



# Institute Planning Grant Report Form

## **SECTION 1: LEAD CONTACT**

All fields must be completed.

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## **SECTION 2: SELF-ASSESSMENT TEAM**

The Trinity College self-assessment, called the WISER-T Project, was conducted under the guidance of a Steering Committee composed of the following:

Dean of Engineering and Systems Sciences (Chair)  
 Dean of Science  
 Dean of Research  
 Professor Jane Grimson, Former Vice-Provost  
 Professor Suzi Jarvis, SFI Research Professor, Department of Physics  
 Dr. Eileen Drew, Department of Statistics and Centre for Gender and Women's Studies;  
 Dr. Maryann Valiulis, Director, Centre for Gender and Women's Studies;  
 Dr. Linda Doyle, Department of Electronics and Electrical Engineering;  
 Professor Ivana Bacik, Law School;  
 Prof. Paul Coughlan, School of Business Studies;  
 Dr. Anthea Lees, Research Support Services Officer;  
 Staff Development Officer;  
 Ms. Caroline Roughneen (Research Assistant & Secretary).

The work of the Committee was supported by two external experts who provided valuable advice and assistance at various stages of the project:

**Professor Teresa Rees**, Pro Vice-Chancellor of University of Cardiff; rapporteur of the EU ETAN Group Report; co-editor of *SET FAIR: A Report on women in science, engineering and technology*; expert in education and labour market policies with a special focus on gender [<http://www.cf.ac.uk/socsi/whoswho/reesT.html>]

**Dr. Mineke Bosch**, Centrum voor Gender en Diversiteit, Maastricht University, coauthor of the ETAN Report; project leader of *EQUAL Bridging the gender gap at universities*; expert in gender issues in universities and in science policy  
[\[http://www.genderdiversiteit.unimaas.nl/frameset\\_uk.htm\]](http://www.genderdiversiteit.unimaas.nl/frameset_uk.htm).

The main focus of the work involved gathering a comprehensive set of statistics and the co-ordination of this and the subsequent analyses of the data was conducted by Caroline Roughneen, who acted as Research Assistant for the duration of the project under the guidance of the Steering Committee. Day to day management of the project was the responsibility of Dr. Eileen Drew, Department of Statistics, and Professor Jane Grimson, Department of Computer Science.

In addition to the Steering Committee, other members of the College community participated in the project through Focus Groups, interviews and/or responding to an on-line questionnaire. Finally, several administrative departments (see Table 1) were actively involved not only in providing data but also in assisting in its interpretation.

Office	Contact Name/ Title	Categories
Student Records Office Alumni / Proctors' Office	Ms. Leona Coady Administrative Officer	<ul style="list-style-type: none"> <li>• Undergraduate Data</li> <li>• Postgraduate Data</li> </ul>
Staff Office/Treasurer's Office	Ms. Karen Roantree Data Analyst	<ul style="list-style-type: none"> <li>• Number of Research Fellow and Research Assistants</li> <li>• Academic Staff</li> <li>• Salaries for the groups</li> </ul>
Staff Office	Mrs. Pat Daly	<ul style="list-style-type: none"> <li>• Fellows Data</li> <li>• Promotions Data</li> </ul>
Research and Innovation Services	Dr. Anthea Lees Research Support Services Officer	<ul style="list-style-type: none"> <li>• Research Grant proposal Data</li> </ul>

**Table 1 Primary source of data for self-assessment**

### **SECTION 3: INSTITUTIONAL SUPPORT & RESPONSIVENESS**

#### **3.1 INSTITUTIONAL SUPPORT**

This project received a strong level of support from Senior Officers of the College including the;

- Provost
- Dean of Research
- Dean of Science
- Dean of Engineering and Systems Sciences
- Staff Secretary (Head of Human Resources).

This support was vital to the successful completion of the self-assessment as much of the data required had to be collected manually either because it is not kept in electronic form at all (e.g. data on promotions) or is fragmented across different independent information systems. Details of the administrative offices which provided data are listed in Table 1.

It should also be noted that there was enormous enthusiasm among women at all levels in engaging with and participating in the project. It was clear that even over this short period of time, the networking opportunities which were being provided through the focus groups etc. both in terms of

mutual support but also in terms of possible research linkages augurs well for maintaining momentum into the future.

The main difficulty experienced during the project related to the timing; the project was running over the summer period when many staff are away attending conferences, on research visits, or on annual leave. Moreover, the College is currently undergoing a major restructuring of academic departments as well as introducing a new resource allocation model which was being implemented during the same period.

### **3.2 CONSULTATION**

Members of the Steering Group engaged in extensive consultation on an informal basis with colleagues, which helped to raise awareness of the project and encouraged engagement with the issues among both women and men.

### **3.3 FOCUS GROUPS**

Two focus groups were held. The first group comprised of female academics, from lecturers upwards, from the Faculties of Engineering and Systems Sciences (ESS) and Science. It was held on the 6<sup>th</sup> July 2005 and Professor Jane Grimson ran the group. Twelve women attended.

The second focus group was with women postdoctoral staff working in the ESS and Science (SE) faculty. An email was sent to postdoctoral staff who are members of the Trinity Research Staff Association inviting them to share their views and experiences. The focus group was held on the 15<sup>th</sup> July 2005. Dr. Eileen Drew ran the session. Twelve women attended.

### **3.4 INTERVIEWS**

In addition to several informal interviews and consultations, three in-depth interviews were held with women from the ESS and Science Faculties. Two of the women had completed their PhD in the past year and are now working as research assistants (postdocs), while another had completed her PhD several years ago and had just returned to academia after years working in Industry. One woman has decided to finish her postdoctoral work early and leave academia, the second woman is undecided while the third woman has given herself a deadline to get a permanent position otherwise she will return to industry. Only two case studies are discussed in this report. One woman is easily identifiable so it was decided not to include her in the report. Details of the interview questions are in Appendix A.5.

These women are postdoctoral researchers. This report shows that the stage from postdoctoral to lecturer is when women are at the greatest risk of leaving academia mainly due to lack of security and financial instability. The women interviewed were chosen through women from the focus groups discussing this project (informal networking) in their department and who then contacted the project administrator. Interviews were then organised.

### **3.5 EMAIL CONTACTS**

Emails were sent to eight women previously employed as academic lecturers in SE who had left Trinity College in the past four years (see Appendix A.6/A.7). Responses were received from six of the eight women. The women were asked why they left Trinity College. As the main reasons were retirement and obtaining permanent positions in other academic institutions, it was decided not to follow up with interviews.

Women researchers (research fellows and assistants) who have left Trinity College in the past four years were not contacted as they are usually employed on contract basis and had therefore left as a result of the expiry of their contract.

### **3.6 SURVEY RESPONSES**

An on-line questionnaire was issued to all permanent and contract academic staff in the Faculties of ESS and Science *via* the College Intranet at the end of August 2005. Details will be found in Section 4.6. There was a 21% response rate from the target group of whom 58% were men and 42% women. Unfortunately, some 20% of respondents did not include their gender and therefore they were excluded from the subsequent analysis.

## **SECTION 4: ACTIVITIES & RESULTS**

The activities and the results of the WISER-T Project are presented according to the format of the Tasks listed in the proposal, namely

Task 1	Gender Equality Indicators
Task 2	Impact assessment of initiatives to date
Task 3	Research profile of women in SE
Task 4	Identification of barriers
Task 5	Staff development needs
Task 5	Reports

### **4.1 Task 1 Gender Equality Indicators**

#### *Task description*

*Currently data concerning the participation of women in SE research in Trinity is very fragmented, patchy and of variable quality. This task will develop a set of gender equality indicators – both qualitative and quantitative - regarding women researchers in SE throughout the pipeline from applicants to undergraduate degree programmes through recruitment of postdoctoral researchers to full professors. These metrics will cover not only the raw data in terms of numbers applying for courses, posts, promotion, research grants and fellowships, etc., but will also examine the numbers eligible to apply at each stage. Data on salaries, space and other relevant factors will be included to ascertain whether or not a gender gap exists. These indicators will then provide the basis for regular and on-going gender monitoring and for the establishment of a set of targets over the coming years.*

The primary sources of information are listed in Table 1. All offices were asked to supply data for the period 2001 to 2005 where possible in order to assist in the identification of any trends.

#### **4.1.1 Introduction**

The starting point for the collection of relevant data in order to establish a set of gender indicators is to obtain accurate gender-disaggregated data for the number of women in SE from undergraduate through to full professor. As noted in the Task Description this data is currently fragmented, patchy

and of variable quality. Student data is held on the Student Administration System, and staff data including payroll information on the Staff Database. Data relating to promotions is not kept in the staff database but rather forms part of the individual paper personnel files. Information about research grant applications is held in a local manual file in the Research Office, while information on research accounts is held on the Financial Information System. In addition, the Faculty Offices maintain small subsets of student-related data. Annual reports are produced by the various offices but generally, the data are presented in summary format and are not gender-disaggregated; no attempt is made to present an integrated picture. Finally in some areas there is a lack of standard terminology so, for example, the category of “postdoc”, which is in common use in the wider research system, is not a term which is formally used within Trinity, but instead are referred to as Research Fellows (who normally have completed their PhD) and Research Assistants (who may or may not have completed a PhD).

The data presented in this section represent a summary of the key data and conclusions. A series of appendices contain the detail.

#### 4.1.2 Summary situation

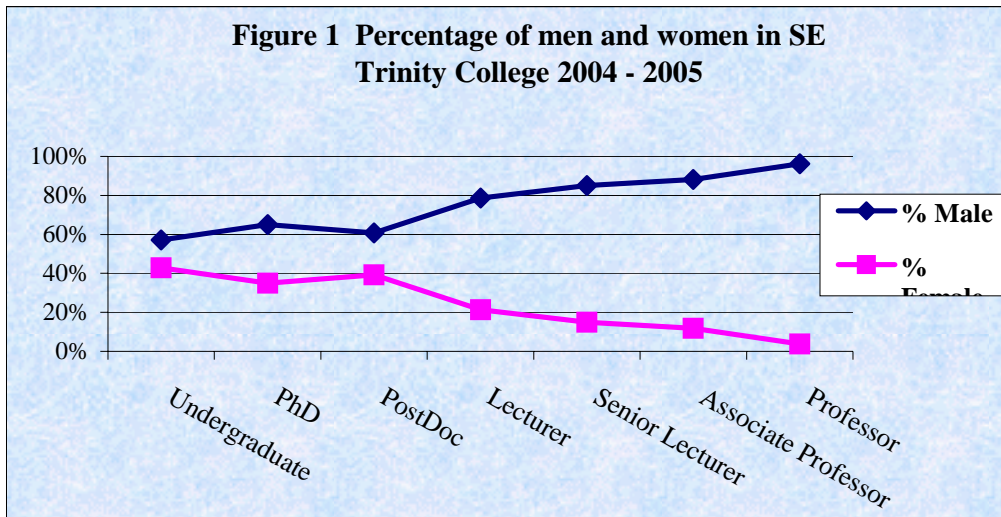
Table 2 shows the progression of women relative to men in SE from undergraduate through to full professor.

<i>Grade</i>	<b>Female</b>	<b>% Female</b>	<b>Male</b>	<b>% Male</b>	<b>Total</b>
Professor	1	4%	26	96%	27
Associate Professor	4	12%	30	88%	34
Senior Lecturer	9	15%	51	85%	60
Lecturer	31	21%	114	79%	145
Postdoctorate	123	39%	190	61%	313
PhD	125	35%	232	65%	357
Undergraduate	1178	43%	1571	57%	2749

**Table 2 Number and Percentage of Men and Women in SE  
Trinity College 2004 - 2005**

The key points to emerge from this Table are:

- While 43% of the undergraduates in SE are women, only 4% of the full professors are women
- There is a small increase in the participation of women from PhD to postdoc level (35% to 39%); this falls back dramatically at the Lecturer grade, the career entry point for academics.
- Women are then lost at each successive stage of the academic career ladder, leading to the now (in) famous “scissors” diagram shown in Figure 1.



