Entry Requirements and Matriculation for Admission into Higher Education

Presentation by Prof. Áine Hyland at conference on Supporting a Better Transition from Second Level to Higher Education: Directions for Change

NUIM - 24 June 2013
Minimum Entry Requirements / Matriculation

Minimum academic achievement required to enable learner to engage successfully with the programme

Cut-Off Points

Outcome of the system in place to allocate limited places
Minimum Entry Requirements / Matriculation: Level 6 & 7

Institutes of Technology
- 5 OD3

Universities
- UCD
- NUIG
- NUIM
- DCU
- UCC
- UL

Ranges from:
- 5OD3’s to 2 HC3 and 4 OD3
- 3 HC3 and 3 OD3
Minimum Entry Requirements / Matriculation: Level 8

Institutes of Technology
- 2 HC3 and 4 OD3

Universities
- UCD
- NUIG
- NUIM
- DCU
- UCC
- UL
  - to include Irish, English, 3rd language

UCD
- 2 HC3 and 4 OD3

TCD
- 3 HC3 and 3 OD3

NUIG
- to include Irish and English

NUIM
- Additional subject requirements are set for many programmes

DCU
## Additional Matriculation requirements

<table>
<thead>
<tr>
<th>Programme</th>
<th>Irish</th>
<th>Other Lang</th>
<th>Maths</th>
<th>Lab Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commerce with French</td>
<td></td>
<td>HC1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Law with Irish</td>
<td>HC1</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Biological &amp; Chemical Sciences</td>
<td></td>
<td></td>
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<td>HC3</td>
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<tr>
<td>Genetics</td>
<td></td>
<td></td>
<td></td>
<td>HC3 Biology</td>
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<tr>
<td>Engineering</td>
<td></td>
<td></td>
<td></td>
<td>HC3</td>
</tr>
<tr>
<td>Medicine, Dentistry, Pharmacy</td>
<td></td>
<td></td>
<td></td>
<td>HC3 Chemistry &amp; Physics or Biology</td>
</tr>
</tbody>
</table>
For each programme offered, the institution must be satisfied that the matriculation requirements are appropriate.
Minimum Entry Requirements/ Matriculation

Are current minimum entry requirements for all programmes adequate and/or appropriate?

e.g. Where HL Maths or HL Irish or HL English (or any other subject) are required for successful engagement with a programme, are they specified as a minimum requirement for that programme?
# CAO Points Calculation Grid

<table>
<thead>
<tr>
<th>Leaving Cert Grade</th>
<th>Higher Paper</th>
<th>Lower Paper</th>
<th>Maths Foundation #</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>100</td>
<td>60</td>
<td>20</td>
</tr>
<tr>
<td>A2</td>
<td>90</td>
<td>50</td>
<td>15</td>
</tr>
<tr>
<td>B1</td>
<td>85</td>
<td>45</td>
<td>10</td>
</tr>
<tr>
<td>B2</td>
<td>80</td>
<td>40</td>
<td>5</td>
</tr>
<tr>
<td>B3</td>
<td>75</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>C1</td>
<td>70</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>C2</td>
<td>65</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>C3</td>
<td>60</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>D1</td>
<td>55</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>D2</td>
<td>50</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>D3</td>
<td>45</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>
What do we really mean by minimum entry requirements?

2 x HC3 = 120
4 x OD3 = 20

Total = 140 points

Candidate would not qualify for any level 8 programme in 2012

2 x HA1 = 200
4 x OA1 = 240

Total = 440 points

Candidate would qualify for x% of level 8 programmes in 2012
Questions

• On what basis was it decided to equate a C3 on a Higher Paper with an A1 on an Ordinary Paper?

• Are HEI’s satisfied that the equivalence grid for Ordinary and Higher Level LC papers is appropriate?
<table>
<thead>
<tr>
<th>NFQ and Blooms Revisited Taxonomy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Creating</strong></td>
</tr>
<tr>
<td><strong>Evaluating</strong></td>
</tr>
<tr>
<td><strong>Analysing</strong></td>
</tr>
<tr>
<td><strong>Applying</strong></td>
</tr>
<tr>
<td><strong>Understanding</strong></td>
</tr>
<tr>
<td><strong>Remembering</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>------------------------</td>
</tr>
<tr>
<td>Creating</td>
</tr>
<tr>
<td>Evaluating</td>
</tr>
<tr>
<td>Analysing</td>
</tr>
<tr>
<td>Applying</td>
</tr>
<tr>
<td>Understanding</td>
</tr>
<tr>
<td>Remembering</td>
</tr>
</tbody>
</table>

**Higher Order Thinking**

**Lower Order Thinking**

Colors represent proficiency levels:
- **Excellent**: Dark blue
- **Very Good**: Light blue
- **Good**: Green
- **Fair**: Light green
- **Poor**: Yellow
- **Inadequate**: Orange

[Assessment Grid Framework Diagram]
Question

- Are the higher order thinking skills which are required to engage successfully in higher education tested and rewarded on Ordinary Level papers?
Cut-off Points for Level 8 programmes
Cut-Off Points for Level 8 programmes

- The diagram shows the number of Level 8 programmes and their cut-off points for universities and Institutes of Technology. University cut-off points peak at 400 – IoT cut-off points peak at 300.
Correlation between cut-off points and progression rate (Year 1 to 2)
Correlation between LC achievement and subsequent academic performance

• There is a clear and strong link between prior educational attainment and successful progression. Prior educational attainment is a very strong factor in whether or not a new entrant progresses past the first year of their course of study.

