STFC ANNUAL STUDENT SURVEY 2021

In February 2021, the Office contacted all current students and their supervisors to request them to complete the survey. The deadline for completion of the survey was 12 April 2021. A total of 1125 students responded out of the 1235 students who were contacted (91% response).

Percentages are based on the numbers of students that responded to the questions. Answers don't always add up to 100% due to rounding.

The main points are as follows:

87% of students met with their supervisor at least once a week.

91% of students rated their supervision that they received as 4 or 5 (i.e. good/excellent).

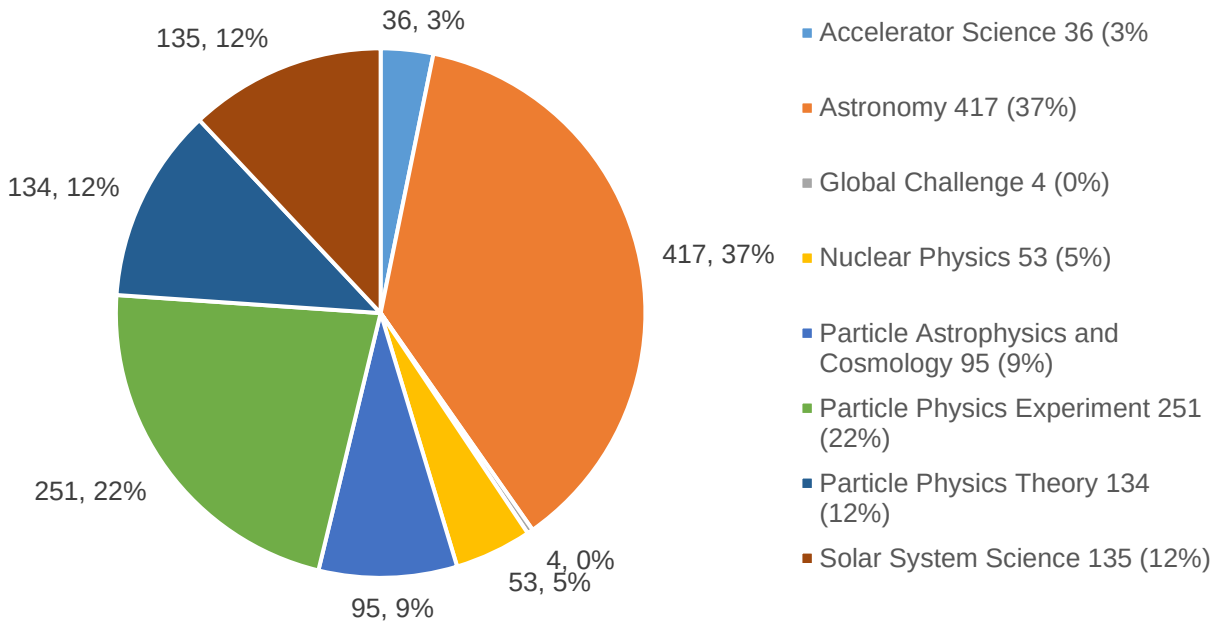
91% of students had received formal training in the first year

57% of students wished to pursue a career in academia.

