector.

These routes also facilitate HEIs in focusing on disadvantaged and under-represented groups and managing their target figures according to national and institutional policies.

However, processing and assessing applications for these schemes tends to be labour and time intensive for HEIs, and applying for these schemes tends to place additional, sometimes burdensome, requirements on applicants.

2. Percentile-based points system

This involves expressing a result in a subject in the Leaving Certificate as a percentile rather than a grade and sub-grade, providing greater ‘granularity’.

CAO Management Remarks: This option may help to moderate for the perceived differences in the levels of difficulty and workload in various Leaving Certificate subjects. The likely effect would be improved measurement of actual achievement, however, it seems unlikely that this would have a major positive impact on educational outcomes - teaching to and studying for ‘the exam’ would remain a feature under this structure.



Another possible effect of such a level of granularity would be large numbers of appeals and recheck applications to the State Examinations Commission, with potential consequences for HEIs late in the admissions season. There is also a question over whether this could be applied retrospectively to existing Leaving Certificate results and, if not, how to select among applicants presenting leaving certificate results in two different formats.

This option would seem to be relatively efficient and transparent, but may be difficult for applicants to comprehend.

3. Reduction in granularity of points grading / random selection

This proposal involves reducing ‘granularity’ by allocating the same score to all A grades regardless of the sub-grade, the same score to all B grades regardless of the sub-grade and so on. Applicants are then offered in order of merit, or offered at random above a certain points ‘cutoff’.

CAO Management Remarks: The current split grades were introduced in order to increase granularity to help reduce the numbers of applicants who remain unselected due to random selection. Because of this random selection is now in limited use, but it is one feature that CAO finds causes much anxiety to applicants and parents.

Setting a minimum points cutoff above which applicants to receive offers are selected at random does not reward educational attainment. There is potential for a negative impact on second-level behaviour. A ‘weighted’ random selection appears to introduce an element of randomness without removing pressure on applicants to achieve in examinations.

While perhaps helping to avoid ‘perpetuation of disadvantage’, these options have the potential to give HEIs less control in achieving this aim than the existing supplementary entry routes.



4. Supplementary testing

Supplementary testing is in limited use for certain types of course including medicine. This involves applicants taking a test, the results of which may be combined with school-leaving results to form an overall score.

CAO Management Remarks: The HEIs will learn much from the experience gained from the recent introduction of the HPAT test for medicine applicants. The results of research taking place into the effects and effectiveness of the test will provide an evidence base to inform consideration of introducing further tests.

It is important to remember that many factors influence course choices, and applicants will often mix categories of courses. It is not uncommon to see courses in the faculties of Arts, Law and Medicine all on one application – there may be geographical and/or economic factors influencing such a selection. So while the introduction of HPAT resulted in an applicant sitting just one extra test on one day, further tests could result in an applicant attending several tests, with significant additional stress, expense and disruption to an applicant in the senior year of the second-level cycle.

If the HEIs consider submitting school-leavers to tests supplementary to the existing Leaving Certificate, perhaps a generic test could be devised to measure the key skills, in literacy, numeracy, communications, and problem solving that are required to succeed in Higher Education and progress to employment.

It should be noted that the NUI matriculation examination was suspended in 1992. Some of the criticisms of the examination were that it added to applicant stress, and that it had the potential to contribute to perpetuating disadvantage.



5. Minimum entry requirements / guaranteed first year place

Having met pre-set minimum entry requirements, applicants would be admitted to a preparatory year within their chosen discipline and successful students would progress and specialise.

CAO Management Remarks: While having obvious implications for the structure of higher education and the resources required, this option appears to ‘put off’ the inevitable selection or competition process.

It should be noted that the average age of a CAO applicant is 21. Many applicants are prepared, ready and suited to the course they wish to study. Perhaps this option might be considered as part of a combination of competitive entry to denominated courses along with a selection of less competitive entry omnibus courses in general study areas (Liberal Arts, Science, Engineering etc.).

This would allow applicants to progress to Higher Education with some requiring further preparation to enter specialised fields of study.

A mechanism would also be required to deal with those applicants who do not progress after the first year.

Other school-leaving examinations

When considering mechanisms that select among applicants presenting Irish Leaving Certificate, HEIs will need to be mindful that selection mechanisms will also be required for those presenting other school-leaving examinations from Ireland (e.g. Northern Ireland GCE/GCSE), other EU countries and from around the world.



Appendix 1 – Application and Nett acceptance statistics

Table 1:

CAO 2010 Applications and Nett Acceptances: total & by category of application

Note: applicants will frequently appear in more than one of the categories below.