This picture is replicated throughout the developed world and indeed is not just confined to SE researchers in academia, but rather is a feature of academia generally and also of the corporate world [1, 2, 3].

#### 4.1.3 Undergraduate Level Full Time Students in ESS

The Faculty of Engineering and Systems Sciences (ESS) offers 5 full-time undergraduate degree programmes and 3 part-time evening programmes. Table 3 presents the breakdown by gender on these courses.

Degree Name	Female	% Female	Male	% Male	Total	% Total
Management Science and Information Systems Studies	29	32%	62	68%	91	100%
Engineering	140	20%	551	80%	691	100%
Information and Communications Technology	14	20%	57	80%	71	100%
Computer Science	27	17%	135	83%	162	100%
Manufacturing Engineering and Management Science	6	11%	49	89%	55	100%
<b>Total</b>	<b>216</b>	<b>20%</b>	<b>854</b>	<b>80%</b>	<b>1070</b>	<b>100%</b>

**Table 3 Number and Percentage of Students Studying Full Time Undergraduate  
ESS Courses in 2004-2005**

The key points to emerge from this data are:

- MSISS is the most feminised degree course where nearly one-third (32%) of the students are women
- MEMS has the lowest participation of women (11%).

However, a detailed analysis of the trends over time, show that while the numbers of women entering the mainstream engineering degree programme since 1970, when the first woman graduated, have increased slowly but steadily until the mid 1990's, they seem to have levelled off and even declined between 2001 and 2005. The points for Engineering have ranged from 420 to 445 from 1998 to 2005. Appendix B, Table B.8 contains the details. However the really significant drop in the numbers of women on ESS undergraduate programmes has occurred in the computing area with a 30% reduction in the number of women on the Computer Science degree programme and a 74% reduction on the Information and Communications Technology programme. It is important to emphasise here that this is almost certainly directly related to the dramatic reduction in the number of school leavers applying for the computing programmes at third level following the "dot com" crash. This has inevitably led to a significant fall in the cut-off points for entry into these programmes from a 485 points high in 2000 to 365 points in 2005 for computer science and since girls have been performing better at Leaving Certificate than boys for several years, it is likely that the impact will be greater for girls who will tend to opt for courses with higher points.

Details of the data will be found in Appendix B, Table B.1-B.6.

#### 4.1.4 Undergraduate Level Full Time Students in Science

The main undergraduate programme offered by the Science Faculty is the common entry Natural Sciences programme with an annual intake of approximately 290 students. The first two years are common for all students who choose 3 subjects from a wide range on offer and then select one in which to specialise in the final two years, subject to certain pre-requisites. In addition, the Faculty offers 8 direct entry programmes in a range of scientific specialities. Table 4 shows the breakdown by gender across the direct programmes, while Table 5 shows the figures for the common entry Natural Sciences programme.

Degree Name	Female	% Female	Male	% Male	Total	% Total
Pharmacy	202	73%	76	27%	278	100%
Human Genetics	25	61%	16	39%	41	100%
Medicinal Chemistry	53	59%	37	41%	90	100%
Computational Science: Chemistry	2	50%	2	50%	4	100%
Mathematics	25	25%	76	75%	101	100%
Theoretical Physics	19	19%	83	81%	102	100%
Physics and Chemistry of Advanced Materials	6	14%	38	86%	44	100%
Computational Science: Physics	0	0%	2	100%	2	100%
<b>Total</b>	<b>962</b>	<b>57%</b>	<b>717</b>	<b>43%</b>	<b>1679</b>	<b>100%</b>

**Table 4 Number and Percentage of Students Studying Full Time Undergraduate Science Courses in 2004 - 2005**

The key points to emerge from these tables are:

- There are significant gender differences between the different programmes ranging from Pharmacy (a very high points course) with 73% women and Computational Physics with none. It should be noted that the university currently offers neither Computational Chemistry nor Computational Physics; the last intake of students was in 2004/05. The course now offered is 'Chemistry with Molecular Modelling'.

- Those programmes with a bio/human focus have far higher rates of participation by women and they also tend to have higher entry points.
- This trend is reflected also in the Natural Sciences programme as shown in Table 5 where girls are disproportionately represented in the biological sciences.
- Only physics has less than 50 per cent women

Degree Name	Female	% Female	Male	% Male	Total	% Total
Neuroscience	16	80%	4	20%	20	100%
Physiology	19	79%	5	21%	24	100%
Genetics	19	73%	7	27%	26	100%
Zoology	29	73%	11	28%	40	100%
Microbiology	42	71%	17	29%	59	100%
Biology <sup>1</sup>	448	67%	224	33%	672	100%
Botany	15	65%	8	35%	23	100%
Biochemistry <sup>2</sup>	52	64%	29	36%	81	100%
Environmental Science	18	62%	11	38%	29	100%
Geography/Geology <sup>3</sup>	211	60%	138	40%	349	100%
Chemistry	273	60%	184	40%	457	100%
Mathematics <sup>4</sup>	211	57%	156	43%	367	100%
Physics <sup>5</sup>	66	44%	85	56%	151	100%
Total	1419	62%	879	38%	2298	100%

**Table 5 Number and percentage of students by subject for full time undergraduate degree course in Natural Sciences as at year end 2004/05**

Since 2001 there has been a small increase in the number of girls studying science - from 939 female students in 2001 to 962 female students in 2004. This represent a 2% increase in the female participation in science, whereas there has been a 10% increase in male participation – from 652 to 717 – during the same period. Details will be found in Appendix B, Table B.7.

#### 4.1.5 Full Time PhD Students

Table 6 shows the gender breakdown at PhD level for ESS and Science. It does not include those intending to transfer from the MSc register to PhD.

Faculty	Female	% Female	Male	% Male	Total	% Total
ESS	25	19%	109	81%	134	100%
Science	100	45%	123	55%	223	100%
Total	125	35%	232	65%	357	100%

**Table 6 Number and Percentage of Full Time PhD Students in ESS and Science  
2004 - 2005**

<sup>1</sup> Biology includes:

Biology, Biology I, Biology II

<sup>2</sup> Biochemistry includes:

Biochemistry, Biochemistry with Immunology

<sup>3</sup> Geography/Geology includes:

Geography, Geography/Geology and Geology

<sup>4</sup> Mathematics includes:

Mathematics, Mathematics (biological), Mathematics (physical) and Mathematical methods

<sup>5</sup> Physics includes:

Physics, Physics A and Physics, B



The key points to emerge from the data are:

- The overwhelming majority of PhD students are men in the ESS faculty (81%) while just over half (55%) of the PhD population in the science faculty are men.
- The participation rates of women at undergraduate and PhD levels in engineering are almost the same (20% versus 19%) i.e. the pipeline has not started to leak
- By contrast in science, the participation of women between undergraduate and PhD levels has fallen from 57% to 45%.
- As with the undergraduate figures, there are significant variations across the different disciplines at PhD level with much higher participation rates in the biological sciences. Details will be found in Appendix B, Table B.14.
- There has been a steady increase in the numbers of both male and female students studying for PhD over the period 2001 – 2005, due primarily to the increased funding available.
- In ESS, the number of women has increased by over two-thirds, while the number of men pursuing PhDs has doubled during the same period. Details will be found in Appendix B, Table B.11
- In Science, there has been a 2% decrease in the number of women studying for a PhD, while the number of men has increased by 29%. Details will be found in Appendix B, Table B.12.
- Students at PhD level are funded in a variety of different ways and therefore it would not be a simple task to analyse whether gender plays a significant role in any pay differentials. Different sponsors set different rates, some projects are better funded than others, etc. However, as a result of the findings summarised below, this is probably a matter which requires further investigation.

#### 4.1.6 Research Assistants and Fellows (Post Doctorate Status)

Data was obtained from the Staff Office on all research assistants and fellows – loosely referred to as “postdocs”. These are quite a heterogeneous group of researchers, ranging from those who have just qualified with undergraduate degrees to those with 10 or more years post PhD. In the main they tend to be funded by research contracts from national, international and industry sponsors and are generally employed on a fixed term contract basis. It is perhaps also worth noting that in some disciplines one or two periods of postdoctoral research is viewed as a pre-requisite for an academic post, whereas in others e.g. Computer Science, the advent of the postdoc is a relatively new phenomenon. Table 7 shows the breakdown by gender across the two Faculties with further details in Appendix B, Table B.15 and B.16.

Faculty	Female	% Female	Male	% Male	Total	% Total
ESS	16	25%	49	75%	65	100%
Science	107	43%	141	57%	248	100%
<b>Total</b>	<b>123</b>	<b>39%</b>	<b>190</b>	<b>61%</b>	<b>313</b>	<b>100%</b>

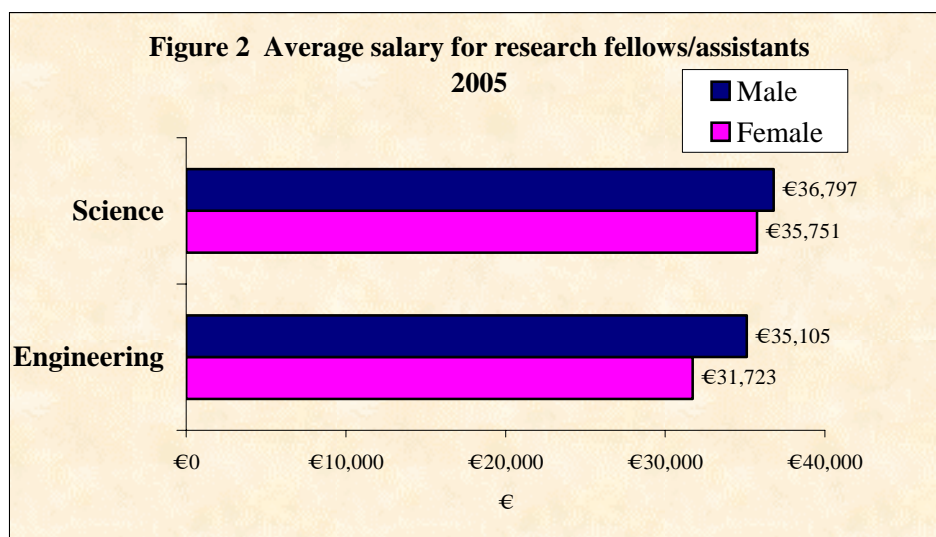
**Table 7 Number and Percentage of Research Fellows/Assistants  
2005**

The key points to emerge from this data are:

- The majority of “postdocs” in engineering are men (75%) but interestingly the percentage of women has increased from 19% at PhD level to 25% at postdoc, but overall the numbers are small
- In Science women, there has been a slight drop in the participation of women from 45% at PhD level to 43% at the postdoc stage.

#### Pay rates at postdoc level

Figure 2 presents the average annual salaries of researchers in the postdoc group by gender.



The key points to emerge from this data are:

- There is a gender pay gap of approximately €1000 between men and women postdocs in the Science Faculty representing a differential of almost 3%
- In ESS the gender pay is significantly more at over €3000, a differential of almost 10%.

The existence of such a disparity in salaries is surprising. However, before drawing firm conclusions, it would be necessary to control for age, experience and sponsors as different sponsors may set different rates. Appendix B, Table B.17 has further details on researchers salaries from 2002 to 2005.

#### 4.1.7 Academic Staff

Tables 8 – 10 present data on academic staff by gender and department in the Faculties of ESS and Science.