• Below 300 points, non-progression rates increase dramatically – from 20% at 300 points to over 50% at 50 points.
“...universities should, in conjunction with secondary and vocational schools, reconsider their entry requirements with a view both to raising the general standard of matriculation so as to eliminate the student who is not suitable university material before he or she has wasted both time and money in beginning a university course which cannot be completed ....”

Question

• Should there be a minimum achievement level at which applicants should be accepted into Level 8 programmes?

• What would the implications of this be for students and for the HE sector?
Correlation between LC Maths results and progression (Yr 1 to 2)
Maths as a Predictor of Academic Performance

C. 95% of students who achieve more than 60 CAO points in Maths progress from Year 1 to Year 2. Those who achieve less than 60 points, have a much higher rate of non-progression – as high as 40% when they get 10 or less points in Maths.
New Entrant Entry Route: **Previous Educational Attainment**

Leaving Certificate Mathematics Attainment by Level and Sector:

- **All sectors & levels**: 28%
- **IoT’s Level 6**: 4%
- **IoT’s Level 7**: 7%
- **IoT’s Level 8**: 15%
- **Other Colleges Level 8**: 35%
- **University Level 8**: 43%

% of new entrants with 60+ Leaving Cert points Maths
Correlation between LC English results and progression (Yr. 1 to 2)
Since English and Maths results at LC are such good predictors of progression and academic performance, the NCCA/HEA report (Dec 2011) recommended that further research be carried out into the validity and potential benefits and consequences of including Maths and/or English in the calculation of points for all programmes.
% of CAO applicants who include English and Maths in their six subjects.

- In relation to Level 8 programmes, 92% of applicants include English among their six subjects; 52% include Mathematics and 46% include both English and Maths.
- In relation to Level 6/7 programmes, 93% include English; 50% include Maths and 46% include both English and Maths.
But not all students with Ordinary Level Maths fail to progress. In the case of some programmes where the cut-off points are high (e.g. Primary Teaching B.Ed.) students who have not taken the higher paper have a high progression rate and achieve good results. The progression rate on B.Ed. (primary) programmes is over 95%.
A Way Forward

A detailed analysis of progression rates and academic results, in relation to each student and programme, should be undertaken by all HEIs to identify the relationship between LC results of students and rates of non-progression and of failure.

• The outcome of such analyses will provide pointers for action.
Questions

• Should specific minimum entry requirements be introduced for some programmes?

• What other action(s) could be taken to improve progression and success rates?
Does it matter at what level (Higher or Ord.) the LC paper is taken?

- We have known for some time that the number of points are a good predictor of subsequent performance. We now know that students who have taken HL Leaving Cert Papers (rather than OL) are more likely to progress and to succeed. Therefore analyses of student performance should also take account of the level at which LC subjects were taken.
Comparison of performance of a selected number of students on same LC points but with different no. of honours.

<table>
<thead>
<tr>
<th>Intake Year</th>
<th>LC Points</th>
<th>Students with 2 or 3 Hons</th>
<th>Completion Rate for Students with 2 or 3 LC Hons</th>
<th>Students with 4 Hons</th>
<th>Completion Rate for Students with 4 LC Hons</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006/07</td>
<td>340</td>
<td>10</td>
<td>30%</td>
<td>4</td>
<td>75%</td>
</tr>
<tr>
<td></td>
<td>345</td>
<td>39</td>
<td>49%</td>
<td>16</td>
<td>75%</td>
</tr>
<tr>
<td></td>
<td>360</td>
<td>20</td>
<td>50%</td>
<td>28</td>
<td>71%</td>
</tr>
<tr>
<td></td>
<td>390</td>
<td>8</td>
<td>63%</td>
<td>36</td>
<td>86%</td>
</tr>
<tr>
<td>2007/08</td>
<td>330</td>
<td>7</td>
<td>29%</td>
<td>2</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>375</td>
<td>13</td>
<td>54%</td>
<td>30</td>
<td>70%</td>
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<tr>
<td></td>
<td>375</td>
<td>13</td>
<td>54%</td>
<td>30</td>
<td>70%</td>
</tr>
<tr>
<td></td>
<td>430</td>
<td>2</td>
<td>50%</td>
<td>8</td>
<td>88%</td>
</tr>
<tr>
<td>2008/09</td>
<td>340</td>
<td>41</td>
<td>46%</td>
<td>11</td>
<td>73%</td>
</tr>
<tr>
<td></td>
<td>350</td>
<td>28</td>
<td>39%</td>
<td>16</td>
<td>69%</td>
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<tr>
<td></td>
<td>375</td>
<td>17</td>
<td>41%</td>
<td>29</td>
<td>76%</td>
</tr>
<tr>
<td></td>
<td>405</td>
<td>2</td>
<td>50%</td>
<td>23</td>
<td>87%</td>
</tr>
</tbody>
</table>
Questions

1. Are current minimum entry requirements for all programmes – Levels 6, 7 and 8 - adequate and/or appropriate?
2. Are higher education institutions satisfied that the equivalence grid for Ordinary and Higher Level LC papers is appropriate?
3. Are the higher order thinking skills which are required to engage successfully in higher education tested and rewarded on Ordinary Level papers?
4. Should there be a minimum achievement level at which applicants should be accepted into Level 6/7 or Level 8 programmes?
5. Are lower achieving students supported enough within higher education to ensure that they complete?
6. Are there implications for balance of provision among further education, level 6/7 and level 8 higher education?
Questions
Feedback from the workshop

- Points
- More Points
Tentative proposals