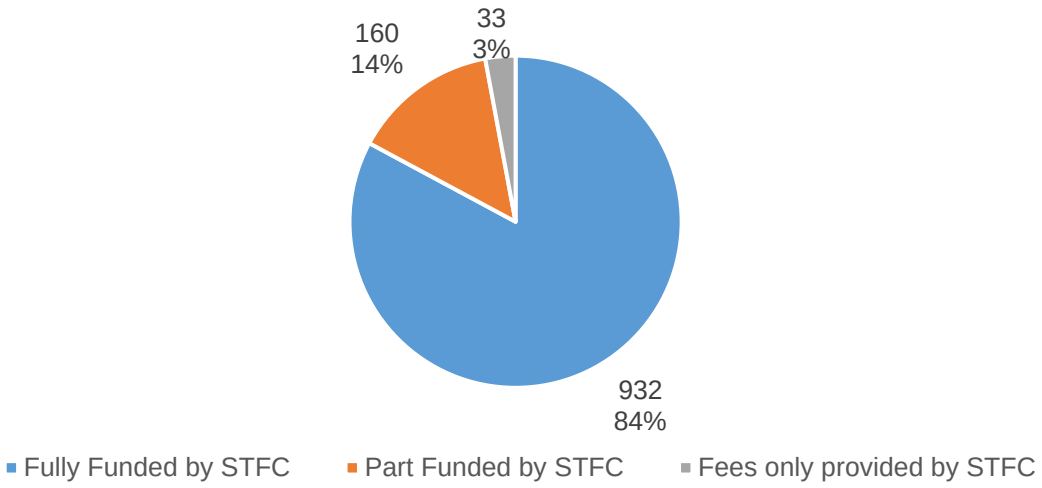
89% of students rated their overall training as good/adequate.

