

Féidearthachtaí as Cuimse
Infinite Possibilities

Irish Network for Gender Equality in Computer Science

Benchmarking Initiative

Professor Michael Devereux



Irish Network for Gender Equality in Computer Science (INGENICS)



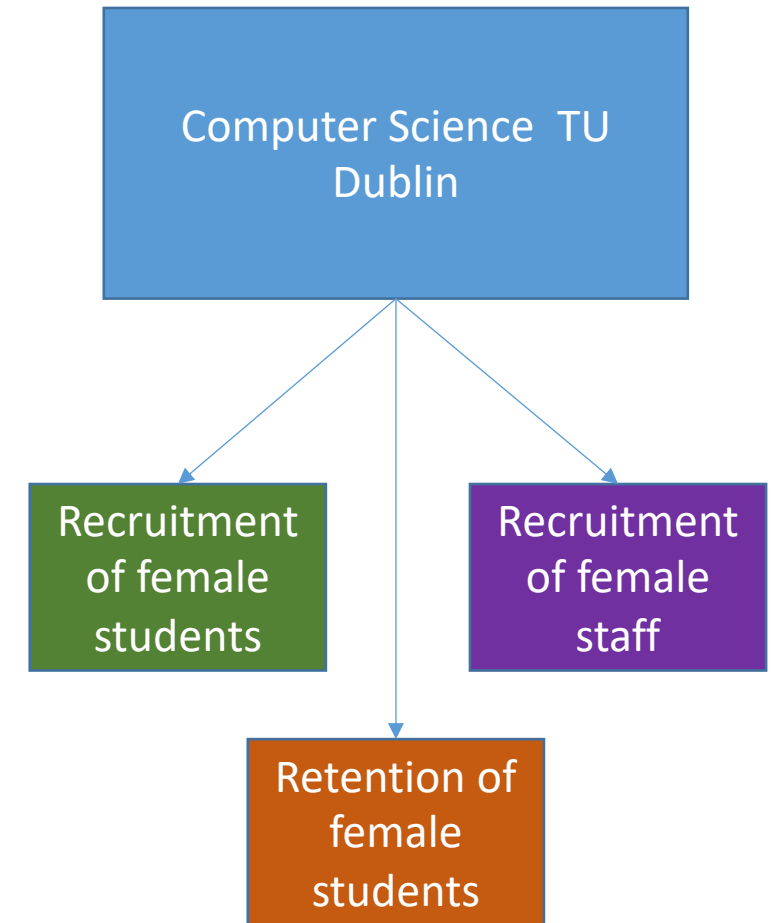
A network of Computer Science Schools from
16 Higher Education Institutions from across
the Republic of Ireland