2005

Faculty	Female %	Female	Male %	Male	Total %	Total
ESS	27	17%	130	83%	157	100%
Science	27	17%	128	83%	155	100%
<b>Total</b>	<b>54</b>	<b>17%</b>	<b>258</b>	<b>83%</b>	<b>312</b>	<b>100%</b>

**Table 8 Number and Percentage of Academic Staff in ESS and Science 2005**

Department	Female	% Female	Male	% Male	Total	% Total
Computer Science	19	20%	75	80%	94	100%
Statistics	3	20%	12	80%	15	100%
Mechanical & Manufacturing Eng	2	14%	12	86%	14	100%
Civil Structural & Environmental Eng	2	10%	18	90%	20	100%
Electronic & Electrical Engineering	1	7%	13	93%	14	100%
<b>Total</b>	<b>27</b>	<b>17%</b>	<b>130</b>	<b>83%</b>	<b>157</b>	<b>100%</b>

**Table 9 Number and Percentage of Academic Staff in  
ESS by Department 2005**

Department	Female	% Female	Male	% Male	Total	% Total
Zoology	4	50%	4	50%	8	100%
Chemistry	5	23%	17	77%	22	100%
Botany	2	22%	7	78%	9	100%
Biochemistry	4	21%	15	79%	19	100%
Genetics	2	17%	10	83%	12	100%
Physics	5	16%	26	84%	31	100%
Geology	1	11%	8	89%	9	100%
Microbiology	1	11%	8	89%	9	100%
Pure & Applied Mathematics	2	9%	21	91%	23	100%
Geography	1	8%	12	92%	13	100%
<b>Total</b>	<b>27</b>	<b>17%</b>	<b>128</b>	<b>83%</b>	<b>155</b>	<b>100%</b>

**Table 10 Number and Percentage of Academic Staff in  
Science by Department 2005**

The key points to emerge from the data presented in Tables 8 – 10 are:

- The overall ratio of men to women is 83:17 representing a significant reduction from the postdoc level where it was 61:39.
- A number of departments have only a single women academic; on average there are only 3 women in each of the science departments
- The most feminised department in Zoology with 50% women, but it is a small department with a total of 8 staff.
- As at the other levels, the representation of women in the biosciences is higher than in other fields.

Table 11 presents the breakdown of staff by grade and gender within ESS and Science. It should be noted that figures presented here include the additional categories of Part Time Lecturer and Teaching Assistant, which were not included in Table 2.

Grade	Female	% Female	Male	% Male	Total	% Total
Professor	1	4%	26	96%	27	100%
Associate Professor	4	12%	30	88%	34	100%
Senior Lecturer	9	15%	51	85%	60	100%
Lecturer	31	21%	114	79%	145	100%
Part Time Lecturer	8	18%	36	82%	44	100%
Teaching Assistant	1	50%	1	50%	2	100%
<b>Total</b>	<b>54</b>	<b>17%</b>	<b>258</b>	<b>83%</b>	<b>312</b>	<b>100%</b>

**Table 11 Number and Percentage of Academic Staff in ESS and Science by Grade  
2005**

Grade	Female	% Female	Male	% Male	Total	% Total
Professor	1	2%	26	10%	27	9%
Associate Professor	4	7%	30	12%	34	11%
Senior Lecturer	9	17%	51	20%	60	19%
Lecturer	31	57%	114	44%	145	46%
Part Time Lecturer	8	15%	36	14%	44	14%
Teaching Assistant	1	2%	1	0%	2	1%
<b>Total</b>	<b>54</b>	<b>100%</b>	<b>258</b>	<b>100%</b>	<b>312</b>	<b>100%</b>

**Table 12 Number and Percentage of Academic Staff in ESS and Science by Gender  
2005**

The key points to emerge from this table are:

- Women are disproportionately represented in the lower grades with nearly three-fifths (57%) of women at lecture grades, compared with only 44% of men.
- Less than one woman in ten has achieved associate professor (7%) or professor (2%). This compares with one man in five reaching associate professor (12%) or professor (10%).
- Even if the biosciences where the number of women have been at least equal if not greater than the number of men for several years, they are not following through into academic careers.

Table 13 - 14 present a breakdown of staff in ESS and Science by contract type and gender. Staffs on contracts of indefinite duration have the same entitlements as staff on permanent contracts including access to promotions but their salaries are paid for from self-financing activities, most commonly taught master's programmes. In the event that the College ceases to offer these programmes, these contracts will be terminated. Permanent employees by contrast are paid for in the main from the state grant and their salaries are not associated with specific income streams. Those on fixed term contracts

are generally employed for a specific purpose e.g. to backfill for a permanent employee who is on career break/leave of absence or on a temporary basis pending filling of a permanent post. See Appendix E for contract types and definitions used by Trinity College.

Contract	Female	Female%	Male	Male%	Total	Total%
Permanent	26	13%	173	87%	199	100%
Contract	27	24%	85	76%	112	100%
Total	53	17%	258	83%	311	100%

**Table 13 Academic Staff in SE by contract type 2005**

Contract	Female	Female%	Male	Male%	Total	Total%
Permanent	26	49%	173	67%	199	64%
Contract	27	51%	85	33%	112	36%
Total	53	100%	258	100%	311	100%

**Table 14 Contract Type in SE by gender 2005**

The key points to emerge from Table 13 and 14 are:

- A higher proportion of men are on permanent contracts: two-thirds (67%) of men compared to just under half (49%) of women.
- There are a higher proportion of women on contracts (51%) compared to men (33%).

## Appointments

Grade	Female	Female%	Male	Male%	Total	Total%
Permanent Lecturers	5	16%	27	84%	32	100%
Contract	20	27%	54	73%	74	100%
Professor	0	0%	1	100%	1	100%
Total	25	23%	82	77%	107	100%

**Table 15 Appointments by Grade for ESS and Science Faculty  
2000 – 2004\***

The key points to emerge from Table 15 are:

- During the period 2000 to 2004, 32 people were appointed as permanent lecturers in the ESS and Science faculties, of which only 16 per cent were women.
- Over one-quarter of appointees at contract grade were women.
- In total, just less than one-quarter of all appointees in ESS and science faculty were women.

### 4.1.8 Promotions

For financial reasons, Trinity College has operated a tight quota system for promotions for several years. Normally, only 8 staff are promoted from lecturer to senior lecturer grade and only 6 from

\* Data from Senior Lecturer's Annual Report annually from 2000 to 2004

senior lecturer to associate professor across the entire University in any one year. Although most staff proceed stepwise from one grade to the next, it is possible in exceptional circumstances for staff to bypass the senior lecturer grade and proceed directly from lecturer to associate professor.

There is no quota for junior promotions (confirmation in appointment/promotion, merit bar). Applicants are considered purely on their own merits. Exceptional candidates may be considered for accelerated advancement at various points on the lecturer scale. There is a merit bar on the lecturer scale and while no quota applies, in order to pass the merit bar, staff must go through a formal assessment process and be interviewed. Although the majority are successful, it is not unusual for candidates to be held for a period of time usually because their research output has been insufficient.

	Recommended		Awarded	
	Female	Male	Female	Male
2001/02	1	4	1	4
2002/03	2	1	2	1
2003/04	4	6	2	2
2004/05	5	3	1	1
<b>Total</b>	<b>12</b>	<b>14</b>	<b>6</b>	<b>8</b>

**Table 16 Accelerated Promotion approaching or at the Merit Bar  
SE 2001 - 2005**

The key points from Table 16 are:

- 12 women and 14 men have been recommended for accelerated promotion at or approaching the Merit Bar
- Six women (50%) were awarded accelerated promotion and just over half the men were awarded the same.

A new promotions system for junior promotions has been introduced with effect from the 2004 – 2005. It will be introduced for senior promotions from 2005-2006. The aims of the new system are primarily to improve equity, transparency and the quality of the feedback to unsuccessful candidates.

Status	Female	Female%	Male	Male%	Total	Total%
Applied	13	27%	35	73%	48	100%
Promoted	3	21%	11	79%	14	100%

**Table 17 Promotion from Lecturer to Senior Lecturer in SE 2001 - 2005**

The key findings for Table 17 are:

- 48 people applied for promotion from lecturer to senior lecturer between 2001 and 2005.
- Of these who applied, just over one-quarter (27%) were women and three-quarters men (73%).
- Only 14 people were actually promoted from lecturer to senior lecturer.
- Proportionately, men were somewhat more successful than women; 11 men (31% success rate) compared with 3 women (23% success rate).

Status	Female	% Female	Male	% Male	Total	% Total
Applied	9	31%	20	69%	29	100%
Promoted	3	50%	3	50%	6	100%

**Table 18 Promotion from Senior Lecturer to Associate Professor in SE 2001 - 2005**

The key findings for Table 18 are:

- 29 people applied for promotion from senior lecturer to associate professor between 2001 and 2005.
- Of these who applied, nearly one-third (31%) were women and just over two-thirds were men (69%).
- Only 6 people were actually promoted from senior lecturer to associate professor but half of those promoted were women.

Status	Female	% Female	Male	% Male
Applied for Promotion	7	13%	12	5%
Received Promotion	2	4%	3	1%
Total Number of Staff	54		258	

**Table 19 Proportion of staff who have applied and are promoted in SE 2005**

The key points to emerge for Table 19 are:

- There are 54 women working as academics in SE and 13 per cent applied for promotion in 2005.
- Four per cent of women academics in SE were promoted in 2005.
- There are 258 men working as academics in SE and five per cent applied for promotion in 2005.
- Only one per cent of male academics in SE were promoted in 2005.

Accelerated Promotions:

- During the period 2001 – 2005, 9 men applied for promotion from lecturer directly to associate professor and 6 men were promoted. No women were promoted from lecturer to associate professor because none applied.

#### 4.1.9 Fellows

Trinity College Dublin admitted the first women students in 1904, 312 years after its foundation, and the first woman joined the academic staff in 1908 [4]. It was not until 1968 that women achieved full equality with their male colleagues when they became eligible for election to Fellowship, a mark of distinction in research. The fact that women were not eligible for Fellowship precluded them from holding most of the major managerial positions (officerships) in the College; although not a legal impediment to academic progression, *de facto* it made it more difficult.

Only full-time academic staff are eligible for election to Fellowship. Professors are automatically elected the year after their appointment so that all Professors are effectively fellows. Although not a

requirement *de facto* all associate professors are Fellows having been elected when either a Lecturer or a Senior Lecturer.

Table 20 provides a breakdown by gender of Fellows in ESS, Science and the rest of the university (Other).

Faculty	Female %	Female	Male %	Male	Total %	Total
ESS	20%	5	80%	20	25	5
Science	7%	4	93%	51	55	4
Other	22%	27	78%	98	125	27
<b>Total</b>	<b>18%</b>	<b>36</b>	<b>82%</b>	<b>169</b>	<b>205</b>	<b>36</b>

**Table 20 Fellows 2005**

The key points which emerge from this data are as follows:

- The first women Fellows was elected in 1968
- In 2005, while women comprise of just under 30 per cent of the permanent staff in the College as a whole, they comprise only 18% of the Fellows.
- In ESS faculty, 20 per cent of fellows are women but in the Science Faculty, only 7 per cent of fellows are women, but interestingly the percentage of women in ESS is in permanent posts (from whom the cast majority of Fellows are elected) is only 13%
- Certain officerships (senior management positions) can only be held by Fellows, namely Vice Provost, Senior Lecturer, Bursar, Registrar and Senior Dean.
- There is therefore only one academic executive officer (member of the senior management team) position open to non-Fellows, namely Dean of Research, but given the nature of this position *de facto* it will be held by a Fellow.

Grade	Female %	Female	Male %	Male	Grand Total %	Total
Professor	5%	1	95%	20	21	100%
Associate Professor	10%	3	90%	28	31	100%
Senior Lecturer	18%	4	82%	18	22	100%
Lecturer	17%	1	83%	5	6	100%
<b>Grand Total</b>	<b>11%</b>	<b>9</b>	<b>89%</b>	<b>71</b>	<b>80</b>	<b>100%</b>

**Table 21 Number and percentage of Fellows in SE by grade**

The key points raised in Table 21 are:

- Most fellows in SE are associate professors (31 people) yet only three of those are women.
- Nearly one-fifth of fellows at senior lecturer are women (18%).



#### 4.1.10 Decision making and management positions

Apart from positions which are restricted to Fellows, all other management positions are open to both men and women. Since Faculties were introduced, there have been 4 women Deans including one of ESS; a small number of women have served as Heads of Department and under the new academic structures 4 of the 20 Heads of School are women (1 out of 9 in SE).

