

2018 ICT Summer Camp Provision

The HEA has allocated annual funding to the Higher Education Institutions under the *Information Technology Investment Fund (ITIF)* since the early 2000's. Funding under this initiative is provided for computing camps to encourage students to consider ICT and computing careers. The ITIF is an annual allocation of €5,000 and is provided to the HEI's to support the continuation of summer camp provision for second-level students.

The ICT Skills Action Plan 2014-2018 has as one of its strategic priorities to "*Enhance ICT capacity and awareness in the education system*". Arising from this the HEA were tasked to build on the success of the existing provision of ITIF camps and in the context of the continued high demand for ICT graduates. Following from the success of these camps in 2017, the HEA allocated an additional €250,000 in 2018 to support further provision of ICT summer camps by higher education institutions.

The ITIF and ICT Summer Camps are aimed at second level students, with a focus on female participation. As with the ITIF Summer Camps, the aim is to encourage young participants to consider a career in ICT and especially computing careers. Camps typically target transition year students and are generally of 5 days duration even though some were of a shorter duration i.e. one day Introduction to Robotics (DCU Lego Innovation Studio) and IT Tralee ran their camps 1 day per week over three weeks.

In 2018 a total of €310,000 (from both ITIF and ICT Summer funding) was provided to 19 higher education Institutions. A total of 54 summer and autumn camps were held with overall participation of 2,945 students attending from all over the country. Female participation was 35.5%. A number of HEI's noted that while they had targeted a 50/50 gender split, it was hard to achieve in practice. However, it is intended that for any future camp provision that this would be addressed by expanding the number of schools targeted (in particular all-girl schools) and running camps for Girls only in 2019. It should be noted that in 2018 three HEI's did provide Girl only camps (total participation of 143 students).

In 2018 the Megadojo took place in October in 6 locations nationwide and the total number of students who attended this event was 3,635. The age profile spanned from 4-year-old to 17 years old female participation was 30.5%. HEI's stated that the Megadojo event complements the current work in the ICT programmes and is a way of getting primary and secondary school children into higher education institutions to experience ICT in a fun and exciting way.

All HEI's reported that the aim of the ICT and ITIF camps was to introduce secondary school students to computer science so that they might make a more informed CAO subject choice. Camps provide a fun interdisciplinary approach to introducing computer science ranging from hardware to software. In addition, it is reported by the majority of HEI's that areas

chosen for summer camps complement perfectly progression onto the 1st year programmes (introduction of Java and scratch) and therefore camps fit with the institutional ICT programmes. It was reported that the most popular modules were the ones that let the students be creative these included Game Development, Multimedia Production, Robotic Programming modules etc.

One HEI ran a summer camp externally from the campus in a DEIS school and stated that this camp provided access to IT subjects for students who potentially may not otherwise have been to attend similar camps. Another HEI stated that they used their undergraduate student assistants (chosen from a range of courses and years) to promote “visible pathways for the secondary school students to follow.

Feedback received from students attending the camps in 2018 was very positive. Nearly all students said that they would recommend participation in a camp to their friends, with many students saying they would return next year to participate in the camp. One HEI used surveys to establish various details about participants of the computer camp to determine overall levels of interest, CAO preferences prior to the camp, while also establishing how perceptions are changed by the event. This offered the HEI insights into perceptions about computing among various students, while also helping to revise the structure of the event from year to year. Students are then encouraged to stay in contact with the HEI over the subsequent 12-24 months prior to progressing to third level, where the HEI identifies how many students are taking programmes in the institution arising from the computer camp event on a year to year basis.

The majority of the HEI providers stated that they plan to run similar summer schools in 2019. Some HEI’s reported that additional financial support is required to

- Support the number of quality teachers and demonstrators available to run the camp
- Ensure that the best software tools are available
- Provision of Lab and Robotic equipment
- Advertising/Marketing campaigns, it was suggested that it would be beneficial if there was a national campaign targeting secondary school students (particularly females) to consider careers in ICT.
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Several HEI’s who charged a registration fee, applied a reduced registration fee for applicants whose families are in receipt of job seekers or disability payments.

Table 1 attached provides details on all the camps provided in 2018.