PERSONAL INFORMATION

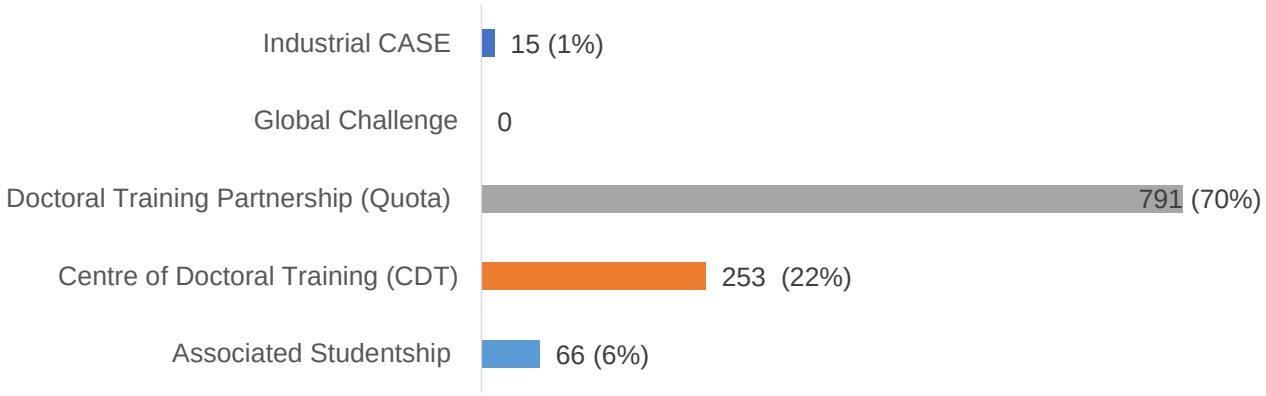
General Field of Research



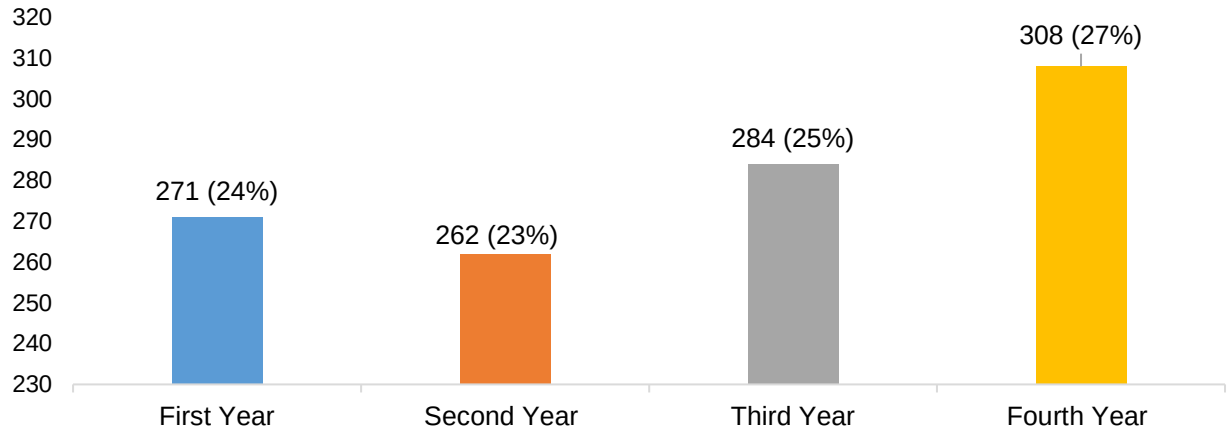
Form of funding received



Type of studentship

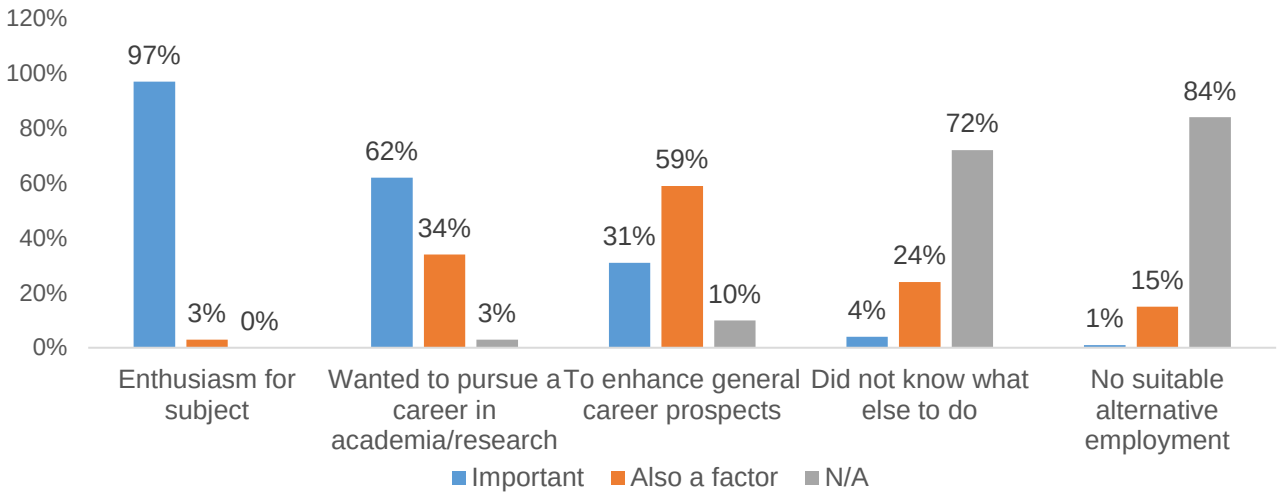


Year of PhD



1112 students were full time and **13** part time.

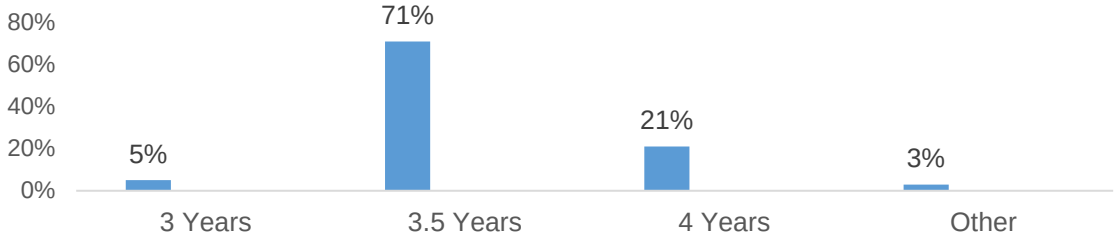
Reasons for undertaking a PhD (1st year students only – 271 responses)



FUNDING PERIOD

94% of students confirmed their funding period was discussed and agreed with their supervisor at the beginning of their PhD.