In senior positions, there has been (including those currently in office) 1 woman Senior Lecturer (chief academic officer), 1 woman Dean of Graduate Studies, 1 Junior Dean (responsible for student discipline, 2 registrars, 1 woman Bursar and 2 women Vice-Provosts. 1 woman served as pro Dean of Research for a period of 9 months. Thus the number of women involved in senior management positions is very limited. It is difficult to see how this can change while the numbers of women in professors and associate professors is so small.

Since 1989, all major committees, including nominating committees for appointments and search committees for chairs must have representation from both genders [5]. While this is clearly essential, the inevitable consequence has been that women academics and in particular those in SE spend significantly more time at an earlier stage in their careers than their male colleagues serving on College committees.

Prior to the Universities Act of 1997, the College's Board (Governing Body) was composed entirely of Fellows, and therefore almost entirely male. The electoral reforms following the Act were designed to ensure that all sections of the College community and women and men are represented on the Board. One third of the members of the first Board (2001 – 2005) elected under these new arrangements were women, while the current Board has just under one-third women. There has therefore been no need to invoke the gender clause in order to ensure a balanced representation.

## 4.2 TASK 2 IMPACT ASSESSMENT OF INITIATIVES TO DATE

### *Task description*

*This task will examine the progress made on the implementation of the recommendations of the previous reports on women as they apply to women in SE, and for those which have not been implemented and which are still relevant, examine the reasons why.*

The reports that were reviewed and assessed are:

- *Report of the Committee on the Position of Women Academics in College*, Ruane F., TCD, 1989 [6]
- *Women Academics and Promotions*, Wright B., TCD, 2002 [7]
- *Report on the Day Nursery Working Party*, McAleese D., May 2002 [8]
- *Best Practice Models for the Career Advancement of Women in Academe*, Drew E., TCD, 2002 [9]

Findings include:

1. Some progress has been made especially following the first report as it led to the requirement to have both genders represented on all major committees, including

nominating (appointments) and search (for professors) committees. It also led to the establishment of the Equal Opportunities (now Equality) Committee chaired by the Vice-Provost.

2. A number of the recommendations required financial commitments and this proved difficult, as there were competing priorities for the limited budget available.
3. There was a lack of clarity as to responsibility for implementation of the recommendations.
4. A central database holding disaggregated gender statistics is not yet established (as recommended by Wright, B).
5. No troubleshooters available for academic staff to reduce the increasing administration burden.
6. The proposal to establish a competitive sabbatical system for women following maternity or adoptive leave was not implemented but the SFI Career Development Award provides a more powerful and prestigious scheme.
7. Each report discussed the childcare availability to academic staff and offered a variety of recommendations. The 2002 report led to several improvements in the Day Nursery including longer opening hours.
8. Earlier this year, a report on childcare places was commissioned by Barnardos [10] and the recommendations are currently under consideration but there is a firm commitment to increase capacity in the short term pending the development of a new facility with a capacity for up to 100 children.

### **4.3 PROFILE OF WOMEN RESEARCHERS**

#### *Task description*

*This task will be concerned with an examination of the research profile of existing women researchers in Trinity with a view to ascertaining the extent to which it is different from that of men. This will include the identification of the disciplines in which women are well /under represented the level of interdisciplinary, and their publication profile.*

#### **4.3.1 Introduction**

There is no integrated data regarding the profile of women researchers in SE in Trinity College Dublin and the Research Support System provides only partial information. It was therefore not possible in the timescale of the Planning Grant to conduct a detailed quantitative analysis. On the publication side, there are very significant variations between disciplines. For example, in Computer Science it is normal to publish in international conferences, where papers are fully peer-reviewed and which have very high rejection rates, higher than many journals. Whereas in the physical sciences, the emphasis tends to be on publishing in high impact journals. The order in which the authors names are listed is highly significant in some disciplines, but less so or simply different in others.

### 4.3.2 Grant Applications

In virtually all areas of SE, the ability to raise research income is essential for a successful research career. Table 22 shows the breakdown by gender of the number of applications for research funding across the various funding sources.

Grant Type	Female	% Female	Male	% Male	Total	% Total
Non-EU	72	57%	172	46%	244	49%
SFI	42	33%	165	45%	207	42%
EU Proposals	12	10%	33	9%	45	9%
<b>Total</b>	<b>126</b>	<b>100%</b>	<b>370</b>	<b>100%</b>	<b>496</b>	<b>100%</b>

**Table 22 Percentages and Number of Grant Applications from ESS and Science  
2003-2004**

The key findings from this data are:

- In the academic year, 2003 – 2004, 25% of the applications were from women and 75% from men, which is in fact slightly higher than the overall ratio of men to women of approximately 80:20 in SE.
- It was not possible to link this data to the research account information held in the Finance Information System and therefore no conclusions can be drawn with regard to relative success rates between men and women.

Table 23 shows the average sum of money requested from the sponsor as part of a research grant application.

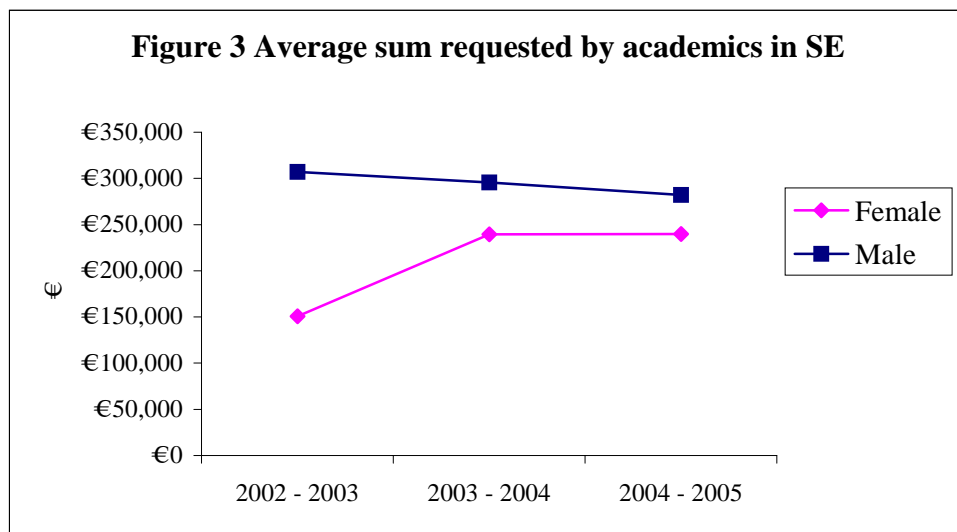
Year	Female	% Change	Male	% Change
2002 - 2003	€150,587	0%	€307,143	0
2003 - 2004	€239,552	59%	€295,733	-4%
2004 - 2005	€239,675	59%	€282,180	-8%

**Table 23 Percentage change in the average amount requested by researchers in SE  
Compared with 2001**

The key findings from this data are:

- The amount requested by women has risen in women 59% from 2001 to 2005 compared to a small decrease of 8% in the amount requested by men over the same period.
- While women have significantly increased the amount of money requested they still ask on average for less than men.

The data is presented graphically in Figure 3.



#### 4.4 Task 4 Identification of Barriers for Women in SE

##### *Task description*

*Some of the barriers to the progression of women in SE have already been identified in previous internal reports and others in many international studies. However, these need to be categorised and placed in the context of the mission and goals of Trinity today. Both actual and perceived barriers will be considered as they apply to those currently in Trinity and to those who have left.*

The purpose of this task was to identify the barriers to the progression of their careers faced by women academics in SE. The main data was collected through qualitative means, including focus groups, interviews, email discussion groups, and open ended responses from an internet survey.

Two focus groups were convened. The first homogeneous group were of female permanent academics from science and engineering faculties. It was held on the 6<sup>th</sup> July 2005 and Professor Jane Grimson ran the group. Twelve women attended and the notetaker was Caroline Roughneen. Appendix A.1 shows the list of participants. Appendix A.2 shows the list of questions and topics that were covered in this focus group.

The second focus group comprised of twelve women postdoctoral staff working in Trinity College Dublin. An email was sent to postdoctoral staff who are members of the Trinity Research Staff Association. The focus group was held on the 15<sup>th</sup> July 2005 in the Large Conference Room in the O'Reilly Institute. Dr. Eileen Drew ran the session with Caroline Roughneen taking notes. Appendix A.3 shows the list of participants and Appendix A.4 shows the list of questions and topics that were covered by this focus group.

##### **4.4.1 Barriers Identified**

The barriers identified by focus groups, interviews and emails have been summarised below.

*'Slow Track' of Academia*

There was the perception by women that the profile of a researcher has changed over the past years. The age profile of a PhD student tends to be increasing and the length of time taken to finish a PhD appears to be between 3-5 years (anecdotal evidence from qualitative analysis). Due to this lengthening of time taken to complete a PhD, this leads to Post Doctoral researchers being, on average, in their early thirties. The trend has been '*slow tracking*' where most researchers tend to get major grants when they are in their forties. This was felt to exclude women because their "*academic track record is damaged*" when they have to take time out for children.

### *Promotion Quotas in Trinity College Dublin*

The quota system of promotions was found to be a major factor for both men in women in being a barrier to their career progression. It was felt that 'merit' was not a factor and feelings of frustration were evident.

### *Lack of Career Progression*

One woman suggested her career is '*like a do loop, where she begins one postdoc, finishes it, goes back to the start, begins another postdoc, finishes it, etc.*'. She stated that '*there is no career track nor career progression at the moment*'. The entire group felt engineering is seen as a profession and can work well in industry as the '*equivalent for a science professional is a researcher*'.

### *Grant Systems*

There was an unsettling feel about the grant systems within Trinity College Dublin. Women tended to feel that "*applying for proposals take a long time and is quite disheartening when declined*" and that "*deadlines for grants are very unrealistic especially if the main researcher is juggling a family*". One academic suggested women need to 'risk take' and become more 'ballsy' in applying for grants as the 'macho world of science is not female friendly'.

### *Children/Childcare*

Women do not reach a stable career path quickly enough and feel that "*women who have children do not reach senior positions*". It was felt that because they do not reach senior positions prior to having children; the women are not financially stable. There can also be a "*low level of satisfaction for a women researcher because of juggling family and researching*".

Women stay in '*soft*' money positions. Male researchers are more productive during the time when women are having children. Women academic track records are damaged. One woman questions that "*if women do not make senior lecturer before having children, it becomes more difficult for a woman to do so after [having children]*". A woman will query whether it is financially worth her while continuing on paying for childcare. Another woman noted that "*one needs to have a research team set up before taking maternity leave*". One woman suggested that women do not "*play the game right*" so feels it is not a gender issue but more of a personality issue. Other women suggested that this view maybe valid for women prior to having children but a woman's position within academia does change after having children. "*Late nights are not noted and women are expected to behave and continue as before they had children*".

### *Job Insecurity/Financial Pressures*

One woman that '*it's not just having children*' that cause women to leave but it could be '*the instability is too stressful*' of doing postdoc after postdoc. There was a feeling by one woman that she was '*expecting to be successful (i.e. I should be a lecturer)*' but '*feels like a huge failure*' for still

being a postdoc. Other financial pressures seen as a barrier for women staying in the academic world include: cost of things in Dublin where there is *'not an attractive enough salary to continue on working in academia'* and *'can't get a mortgage'* [because of being on a contract] and *'tied down with family'*, *'women will not have permanency, stability and no benefits to stay'*.

### *Post-Doctoral Issues*

After finishing a PhD, the first preference for all was to do a postdoc as this is seen as a *'vital stage, especially in SET'*. There was a feeling of despondency about their career progression as many felt that they have to *'do post-docs for a long time as there is no lectureship positions'* in science. There was a belief that other disciplines do not have to do so many post-doc positions. Most of the members did feel that *'if you want to do research, you MUST do a post-doc'*. It was felt though that *'women take time out, men remain [in academia], and so have more publishing'*.

It was noted that *'there is no such title in Trinity College Dublin called post doctorate'*. The current situation regarding researchers in Trinity College Dublin seems to be *'very confusing'* with one woman mentioning that Trinity's researchers are known as *'Research Assistant or Research Fellow'* with both positions holding *'different rights'*. One woman mentioned that *'nobody knows what a postdoc does outside academia'* and it needs to be reinforced that they *'are not students'*.