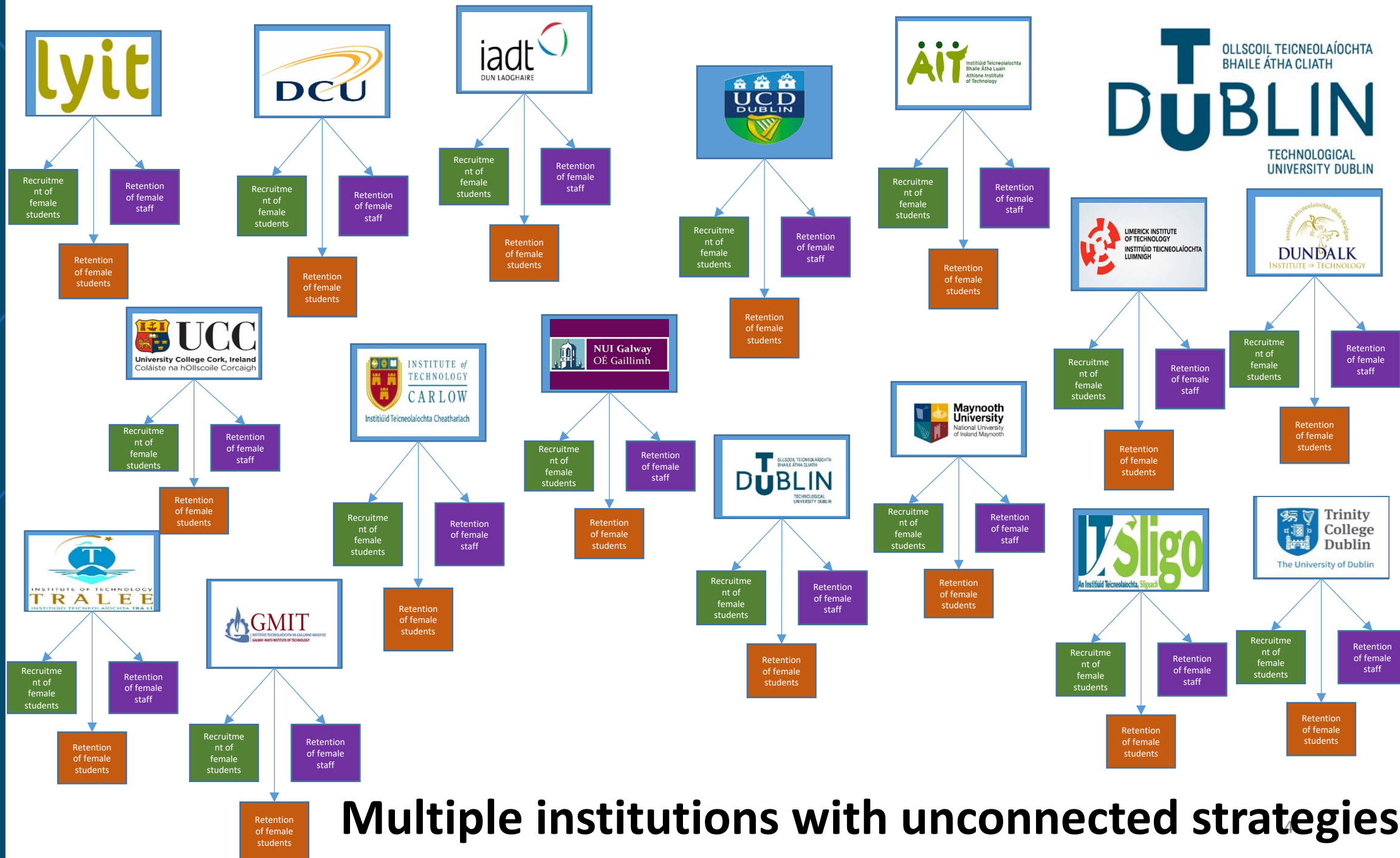


INGENICS – WHAT IT IS ADDRESSING

School of Computer Science in TU
Dublin recognised:

- the gender related challenges faced in Computer Science, including – but not exclusively – recruitment of staff and students, and retention of students.
- that these challenges were being faced in all third-level institutions in Ireland, all of which were addressing them individually.





INGENICS

Founded by Dr Susan McKeever (TU Dublin)
and Dr Catherine Mooney (UCD) in 2017

In response to what they saw as a need **to coordinate efforts to address Gender Equality** in Computer science across all third level institutions in the Republic of Ireland

‘Achieving critical mass at national level’

INGENICS - AIMS

- Help **increase the enrolment of females** on third level computing degree programmes.
- **Improve on the experience of female students** within computing degree programmes.
- Identify and develop **supports for female academic staff development** in computer science associated with improving gender diversity and equality.
- Support **collaborative approaches** to address these aims.