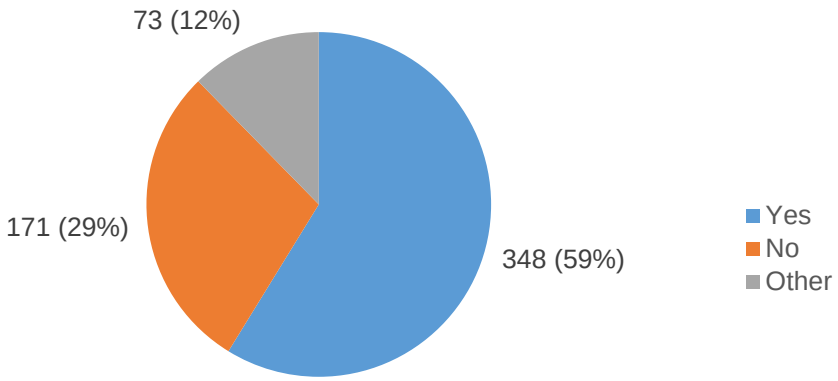
How long is funded period?



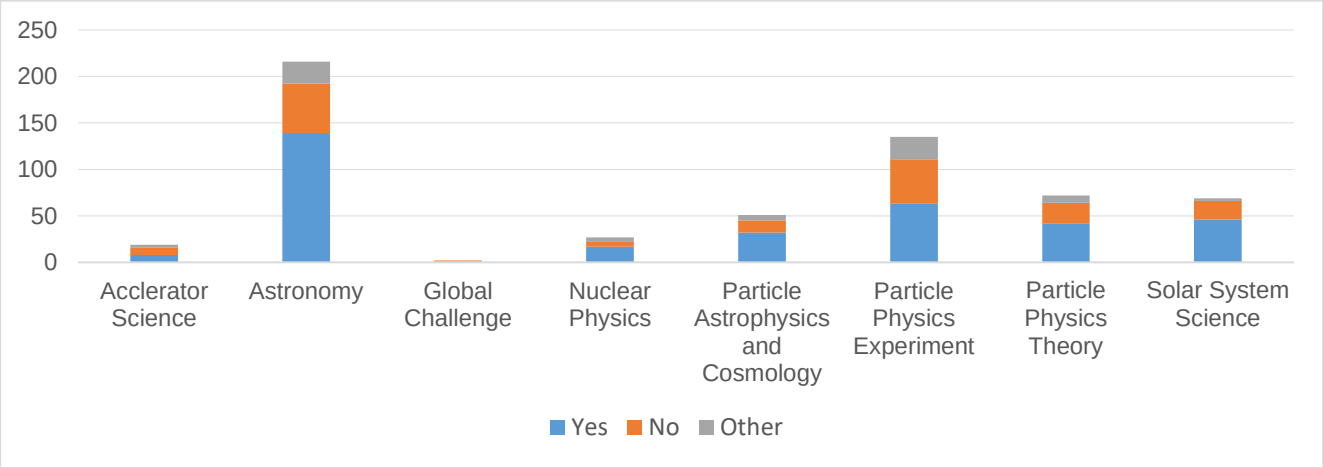
PHD SUBMISSION - Questions asked of 3rd and 4th year students only

There were **592** third and fourth year students who completed the questionnaire.

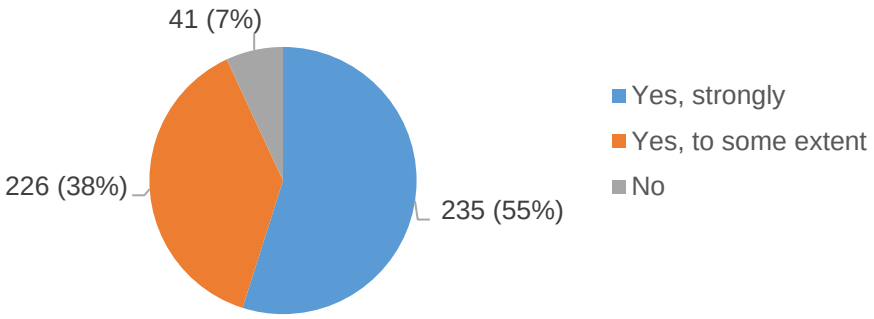
Do you think have sufficient time within the funded duration of your studentship to complete your PhD, including writing up?