PostDoc researchers are *'not often listed in the department'* and they *'may not be in the TCD calendar'*.

### *Lack of Confidence*

It was put forward that women have lower self confidence than their male counterparts which may influence them in not putting themselves forward for major grants or promotion. There was a strong feeling that women do have to *"learn how to believe in themselves"*.

### *Unconscious Bias*

One woman felt excluded from the *"single, boozy male"* social and cultural environment. One member of the Post Doctoral group mentioned that her supervisor feared *'she'll do something stupid like have babies and get married'*. One other woman stated that having babies changes your career and said that *'my husband had a different career because he didn't have the baby'*. One woman noted that *'male lecturers/colleagues go to the pub with male postdocs and they discuss projects'*. She felt that she is *'not given the opportunity to do that because it's "after hours"'*. Another stated that it should be *'your choice whether you want to go to the pub or not'*, implying that going to the pub or not should not affect one's position in the department. It was believed at the focus group that women *'must adapt their personality'* to fit the culture and *'not be aggressive, but assertive'*. The group suggested that women in SE need to receive *'training to get your voice across'*.

### *Administrative Work*

One woman felt that she is left to tidy up the lab while her male counterpart does very little tidying up. Most members felt that *'women end up taking on more administration'* and one person suggested *'maybe it's just part of a woman's personality'* to do the administration. The women suggested that generally women tend to apply for contract positions and they are more prepared to take on more menial tasks than men. It was suggested that this was because some women tend to lack confidence.

#### 4.4.2 Case Studies

Three interviews were held with women postdocs. Two women have completed their PhD in the past year and are now working as research assistants while another completed her PhD several years ago and has returned to academia after years working in Industry. The woman from interview one, Jane, has decided to finish her postdoctoral work early and leave academia, the second woman, Anne, is undecided while the third woman has given herself a deadline to get a permanent position otherwise she will return to industry.

The third case study will not be discussed in the she is easily identifiable. The names of the women will not be revealed in this report to ensure confidentiality issues. Appendix A.5 has further details on the issues discussed in the interviews.

##### Case Study One                      Definitely leaving Academia

Jane is 32 years old.

##### *Education Background*

4 Years:            UCD Degree (hons) in Science

1 Year:            UCD Masters (taught) in SE

5 Years:            PhD Trinity

1 Year +:           Post Doctorate in UK

Current post:    Post Doctorate in Scotland

##### Future Plan

Apply for Lecture position in SET area or computing in DIT. They *“offer more time off, the salary scales are not so different to universities, less taxing and allows time for consulting”*.

##### Leaving Academia?

###### 1/ Over-stimulation

She feels *“over challenged”* in her current postdoc and *“wants something more hands on”*. She *“wants to lecture and be less research orientated”*. She wants *“less building on theory and more people interactive”*.

###### 2/ Lack of Career Progression

There is a *“lack of confidence that career path will go where I want”*. She *“knows I will get a lectureship but will not be promoted to Senior Lecturer”*. She is afraid that she will *“feel trapped”* at this lower position. She believes she will *“have to work very hard (normal 9-5 hours is not hard enough)”* and that *“research orientated work makes senior lecturer”*. To make senior lecturer she says that you must *“take less holidays, take work home with you (mental and actual), and work weekends”*. An academic also has to be on *“unpaid committees and be mentally taxed all the time to be successful”*. She believes *“teaching and some research will not get you Senior Lectureship”*. She knows this by *“observing others in departments”*

###### 3/ Contract Work

The starting off of academic life is “contract based”. You are “back to where you began after finishing a postdoc”. She is “getting out now before delaying what is inevitable, particularly if I wants children (as women probably drop out for a year or two)”

### Research and Publications

She is “annoyed that it is that difficult to get ahead and that it is not good enough to be a decent lecturer with some research”. She is “angry that this is not enough to be successful in the academic system”. She thinks “the type of research has changed in the past few years where people produce research for the sake of research”. She sees that “people produce more to help them progress but the papers are less good (substandard)”. She “sees a lack of quality high standard research”. She states that an “academic needs to publish 2 papers per year to get ahead”. There are “informal careers discussions about what you need to publish and how much” but finds it “very secretive” and “doesn’t know exactly what you need to do”.

### Teaching and Role of an Academic

She “presumed she could produce good research every couple of years”. She believes an “academic job is to learn and be there for the undergraduates and postgraduates to ask questions” while “now they just learn specifics on a need to know basis”. Because of the intensity of research, there is “less time for students” and she is “very disillusioned”.

### Case Study Two                      Should I Stay or Should I Go?

Anne is 28 years

#### Education Background

3 Years	BSc
2 Years	Masters in a SE subject
3 ½ yrs	PhD
<1 yr	Postdoctoral position (TCD)

#### Career plans

To “find a job that is permanent, offers a good pay scale, has career progression, career stability and using PhD Science”. She “can’t see getting all these in academia”. She is leaving because most universities “offer short term lectureships”. She wants to learn “new skills” but most postdocs positions she could apply for are “using her current skills”. She questions “how many more postdocs do I have to do until I have the skills?” She feels her career options are:

1. Lecture at a University (“would love to lecture but not researching”)
2. Teaching at an Institute of Technology
3. Work at SFI/Enterprise Ireland (“investigate who is approved funding”)



4. Pharmaceutical company (would “*need to start on production floor for two years – PhD is not valuable*”)
5. Retrain in another field to use in industry (“*uses science degree, need to do more exams, once trained, employable*”)

Differences between fe/male academics in the obstacles they face

She believes there are no differences in the obstacles fe/male academics face “*until you reach family bearing age*”. She thinks women ask themselves “*can I handle temporary contracts or set down roots?*”

Why Women Leaving Academia

1. “*Lack of job stability*”
2. “*no clear career progression*”
3. “*lack of positions available in Ireland*”
4. “*lecturing is not paid well in Ireland*”
5. “*Get sick of competing/negotiating to use labs (limits you to the amount of productive research you can do which affects publishing)*”

Final Word

“*I can work really hard, get no results and look like I have done nothing – the effort in does not equal the output*”

#### **4.4.3 Women who have left Trinity College Dublin**

Emails were sent to women working in SE who had left Trinity College in the past four year (See Appendix A.7). The list of women was obtained from the Mrs. Pat Daly of the Staff Office (see Appendix A.6 for further details). Responses were received from six of the eight women. They were asked why they left Trinity College. As the main reasons were retirement and permanent positions in other academic institutions, it was decided not to follow up with interviews.

#### **4.5 TASK 5 STAFF DEVELOPMENT NEEDS**

*Task description*

*This task will assess the developmental needs, both personal and academic, of women in SE at all stages of the career ladder. The effectiveness and relevance to women in SE of the proposed mentoring scheme will be examined.*

##### **4.5.1 Career Development Scheme**

Two units are responsible for meeting the development needs of the College, namely the Staff Development unit in the Staff Office and the Centre for Academic Practice and Student Learning (CAPSL) in the Senior Lecturer’s Area. The Staff Development Unit focuses more on meeting the development needs of administrative and support staff while the relatively recently established

CAPSL, as the title suggests, focuses exclusively on academics. However there are obviously a number of areas of overlap and the two units work closely together.

Under the Sustaining Progress agreement, the College was required to produce an Action Plan and a number of the actions agreed under this plan are concerned either directly or indirectly with Staff Development. In particular, Performance Management and Development will be introduced for all staff with effect from January 1, 2006, and secondly a mentoring scheme for academics is being developed. Since both schemes are only in their pilot phase it is too early to assess their impact.

From the focus groups, interviews, emails and survey data, there was a general consensus that there was a need for a formal career development structure. It was believed that women react positively to a formal career structure, allowing them to plan, organise and manage their career path. The current career system in Trinity College Dublin appears to be very *ad-hoc* and the main responsibility lies in the individual academic finding a mentor, identifying suitable grant opportunities, and learning where and how to publish.

In recent years, a number of initiatives have been launched by the Research Committee to support early career academics. While these are targeted at both women and men, they provide valuable assistance at a critical stage. Of particular importance are the start-up grants for new lecturers under which up to €20,000 is available and the research incentive scheme which provides up to €5,000 as seed money to support an application for larger external grants. On the staffing side, the College has all the standard policies in place including Equal Opportunities; Recruitment; Bullying and Harassment; teleworking; job-sharing; adoptive, maternity, paternity, and carers leave, etc. [[http://www.tcd.ie/Staff\\_Office/policies/](http://www.tcd.ie/Staff_Office/policies/)]. In addition the Personnel and Appointment Committee operates an Emergency Staffing Fund which provides cover for departments when an employee is on maternity, carers or sick leave.

#### **4.5.2 Springboard Initiative**

Key issues that have arisen from this study include women's feeling of lack of self-confidence in the academic world. The Springboard Initiative is a personal and work development programme for non-management women. It was introduced in Trinity College by the Staff Development Officer for the first time during the last year and was offered for a small cohort of administrative staff. Women must commit to four 1-day sessions over a period of three months. They also have to complete a workbook dealing with different issues including: CV, building confidence in their surroundings and work-life balance issues. The women who participate in this programme tend to form a close self-supporting network. Currently, the programme is not available to academic staff, postdocs or students. [<http://www.springboardconsultancy.com/springboard.htm>]. The University of Cambridge adapted the Springboard initiative for female undergraduate students in SE with a view to trying to address the 'leaky pipeline'. A study visit to Cambridge University took place during the period of the Planning Grant to investigate an initiative they have in place since 1999 entitled "Women in Science, Engineering and Technology Initiative (WiSETI)". This group promotes the awareness of gender in SET fields in Cambridge by applying methods such as conferences, workshops and mentoring. See Appendix C for details. The results have informed the recommendations for action in the accompanying Development Award proposal.

#### **4.6 SELF-ASSESSMENT SURVEY**

A survey was designed and re-drafted during July and August 2005, following feedback from the interviews, focus groups and consultations with interested parties. It was delivered *via* the College intranet as it was felt that this would reach the target audience more effectively and encourage a higher response rate than a paper-based survey. It would also greatly facilitate subsequent analysis. The questionnaire can be found in Appendix D.3.

An email was sent to all academic staff on the staff lists associated with departments in the SE. The survey went live towards the end of August 2005 and there was a strong initial response. A reminder email was sent on in early September 2005. See Appendix D.2 for the email sent to staff.

There was a 21% response rate. A breakdown of who were on the staff lists was obtained from Information Systems Services which provided the original email lists for the target group. See Appendix D.1 for further details.

#### 4.6.1 Responses and Methodology

In total, 211 academics in SE replied to the survey. However, 38 people did not include their gender so these cases are omitted from the analysis as a central aim of the survey was to investigate whether there are gender differences in perceptions, attitudes and views regarding certain areas of the College. It should be noted that the response rates appear lower than expected because of the low response from research students.

Tables 24 and 25 present details of the response rates.

	Female Population	Female Survey Responses	% Response
Professor	1	0	0%
Associate Professor	4	3	75%
Senior Lecturer	9	3	33%
Lecturer	31	19	61%
Research Fellow/Assistant	123	34	27%
Research Student	125	2	2%
Other		12	
<b>Total</b>	<b>293</b>	<b>73</b>	<b>25%</b>

**Table 24 Response Rate for Women**

	Male Population	Male Survey Responses	Proportion Response
Professor	26	9	35%
Associate Professor	30	8	27%
Senior Lecturer	51	20	39%
Lecturer	114	38	33%
Research Fellow/Assistant	190	22	12%
Research Student	232	1	<1%
Other		2	
<b>Total</b>	<b>643</b>	<b>100</b>	<b>16%</b>

**Table 25 Response Rate for Men**

The key observations in relation to response rates are:

- 42% of the respondents were women and 58% men. Although men significantly outnumber women in SE, but given the subject of the questionnaire, it is not surprising that there was a higher response rate from women than men.
- Nearly two-fifths of the respondents were from ESS with the remainder from Science (60%). Of those who responded from ESS, one-third were women, and in science, nearly 50% were women (47%).
- Most of the responses came from lecturers (57), with 67% of those being men.
- The highest response for women was from the research fellows, “postdoc” group.
- All 9 male professors completed the questionnaire; there is only one female full-time permanent professor in SE and because she can be identified she did not complete the questionnaire.
- The highest proportionate response for women came from associate professors with three out of the four associate professors responding to the questionnaire.
- Over three-fifths of all female lecturers in SE responded while only one-third of senior lecturers replied.
- Two-fifths of all senior lecturers responded to the survey while over one-third of professors responded. Similarly one-third of male lecturers replied to the questionnaire. The low response of research fellows/assistants/students may be because not all fellows/assistants/students would be on the staff lists.
- 95% of women who responded work full-time while 97% of men work full-time.
- Over double the number of men who responded are on permanent contracts (60%) while less than a third of women (28%) are on the same type contract.