INGENICS CONSORTIUM



**A powerful network
for information
sharing, data
gathering and
collaboration.**

Recruitment
of female
students

Recruitment
of female
staff

Retention of
female
students

**A national platform for
good practice development
and dissemination.**

INGENICS – WORK TO DATE

- **Dataset gathering on gender balances on programmes** (this is becoming increasingly valuable as our Higher Education Authority no longer produces this breakdown on programmes)
- **Collation and consideration all gender balance initiatives** in computer science carried out across the 16 Schools of Computer Science involved.
- **Inter group collaboration for local initiatives** (e.g. Association of Computer Machinery (ACM) special interest group on computer education)
- Established social media networks for **information sharing**.

INGENICS – THE BIG OPPORTUNITY

- The Irish government currently developing the **National ICT Skills Action Plan for the next five years**
- A key focus in the plan is to:
 - **increase female participation in the ICT industries**
 - **Address the ICT industry's gender balance and skills needs.**
- **INGENICS has connected with government**, as a national platform, to explain their efforts, identity and aims regarding gender balance and equality in Computer Science and ICT.
- The **Minister for Higher Education has complimented INGENICS** their work, opening up the possibility of their **involvement in the development of national policy.**



Dr. Susan McKeever
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Our Ref: MoSMOC00325

05 September 2018

Dear Susan, Catherine and signatories,

I refer to your recent letter in relation to the female participation in Computer Science programmes.

I would like to first of all commend you and your group for the work you are doing to not only increase female participation in Computer Science, but also to improve their retention in our third level institutions.

I recognise the many issues that you have outlined concerning female participation within certain subject areas - in this instance computer science - and share the very significant concerns you have outlined. At present, there are a number of initiatives underway at primary and post-primary levels which are intended to improve participation in these areas. I have highlighted a few of these initiatives below.

My Department's STEM Education Policy Statement provides a roadmap to achieve the goal of making Ireland a leader in the provision of STEM education. It builds on a range of reforms and initiatives already underway, in areas such as curriculum and assessment reform, teacher professional development, embedding digital learning and advances in initial teacher education. It aims to encourage and inspire more of our young people, particularly more females, to specialise in STEM. Among the objectives, it aims to increase by 40% the uptake of STEM subjects by females in post-primary school, and to increase the uptake of specific subjects, namely, Leaving Certificate Chemistry, Physics, Technology and Engineering by 20%.

In addition, a new Leaving Certificate Computer Science course will be implemented in 40 schools from September 2018 as part of the first phase rollout of this new subject. The first exams will take place in 2020. The introduction of the Computer Science course is part of the Government's overall commitment to embed digital technology in teaching and learning and is one of a range of actions outlined in the STEM strategy and Action Plan for Education. It also complements other curricular changes the Department are implementing such as introducing coding and computational thinking as part of the new math curriculum for primary schools.

The issue of gender equality within higher education is an issue I have set out to tackle as my role of my Minister for Higher Education. The work of the Expert Group Report laid out the issues facing gender equality within our institutions and made recommendations to further progress on these issues. However, due to the slow progress in addressing these issues, I convened the Gender Equality Taskforce to give a much greater emphasis to the work of achieving gender equality in our higher education institutions. I look forward to receiving their report shortly.



We were very excited to host this year's Gender Equality Conference. It is a very significant event for those of us with a passion for gender equality and I was encouraged that so many were able to attend this event.

Once again, I would like to thank you and your fellow group members for the work you are undertaking in this very important area. You may be aware that this Department, and the Department of Business, Enterprise and Innovation are currently developing the third ICT Skills Action Plan. A key focus within the Plan is to increase female participation in the ICT sector and addressing the ICT sector's gender balance and skills needs. A member of the team working on the ICT Skills Action plan will be in contact with you in the near future.

Yours in Education

Mary Mitchell O'Connor TD
Minister of State for Higher Education

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Yours in Education

Mary Mitchell O'Connor TD
Minister of State for Higher Education

SUMMARY

INGENICS is a Irish national platform for Gender equality in Computer science:

- **Achieving critical mass at national level**
- **Undertaking effective analysis of gender balance practices Nationally (what has worked and what hasn't worked)**
- **Influencing government policies**