	2010 Applicants	% of Applicants	Nett Accepts	% of Nett Accepts	% of All Applicants	% of Category of Applicants
Total Applications and Acceptances	78,199	100.00%	45,624	100.00%	58.34%	
2010 Leaving Cert applying to CAO (Total of 55,480)	44,967	57.50%	29,937	65.62%	38.28%	66.58%
All Leaving Cert regardless of years.	67,932	86.87%	41,562	91.10%	53.15%	61.18%
Matures	14,910	19.07%	7,131	15.63%	9.12%	47.83%
FETAC	11,711	14.98%	2,360	5.17%	3.02%	20.15%
GCE	1,913	2.45%	601	1.32%	0.77%	31.42%
OSE - EU and Non-Eu not LCE,GCE or FETAC	3,516	4.50%	1,275	2.79%	1.63%	36.26%
Acceptances for Applicants with previous HE	9,797	12.53%	4,799	10.52%	6.14%	48.98%
Acceptances for Applicants with previous FE	4,877	6.24%	2,294	5.03%	2.93%	47.04%
HEAR Applicants	8,399	10.74%				
HEAR Applicants who received an offer			4,901	10.74%	6.27%	58.35%
HEAR Applicants who got a HEAR offer on merit			436	0.96%	0.56%	5.19%
HEAR Applicants who got a HEAR offer below the points cutoff			682	1.49%	0.87%	8.12%
DARE Applicants	2,309	2.95%				
DARE Applicants who received an offer			1,401	3.07%	1.79%	60.68%
DARE Applicants who got a DARE offer on merit			132	0.29%	0.17%	5.72%
DARE Applicants who got a DARE offer below the points cutoff			268	0.59%	0.34%	11.61%



Appendix 1 – Application and Nett acceptance statistics

Table 2:

CAO 2010 Nett Acceptances: by age

Level 8						
Age at Jan 1st	Male	%	Female	%	Total	%
23 or more	2131	14.5%	2108	12.3%	4239	13.4%
22	172	1.2%	140	0.8%	312	1.0%
21	223	1.5%	192	1.1%	415	1.3%
20	350	2.4%	397	2.3%	747	2.4%
19	972	6.6%	1095	6.4%	2067	6.5%
18	4831	33.0%	5778	33.8%	10609	33.4%
17	5156	35.2%	6368	37.3%	11524	36.3%
16	816	5.6%	999	5.8%	1815	5.7%
Total	14651	100.0%	17077	100.0%	31728	100.0%
Level 7/6						
23 or more	1877	21.7%	1015	19.3%	2892	20.8%
22	155	1.8%	69	1.3%	224	1.6%
21	230	2.7%	133	2.5%	363	2.6%
20	389	4.5%	207	3.9%	596	4.3%
19	837	9.7%	485	9.2%	1322	9.5%
18	2161	25.0%	1429	27.2%	3590	25.8%
17	2439	28.2%	1577	30.0%	4016	28.9%
16	549	6.4%	339	6.5%	888	6.4%
Total	8637	100.0%	5254	100.0%	13891	100.0%



Appendix 2 – The Growth of the CAO system 1977 – 2011

Year	Applic- -ants	Deg.nett acceptances	Dip/Cert nett acceptances	Total nett acceptances	HEIs	Courses
1977	14845	(not avail)	-	(not avail)	5	69
1978	15401	“	-	“	7	82
1979	16955	6709	-	6709	7	75
1980	17165	7714	-	7714	7	71
1981	19130	7380	-	7380	8	76
1982	20339	8443	-	8443	9	95
1983	21799	9349	-	9349	9	97
1984	21949	9495	-	9495	9	99
1985	22851	9872	-	9872	9	102
1986	24421	9838	-	9838	9	104
1987	25229	9496	-	9496	9	104
1988	25464	10076	-	10076	9	107
1989	26806	10367	-	10367	10	109
1990	27259	11540	-	11540	10	117
1991	52212	12341	11594	23935	23	152/233
1992	54877	14488	12274	26762	31	176/244
1993	57465	14506	13061	27567	31	188/258
1994	60548	14900	13559	28459	31	203/270
1995	62913	15923	16268	32191	34	225/285
1996	59778	16667	17644	34311	34	246/297
1997	63677	17021	15655	32676	35	261/337
1998	66012	18872	16189	35061	38	325/338
1999	65253	20179	16663	36842	41	365/352
2000	63451	20786	16739	37525	44	387/374
2001	63810	20934	15691	36625	43	416/343
2002	63886	21101	15526	36627	44	458/328
2003	66222	23935	14398	38333	43	542/316
2004	63696	25275	12521	37796	43	583/312
2005	63716	24982	13193	38175	43	581/350
2006	63634	26489	12478	38967	42	664/378
2007	65883	27853	12062	39915	43	723/386
2008	68809	29704	12413	42117	44	778/407
2009	74621	31424	14162	45586	44	825/410
2010	78199	31732	13891	45625	44	851/428
2011	76698	32328	13354	45682	43	842/443

NOTES:

- (i) HEIs = no. of higher education institutions participating.
- (ii) Courses = no. of course choices available; after 1990 = Degrees/Dip Certs.
- (iii) Figures for 1996 distorted by introduction of L.C. transition year.