#### 4.6.2 Promotion Issues

Table 26 presents a summary of the responses from those who successfully applied for promotion.

	Female	% Female	Male	% Male	Total	% Total
Yes	19	59%	47	75%	66	69%
No	13	41%	16	25%	29	31%
Total	32	100%	63	100%	95	100%

**Table 26 Successful on Promotion**

The key findings are:

- Of those who responded, more women proportionately have applied for promotion (63%) compared with men (53%).
- Women have been moderately successful with three women in every five who apply for promotion being successful compared with three in every four men being successful.

Respondents were asked to comment on why they felt they were unsuccessful in any promotion attempt. (f) denotes female respondents while (m) denotes male respondents to the question. Reasons for being unsuccessful included:

- Quota System

*“the quota system (f)”*; *“limit on numbers. Promotions ‘ear-marked for the favoured few (men)’” (f)*; *“feedback says ‘you reached the criteria for promotion but not everyone can be promoted’” (f)*; *“restricted number of promotions available”(m)*; *“not enough senior lectureships available – successful second or third attempt”(m)*; *“limited number of positions available”(m)*; *“faculty quotas”(m)*; *“A ridiculous quota system, that only promotes with reference to the bottom dollar as opposed to merit!”(m)*

- Lack of Career Structure/Research Record

*“research output not good enough”(f)*; *“lack of international publications”(f)*; *“lack of publication”(m)*; *“inadequate research record”(m)*;

- Lack of Feedback/Others

*“I think I was unsuccessful on my first attempt, but at the time they didn't tell you their reasons for rejection, so I don't know!”(m)*; *“Failing of College Committee and its Chair. Concomitant lack of support from within hierarchy and "inner circle" you refer to”(m)*; *“2 attempts for Ass. Prof., ranked 'just missed it' the first time, and 5 years later, 'nul points'. No reason available despite attempts”(m)*

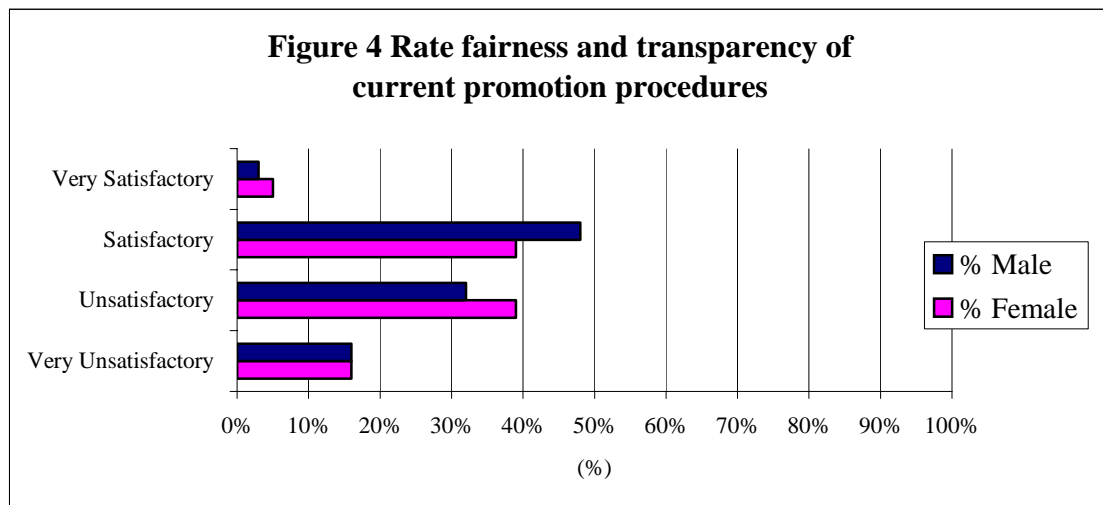
*Why one wouldn't go forward from promotion*

Nearly two in every five female respondents (38%) and 27% of men stated that the main reason for not going forward for a promotion was because they are on a temporary contract (Table 27). The least reason for both men and women was the longer working hours. This was not seen as a deterrent to promotion.

	%			
	Female	Female	Male	% Male
On temporary Contract	28	38%	27	27%
Loss Of Current Flexibility	9	12%	14	14%
Below the Merit Bar	10	14%	10	10%
Longer working hours	8	11%	7	7%
Total (women, men)	73		100	

**Table 27 Reasons for unsuccessful application for promotion**

Figure 4 show that most men rate the current promotion procedures as satisfactory or very satisfactory. More women than men find the transparency of the promotions procedures as unfair.



#### *Why the Promotions Procedures are unsatisfactory*

Respondents were asked to describe why they consider the fairness and transparency of current promotions procedures ‘unsatisfactory’ or ‘very unsatisfactory’. Issues included:

- Lack of knowledge/no information on promotion procedures

*“poor information on what positions are available to apply for”(f); “I have no idea what the current promotion procedures are!”(f); “I didn’t receive any information on the procedure at all”(f); “completely unaware of promotion procedures at TCD”(f); “It is unclear what needs to be done to get to Senior Lecturer and it appears that positions are limited which acts as a disincentive”(m).*

- Political promotions

*“the opportunities rarely exist and when they do they are predetermined political decisions” (f); “jobs tend to be lined up for people already in the department”(f); “I do not think that the actual quality of the candidates is being considered but other political issues. Besides the strong support of Heads and/or Deans seem to be essential and if your Head does not push strongly there is nothing to be done”(f); “Apparently political”(m); “there are less positions that there are qualified candidates - politics comes into play for the final selection”(m).*

- Lack of transparency regarding promotions

*“lack of transparency and lack of specific benchmarks that must be achieved to attain promotion(f); “No clear targets given”(m); “it is based on research, research and more research, repetitious papers and favouritism. Being useful doesn't count!”(m); “any promotion system that is ultimately dependent on the availability of resources is unlikely to be fully transparent. I think that staff in some disciplines feel that their achievements are unfairly compared with those of staff in other - perhaps already better resourced – disciplines”(m).*

- Lack of career structure for researchers/no promotions available

*“No career structure for post-doctoral fellows, beside applying for a lectureship, there are very few lectureship positions opening each year”(f); no career structures in place to gap between postdoc and lecturer positions and certainly no help for guidance”(f).*

- ‘Soft Research’

*“There is a bias towards men, scientists and 'theoretical' research. Have been told that with a successful publication/funding record and having achieved national recognition that my work is 'too applied and policy-oriented!'"(f).*

- Few positions available/Quota System

*“The low number of positions available at senior level clearly outnumber those who should have them (based on merit). I am reluctant to apply because of the number of people I know and admire who have been unsuccessful.”(f); “I do not think that the quota system is fair -- it means that those who merit promotion may not achieve it. If the quota is abolished I am sure there will still be an effective quota due to financial constraints”(f).*

*“There seems to be a bottleneck at the level of lecturer to SL, thus making it harder for those who would normally 'qualify' for promotion to achieve it. Also the current procedures seem too dogmatic and formulaic, so that excellence in one particular area (e.g. research) may not be enough”(m); “None of the terms to describe what is sufficient performance to achieve promotion are objective and no guidance is given to what they might mean in a subjective or relative context. Quotas for promotion to Senior Lecturer and higher are extremely discouraging and inappropriate for a professional system designed to encourage and reward performance”(m); “Quotas are ridiculous and bad for morale, especially when see other Universities promoting on mass. If promotion is merited through academic achievement then it should be awarded without reference to a quota!”(m).*

- Merit Based System

*“promotion is a random process, quota is impossibly small, requirements for promotion appear completely subjective and promotion appears to be a political rather than a merit process. It is fundamentally unsound”(m); “Promotion should be merit based and not subject to quotas. At present staff who are deemed "promotable" are not being promoted due to quotas: this is very discouraging. UCD has successfully introduced a merit based system”(m); “Number of promotions is determined by finance, not merit”(m).*

- Research Vs Teaching

*“The real role teaching and research play in promotion is uncertain, at least in terms of perception/observation”(m); “the balance in favour of research over quality lecturing is wrong”(m); “System does not reward teaching. Very narrow metrics used to assess publication”(m); “Excellence in teaching is not valued. Far too much emphasis is placed on research funding and the quantity rather than quality of research publications.”(m); “There is not a clear criteria based assessment for 'excellence' or otherwise in teaching, research or administration”(f); “biased towards research, but not equal opportunity to do this”(f).*

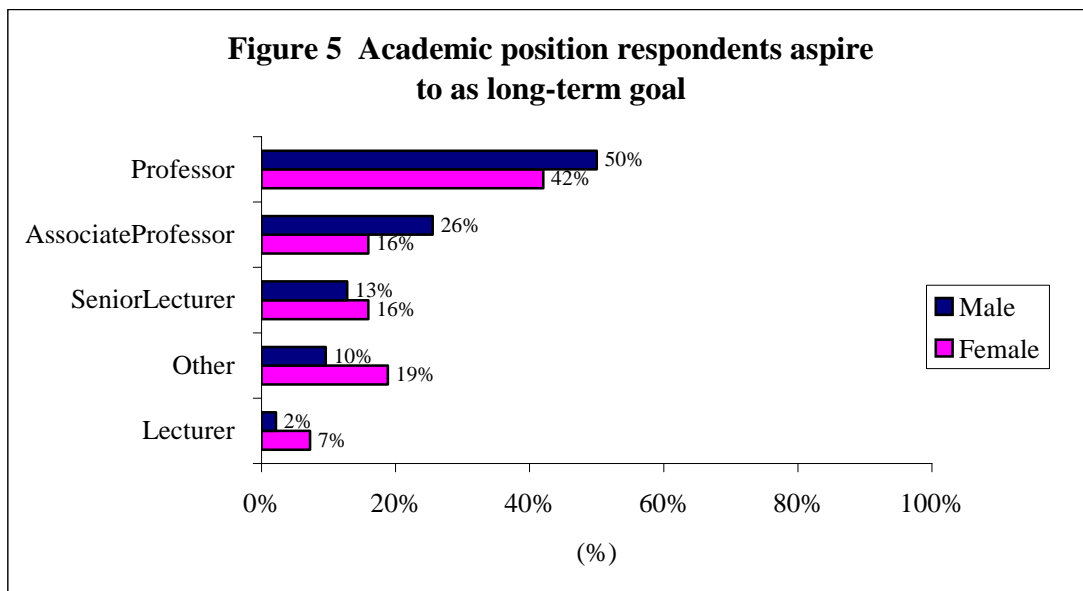
- Poor Feedback

*“No adequate feed-back on reasons for not being promoted.”(f); “When I did go for promotion this year the feed back process was unhelpful and inappropriately delivered so nothing about the process helped.”(f); “I have no feedback relating to my performance, such as annual reviews”(m).*

It is important to note that the new systems of promotions introduced at lecturer level in 2004 – 2005 and at the senior level from 2005 – 2006 seeks to address at least some of the criticisms of lack of openness and transparency of the previous system (see Section 4.1.8).

### 4.6.3 Long Term Career Goals

Figure 5 shows the career aspirations of men and women in SE.



