Growing a Research Culture in an Irish Technological University

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Background

• 14 Institutes of Technology across the Republic of Ireland.
• Irish Institutes of Technology (IoT), traditionally focused on vocational education – providing good quality graduates well.
• The plan is to merge 14 existing IoTs into 4 Technological Universities.
• The first Irish Technical University to be established by September 2018:
  • Dublin IT
  • IT Blanchardstown
  • IT Tallaght
• However, IoTs were primarily teaching focused rather than research and teaching - the IoTs constitute about 11% of the national research effort.
• There is need for building a research culture and enhancing the research capacity in IoTs/TUs.
Motivation

• The move to becoming a Technological University requires greater emphasis on research and research outputs.
• This study aims to identify the factors, that contribute to research activity by academic and research staff across Dublin Institute of Technology (DIT).
• The results from the study will help DIT to grow a research culture and enhance research capacity.
Methodology

• Academic and Research staff survey across four IoTs:
  1. Dublin Institute of Technology,
  2. Cork Institute of Technology,
  3. Institute of Technology Sligo and
  4. Waterford Institute of Technology.

• Combined number of academic and research staff across DIT is: 1,738.
• All academic and research staff were emailed and invited to participate in survey (Survey Monkey).
• To date 310 staff participated in the survey.
• 39 questions, of which 38 quantitative questions and one open ended question.
• Survey was open on 14\textsuperscript{th} March 2018 and will close on 29\textsuperscript{th} April 2018.
### Results – Preliminary Survey Data Analysis

- **Participant Profile; DIT, N = 310**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Response percent</th>
<th>Response No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>55</td>
<td>170</td>
</tr>
<tr>
<td>Female</td>
<td>43</td>
<td>134</td>
</tr>
<tr>
<td>I prefer not to say</td>
<td>1.9</td>
<td>6</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Position in DIT</th>
<th>Response percent</th>
<th>Response No.</th>
</tr>
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<tbody>
<tr>
<td>Lecturer</td>
<td>37.42</td>
<td>116</td>
</tr>
<tr>
<td>Assistant Lecturer</td>
<td>27.10</td>
<td>84</td>
</tr>
<tr>
<td>Senior Lecturer (I,II,III)</td>
<td>24.84</td>
<td>77</td>
</tr>
<tr>
<td>Researcher</td>
<td>5.81</td>
<td>18</td>
</tr>
<tr>
<td>Other</td>
<td>4.84</td>
<td>15</td>
</tr>
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<table>
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<tr>
<th>Highest Qualification to Date</th>
<th>Response percent</th>
<th>Response No.</th>
</tr>
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<tbody>
<tr>
<td>L10 - PhD</td>
<td>60.65</td>
<td>188</td>
</tr>
<tr>
<td>L9 - Masters</td>
<td>32.91</td>
<td>102</td>
</tr>
<tr>
<td>L8 – Honours Degree</td>
<td>4.52</td>
<td>14</td>
</tr>
<tr>
<td>L7 – Bachelor Degree</td>
<td>0.97</td>
<td>3</td>
</tr>
<tr>
<td>Other</td>
<td>0.97</td>
<td>3</td>
</tr>
</tbody>
</table>
Results – Preliminary Survey Data Analysis

• Participant Profile; DIT

Do you consider yourself an active researcher?

<table>
<thead>
<tr>
<th></th>
<th>Percentage of Participants (N = 301)</th>
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<tbody>
<tr>
<td>Yes</td>
<td>(N = 234)</td>
</tr>
<tr>
<td>No</td>
<td>(N = 23)</td>
</tr>
</tbody>
</table>

Research Field

- Science, Technology, Engineering and Mathematics (STEM): 59%
- Arts, Humanities and Social Sciences (AHSS): 41%

N = 310
Results – Preliminary Survey Data Analysis

• Teaching Vs Research

- [Bar chart showing the percentage of a working week spent on teaching and research activities across different time intervals]

  - Percentage of a working week spent on teaching activities
  - Percentage of a working week spent on research activities

N = 226
Results – Preliminary Survey Data Analysis

• Research Activity

- Number of external funding applications submitted in past 5 years (N = 220)
- Number of internal funding applications submitted in past 5 years (N = 213)
- Number of peer review journals published in past 5 years (N = 204)
Results – Preliminary Survey Data Analysis

Research Blockers

- Too much administration
- Too much teaching
- I have no support from my Head of School/College
- I have no support from the Research Office at my Institute
- Extra activities - third level teaching course
- I have no research network
- Writing proposals is too hard
- I am not mobile - International mobility is not an option for me
- I have no interest in research
- I have no research ideas
- Other

Percentage of Participants (N = 267)
Results – Preliminary Survey Data Analysis

• Research Support

- Provide time to do research
- Provide research reward scheme
- Provide seed funding
- Provide assistance with proposal development
- Provide training to enhance research skills
- Improve awareness of funding calls
- Other

Percentage of Participants (N = 256)
Results – Preliminary Survey Data Analysis

• Q: How could your Institute better support the development of the Research Culture within the Institute?

“Provide time to do research for academic staff - currently they need to be successful in receiving a grant to buy time out. They need to be given time and support to work on proposals as part of their day job.” (Participant 244)

“There is very little support for project PIs or coordinators in relation to finance or administration. The research office should be there to support researchers and help them manage projects in terms of administration and finance.” (Participant 226)

“Teaching hours, assessment and corrections, and student administration dominate my schedule at the expense of time to research during term time. ..... During busy times during term I am doing well to allocate a few hours to research per week. ..... More structured buy-out time for research projects is important.” (Participant 172)
Conclusions

• The survey has succeeded in giving a voice to research active staff in DIT.
• DIT has a cohort of academic and research staff who consider themselves research active, who need support.
• To grow its research output and enhance research capacity DIT should consider the following supports, suggested by staff:
  • Reduce teaching hours and administration load,
  • Provide support to research active staff on School/College level,
  • Introduce research reward scheme,
  • Introduce research proposal writing workshops,
  • Promote of cross disciplinary research collaboration.
• In turn, such an investment will result in improvement of research activity and growth of the research culture in new, upcoming Technological University.
Authors would like to thank Dr. John Bartlett, Institute of Technology Sligo; Dr. Niall Smith, Cork Institute of Technology and Mrs. Susie Cullinane, Waterford Institute of Technology, for providing continuous input during development of the questionnaire and for their endless support of the study.
Questions & Discussion

Thank you for your attention!

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