The key findings are:

- Half of male academics stated that they aspired to reach the professorial level, while just over two-fifths of women (42%) had the same aspiration
- Proportionately more men than women aspire to being associate professors.
- More women than men aspire to lower levels such as senior lecturer or lecturer.
- “Other” categories make up one-fifth of women’s goals. These include:
  - Researcher
  - Scientist
  - Senior Research Fellow
  - Senior Experimental Officer



#### 4.6.4 Satisfied with Career to Date

Just over half the women respondents felt that they were satisfied with their career progress to date while 45 per cent are not satisfied (Table 28). More men than women appear to be satisfied with their career progression.

	Female	% Female	Male	% Male	Total	% Total
No	32	45%	34	35%	66	39%
Yes	39	55%	63	65%	102	61%
Total	71	100%	97	100%	168	100%

**Table 28 Satisfied with Career to Date**

Respondents who were unsatisfied with their career to date were asked to explain further the reasons for this. Issues include:

- No recognition of previous experience

*“Coming from industry, I am immediately at a disadvantage in terms of publications compared to staff who have spent their whole life in universities. Since publications seem to be the main criteria by which an academic career is judged in Trinity this will leave me at a disadvantage for several years no matter how many research contracts I get in the early years”(m); “When I arrived to TCD I was put in a very low point in the salary scale despite the fact that I had 14 years of experience as an established researcher in another country. By now I should have been able to have been promoted and I could not apply before since I started very low in the scale”(f).*

- Lack of Stability/job security

*“Lack of stability, having to move overseas for research area, no job security”(f); “I would prefer some stability in my job. As it stands, I have to apply for new funding every two to three years and, in some circumstances, it is impossible to apply to be the PI (principal investigator) without a permanent contract.”(f); “I wish to gain a position of more security. My research work is successful and well recognised yet I would have better job security etc as a member of the administration staff.”(f); “I enjoy my job but don't have long term security and no real options to improve my status without completely changing job.”; “Am currently on a contract of indefinite duration which means that my status in the department is somewhat ambiguous”(f).*

- Non Teaching Positions

*“there is no means of career progression for scientific researchers unless they wish to become lecturers. My ideal would be for researchers to be valued as members of departments and given some of the security in terms of permanency afforded lecturers and other staff members”(f); “And a greater ability for researchers to get scientist permanent positions if no lectureships are available. Lectureships also need to be at the very minimum paid the same as a senior teacher.”(f).*

- Flat Career Structure/Slow Advancement

*“The academic 'ladder' has to be the flattest career structure ever invented. I also observe that there are twin tracks in which I feel I found the slow one. It is evident that some 'bright stars' have managed to leapfrog up this ladder - in the fast lane. The system purports to be meritorious but it is NOT”(f); “I work exceedingly hard, and I'm a junior lecturer. It takes \*way\* too long to progress”(f); “I could say quite honestly that in my peer group (friends from university etc.) that I am the only one who is still at the same level as I was when I started full-time employment. It is utterly ridiculous to be in a situation where you know you are performing well but have no hope of that ever being acknowledged”(f); “It is really very slow. It should be faster”(m).*

- Career Breaks

*“Have taken extended leave for child-rearing, and now unable to compete for positions appropriate to my experiences. No allowance in applications for career breaks reflected in CVs”(f).*

- Teaching Vs Research

*“insufficient weighting given to contribution to admin and collegiate life and service to community”(m); “I have kept a good balance of Research, Teaching (currently with 8 postgrad research students) & Admin. These other elements seem to be ignored in TCD”(m); “Too much teaching hours have held back my research activities”(m); “I had a very heavy lecture load early in my career and this was unhelpful”(m).*

#### 4.6.5 Promotion Possibilities

Respondents were asked to rate their chances of promotion in Trinity College Dublin compared with others of the opposite sex (Table 29). The majority of men and women did rate their promotion chances the same as someone of the opposite sex. However, one in three women rated her chances of promotion worse than men, while one in five men rate their chances worse than women.

	Female	% Female	Male	% Male	Total	% Total
Better	1	1%	10	10%	11	7%
Same	45	63%	69	72%	114	68%
Worse	26	36%	17	18%	43	26%
Total	72	100%	96	100%	168	100%

**Table 29 Rate chances of promotion in TCD compared with others of the opposite sex**

Reasons for women rating their promotion chances *worse* compared with others of the opposite sex include:

- Children

*“Women leave to have kids and therefore take time out and their publication record suffers as a result.”(f); “Women are perceived as being less career driven, especially when they reach their thirties as it's assumed they'll want to have children and will lose interest in the job or be less committed.”(f); “Because women tend to have more family pressures and commitments so cannot always work the overtime necessary to get promotion.”(f); “I do feel that the hours often required to be put in to pursue a*

*career in scientific research do not necessarily suit women who wish to start a family.”(f).*

- Networking/Socialising/Self-Promotion

*“Men know how to 'network' better and sale themselves much better than women” (f); “I think the people making the decisions are male and therefore have more affinity with men. I do not think is it a completely conscious decision.”(f); “I think this especially the case in male dominated environments and I am not use it is a conscious decisions on anyone’s behalf. However I think this arises as the older males develop closer relationships with the younger males. They feel freer to arrange to go for lunch together, a drink after work etc and these personal relations ultimately affect the way the younger males are pushed forward and promoted within their department.”(f); “Members of the opposite sex are more willing to be self-publicists of their research (regardless of its quality).”(f).*

- Male Environment

*“The system favours men by rewarding the male attribute of zealous self-promotion and devaluing the female team-nurturing approach.”(f); “the structure is geared towards male achievements - my publications list is bigger than yours - rather than quality of teaching or ability to motivate students”(f); “The people in charge seem to still view women as chiefly child minders like their wives.”(f); “The department has a "boys" culture that promotes men at top positions” (f).*

- Other Issues

*“lack of assistance/support which seems more critical for women” (f); “I do not feel that the support for women in this situation is necessarily in place.”(f).*

Only one woman rated her chances of promotion better than a man. She felt it is because “*Women in computing are a novelty so people think there is something extra special about them.*”

Men who felt disadvantaged with their career promotions because of their gender mainly stated it was because of affirmative action by Trinity College and government to encourage women into science and particularly engineering.

- Affirmative Action

*“The government and college are actively promoting an increase of women in science.”(m); “Some degree of positive discrimination is present and TCD wishes to be a pace-setter in gender creating better balance. However, despite being male, I do not disagree with this.”(m); “Historically lower number of women in 3rd level and a desire to achieve a more balanced number.”(m); “At junior level, female candidates are often preferred so that the department is seen to be gender balanced.”(m).*

One in ten men from science and engineering faculties felt that they are at an advantage in promotions because of their gender. They stated reasons such as:

- Male Environment

*“gender discrimination, both conscious and unconscious”(m); “Trinity is a male dominated system”(m); “The system has a male bias - SFI funds men”(m); “I’d hope the same but in reality it is probably better”(m).*

- Children/childcare

*“As a male, I am not going to need to take months (or years) off work and there appears to be very little (or no) support for female academics who wish to raise a family, leaving them at a real disadvantage”(m); “Sweden as a society is instructive here. Despite all societal support for women retaining positions after childbirth, men still earn 15% more on average. It appears we use their lost time to get ahead on the ladder. In Sweden men lose 6 months, women 9 months + pregnancy + optional 12 months. Those years are crucial for career progression.”(m).*

Men and women were asked to state to which level they agreed with the statement ‘women and men are treated equally when it comes to promotion’ (Table 30). Women were undecided with nearly half saying that they agree that both genders are treated equally while the remaining half feels that men and women are not treated equally. The majority of men (70%) do feel that women and men are treated equally when it comes to promotion.

	Female		Male		Total	Total
	%		%		%	
Agree	30	49%	59	70%	89	30
Disagree	31	51%	25	30%	56	31
Total	61	100%	84	100%	145	61

**Table 30 Women and men are treated equally when it comes to promotion**

#### 4.6.6 Departmental Culture

Respondents were asked to state if they consciously changed their behaviour or attitudes to fit the academic culture of their department (Table 31). Nearly three women in every ten (28%) and two men in every ten (21%) did feel that they changed their behaviour.

	Female		Male		Total	Total
	%		%		%	
No	52	72%	78	79%	130	76%
Yes	20	28%	21	21%	41	24%
Total	72	100%	99	100%	171	100%

**Table 31 Consciously changed behaviour/attitudes to fit academic culture of department**

- Self Promotion/Visibility

*“it is essential to maintain self promotion”(f); “Seeking own funding to secure own contract in order to further my research”(f); “You need to blow your own trumpet -- it is not enough to carry out the research, you must make sure everyone is aware of what you are doing, regardless of its quality. At least some publications should be directed*

towards journals, even if conference publications are more appropriate in your field.”(f); “By preferring projects with visible outputs, where possible”(m).

- Teaching Vs Research

*“Research is my first love but I also have a strong interest in the development of teaching and the welfare of the students. I curtail my activities in the latter activities as they do not seem to be appreciated.”(f); “In the few months I have tried to remain as uninvolved as possible from anything except research. This has not really worked out as I don't say no easily. But even though I have not been successful in doing this it is still what I believe to be the ONLY way to get anywhere and I find the message totally reinforced in any place that matters, i.e. promotions committee etc.”(f).*

*“Highly unequal distribution of teaching load & research supervisory duties between staff makes a stronger shift towards research impossible.”(m); “I strive to maintain the vigour and enthusiasm I had when I started. The "we don't count teaching" informal College credo seeks to impose itself daily.”(m); “I find that for my career to progress I must restrict the time I devote to undergraduate students.”(m) .*

- Other Issues

*“I have not said/done things for fear of being branded a trouble maker”(f); “Sit at desk all day, speak to no one else in research room, conform, consume, obey”(f); “Kept my head down to avoid being selected for over-worked, under-rewarding jobs, such as programming jobs the helpdesk people should be capable of doing.”(m); “Need to adopt a more masculine communication style - in order to be heard/not written off!”(f).*

- Family Issues

*“I have compensated for being less mobile than my male colleagues by focusing on my contribution to departmental activities. I do not know at this stage whether this will have been a negative move but as far as I am not prepared at this stage to force my family to make those sacrifices necessary to allow me global mobility”(f).*

- Mentoring/Positivism/Socialising

*“Am currently in a high-profile, cross-disciplinary laboratory and am a 'senior' researcher. For these reasons, I am more aware of my mentorship role to younger researchers and invest a lot of time and energy into 'selling' and promoting our research and research group.”(f); “Spent more time cultivating personal relationships as it appears that most things in Trinity only get done if people like you/can be bothered!”(m); “I think that I have become more conciliatory, though I am sure that others will think I have not changed enough in this respect.”(m); “Greater engagement with other staff “(m).*

#### 4.6.7 Statements/Perceptions

Tables 32 and 33 present results of some general perceptions

	Female	% Female	Male	% Male	Total	% Total
Agree	42	65%	19	22%	61	42
Disagree	23	35%	69	78%	92	23
Total	65	100%	88	100%	153	65

**Table 32 Women have to work harder and do better to get the same recognition as men**

	Female	% Female	Male	% Male	Total	% Total
Agree	7	10%	27	31%	34	7
Disagree	62	90%	59	69%	121	62
Total	69	100%	86	100%	155	69

**Table 33 Men, generally, work longer hours than women in academic posts**

#### 4.6.8 Role Models and Mentoring

Just over half the female (53%) and male (54%) respondents did say that they had a role model in their career, yet a lot less of respondents have had an academic mentor in Trinity College Dublin. Just less than one-third of women (31%) and one in five men (18%) have an academic mentor in Trinity College Dublin.

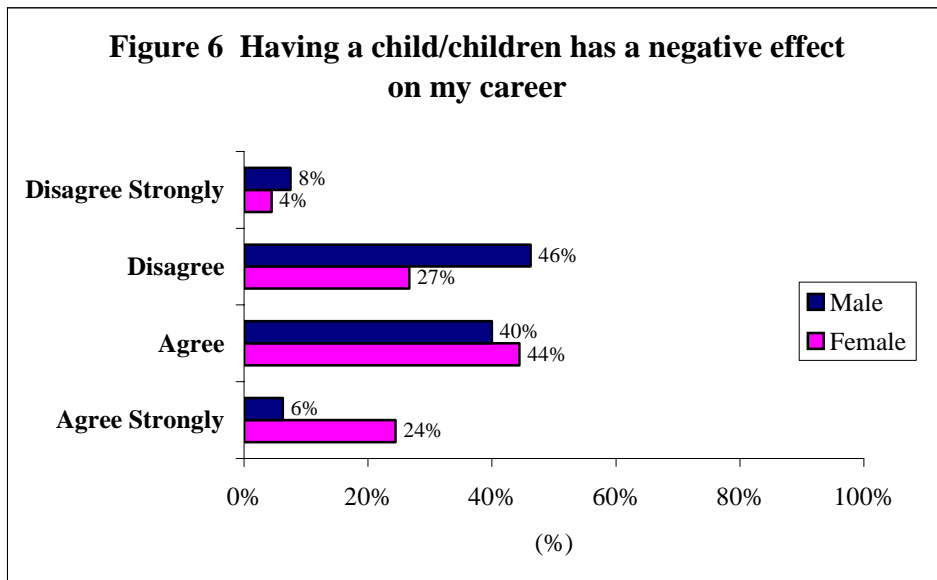
#### 4.6.9 Work Life Balance

The awareness of work life balance initiatives offered by Trinity College is very low in the science and engineering faculties (Table 34). Only one in four women and 16 per cent of men are aware of what Trinity College Dublin offers in respect to Work Life Balance.

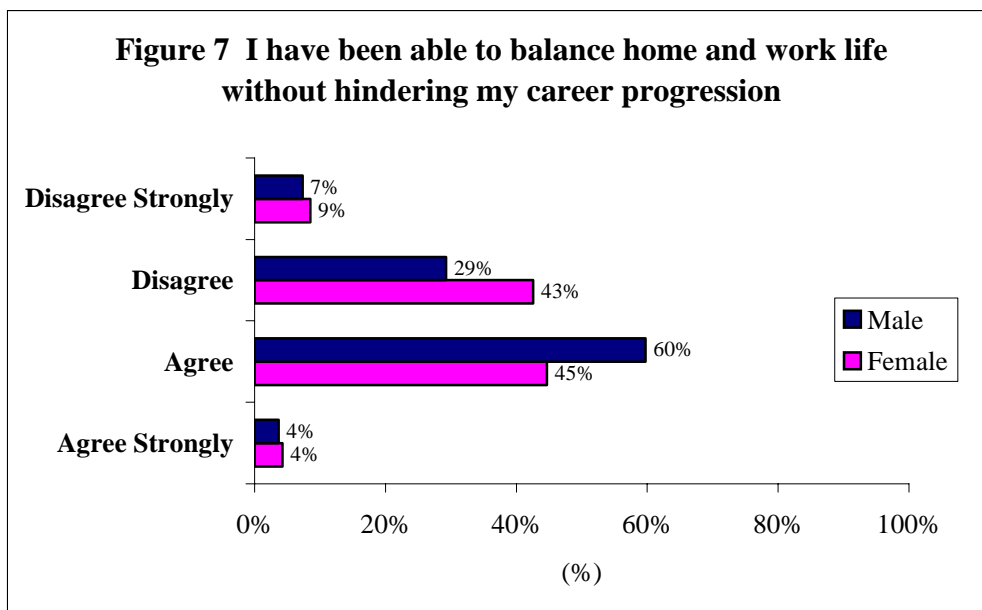
	Female	% Female	Male	% Male	Total	% Total
No	45	75%	77	84%	122	80%
Yes	15	25%	15	16%	30	20%
Total	60	100%	92	100%	152	100%

**Table 34 Awareness of Work Life Balance Initiatives in Trinity College**

Respondents were asked to state whether they agreed or disagreed with certain statements. Figure 6 refers to “Having a child/children has a negative effect on your career”. Nearly 70 per cent of women (68%) agree/strongly agree that having children does have a negative effect on your career while over half the men (54%) disagree or disagree strongly that having children has a negative effect on their career.



Similarly there is a gender difference in the response to the statement ‘*I have been able to balance home and work life without hindering my career progression*’ (Figure 7). More than half of the women (52%) feel that they have not been able to balance home and life without having a negative impact on their career compared with 36 per cent of men. Generally, the majority of men (64%) feel that they have found a good balance between their home and work life without affecting their career progression.



#### 4.6.10 Frustration and Disillusionment

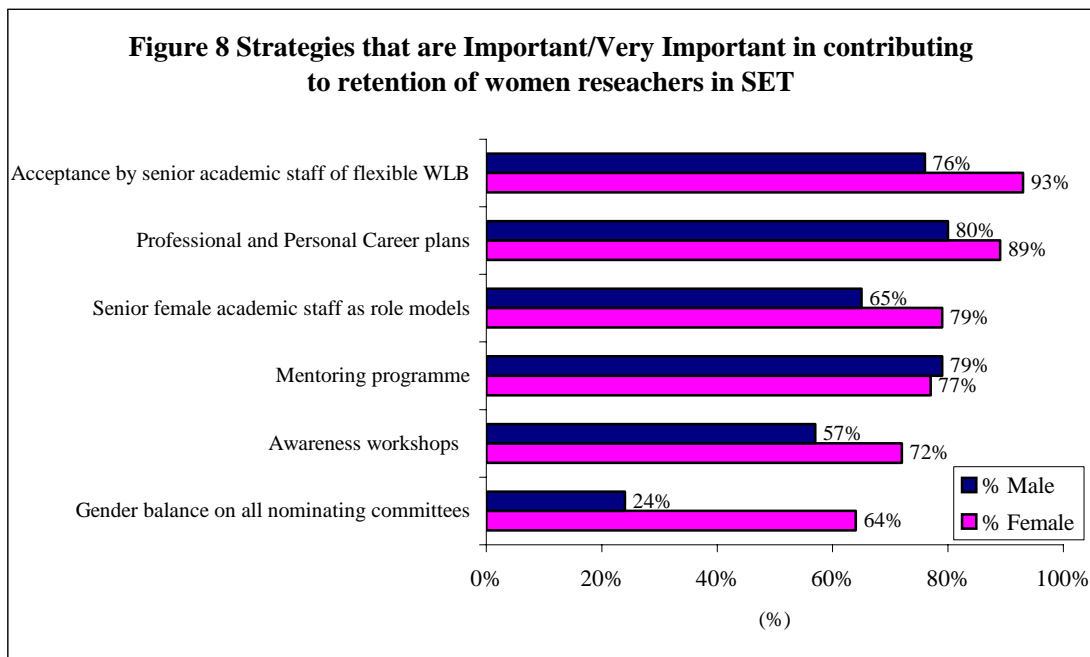
*“Measures to retain staff are needed in the current climate. I have observed greater outflow of women who have felt that it was too difficult to get recognition and promotion in College and left - this is a major loss to Trinity. For the first time since I was appointed I am seriously contemplating an alternative appointment which will be commensurate with my experience and qualifications e.g. a Chaired Professorship “(f)”;* “*I am very disillusioned with life as an academic in TCD and, when family circumstances permit, intend to further my academic*

*career elsewhere. This is very disappointing for me, as when I took this job I fully expected to establish my research career as an academic here.”(f).*

#### 4.6.11 Initiative and strategies

Respondents were asked to state how important they found suggested initiatives in improving the retention of women researchers in SE in Trinity College. Figure 8 shows the responses to those who answered ‘very important’ or ‘important’ to the suggested initiatives. The most important strategy viewed by women is that there is a “greater acceptance, promotion and uptake by senior academic staff of flexible work-life balance” with almost all women (93%) feeling this to be important. The most important initiative viewed by men (80%) and the second most important by women (89%) is to “develop professional and personal development plans”. Both men and women also deem academic role models and mentoring programmes important. More women (72%) than men view “awareness workshops targeted at senior academic staff of the barriers and challenges which female employees face in a male dominated department” as important.

Overall, each initiative put forward as a means of Trinity College Dublin developing in order to contribute to the retention of women pursuing academic careers was seen as important.



*Other Initiatives Suggested by Respondents of the survey included:*

- Children Support

*“Advice and support to women wishing to pursue a career in research while starting a family. Improved child care facilities. Options for women on short-term research contracts to potentially extend their contracts if time is taken off for maternity leave.”(f).*

- Career Advice



*“As an academic, my career could take up all my time if I choose to let it. I simply cannot compete with colleagues who have fewer external commitments. It would be useful to have some idea of the "minimum" standards needed to achieve promotion/recognition. I hate the guilty feelings I get if I do not work at weekends or when I take holidays.” (f); “No point in having career development plans unless College buys into the process too. College should set clear targets for what it expects from staff, and should recognise when these are achieved.”(m).*

- **Postdoctoral Career Advice**

*“Clear College goals recognised” (m); “Active career advice for postdocs and PhD students”(f); “There needs to be a huge focus on integrated mentoring for postdoctoral staff and a formalised career advancement structure within the college. Having a PhD and being a legal nonentity in college is a major downfall on the part of trinity and mares its image as a world-class university. There needs to be an office of postdoctoral affairs and a recognised postdoctoral association that represents postdocs in college affairs. College also needs to provide career advancement and other education for postdocs.”(f).*

- **Addressing the Role of a Man**

*“We have come a long way from the hunter-gatherer society. Women and men have roles of differing but equal importance in all aspects of social interaction (work and home). In order to address the very real problem of gender discrimination in the workplace, the mentality that says that a man must work as much as possible must also be addressed. If everyone is at work, then no one is at home. Children then are brought up in a workplace (crèches are workplaces). If men were encouraged to work less and have a greater role in the care of their children where possible, this would have a symbiotic effect in the workplace. Will this happen? No. Success is unfortunately measured in quantitative terms.”(m)*

## **SECTION 5: BENEFIT TO INSTITUTION & FUTURE PLANS**

It is clear from the engagement with the College community during the process of conducting this self-assessment, that there is a widespread realisation of the importance of addressing the issue of improving the participation and retention of women in SE. While the original motivation may be one of equality and social equity, there is a growing realisation as numbers of women increase in SE even if only slowly, that women do indeed bring a different perspective not only on management and decision-making but also on the science itself.

It is also apparent that there is no quick-fix solution but rather a requirement for cultural and organisational change if gender mainstreaming is to become a reality. The scale of the problem is evident when analysing academic staff data from 2005. There are currently 31 women at lecturer level and 114 men (Table 11). Therefore in order to achieve equal number of men and women, it would be necessary to appoint 83 female lecturers and no male lecturers!

The detailed recommendations and their justification are presented in the accompanying application for a Development Award and will not be reproduced here. However, it should be emphasised that they comprise a careful blend of initiatives aimed at programmes targeted directly at supporting women, and those which seek to effect institutional change.

## **SECTION 6: DISSEMINATION OF INFORMATION**

*The dissemination of the results of the self-assessment programme is an important step towards the development of sustainable mechanisms and practices within the institute. This section should describe how the information contained in this report, either in full or in part, will be made available to the wider research community and other interested parties. Any confidential information should of course be protected.*

The report will be widely distributed throughout the College via the Intranet. The following committees will table it for discussion in the first instance:

1. Executive Officers
2. Equality Committee
3. Personnel and Appointments Committee
4. Research Committee
5. Lecturers Forum
6. Faculties of Engineering and Systems Sciences and Science.

It is also intended to present the results in the form of a paper for publication in an appropriate journal. Finally, as proposed in the Development Award application, the College would like to propose that a working conference of all the institutions participating in the planning grant process be held at which the results will be disseminated. The conference should become an annual event at which experience can be exchanged and best practice disseminated. More significantly it will provide a networking opportunity around which to build joint activities as it is likely that a number of the initiatives which will be proposed under the development grant applications by the various institutions could incorporate an inter-institutional dimension thereby improving the situation for women in SE both within individual institutions but also throughout the sector.

## References

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