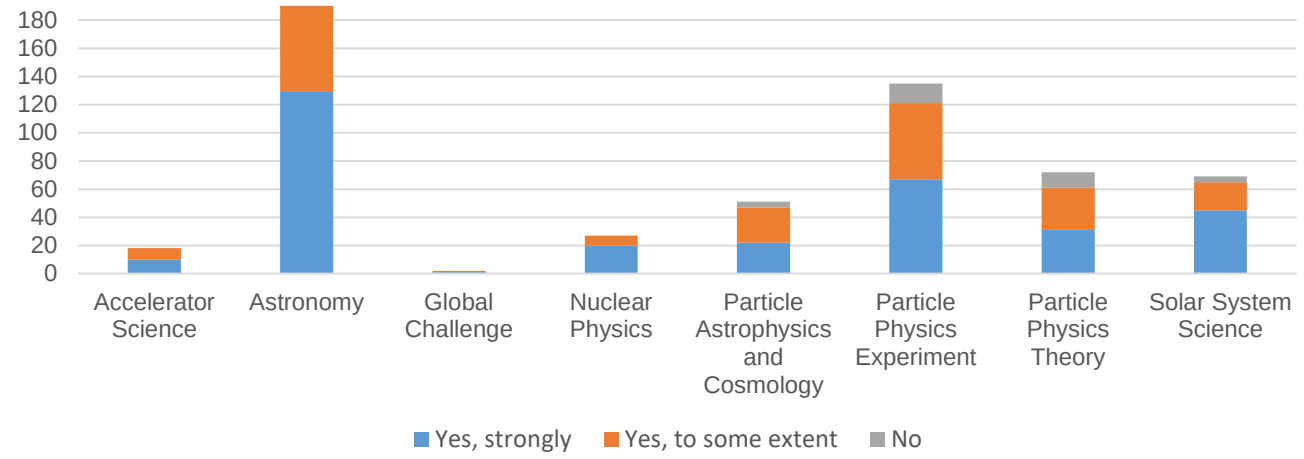
Breakdown of third and fourth year submission question *"Do you think have sufficient time within the funded duration of your studentship to complete your PhD, including writing up?"* by research area:-



STFC expects student projects to be planned and supported such that they may be completed within the funded duration of the studentship. Do you consider your institution actively encourages students to complete their PhD, including writing up, within the funded duration of the studentship?

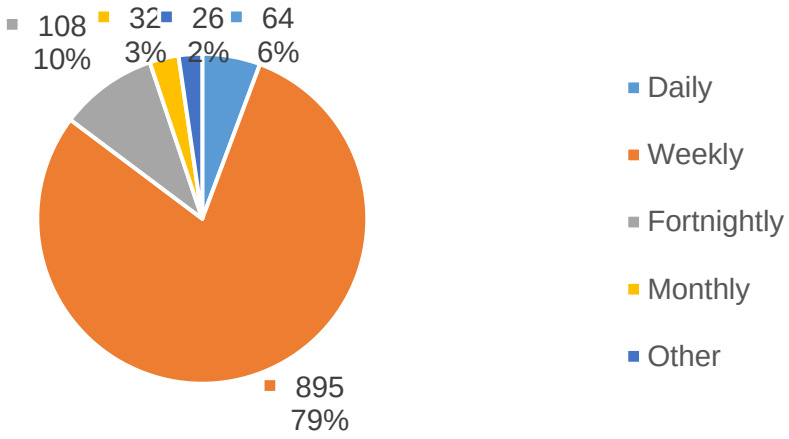


Breakdown of third and fourth year submission question *"STFC expects student projects to be planned and supported such that they may be completed within the funded duration of the studentship. Do you consider your institution actively encourages students to complete their PhD, including writing up, within the funded duration of the studentship?"* by research area:-



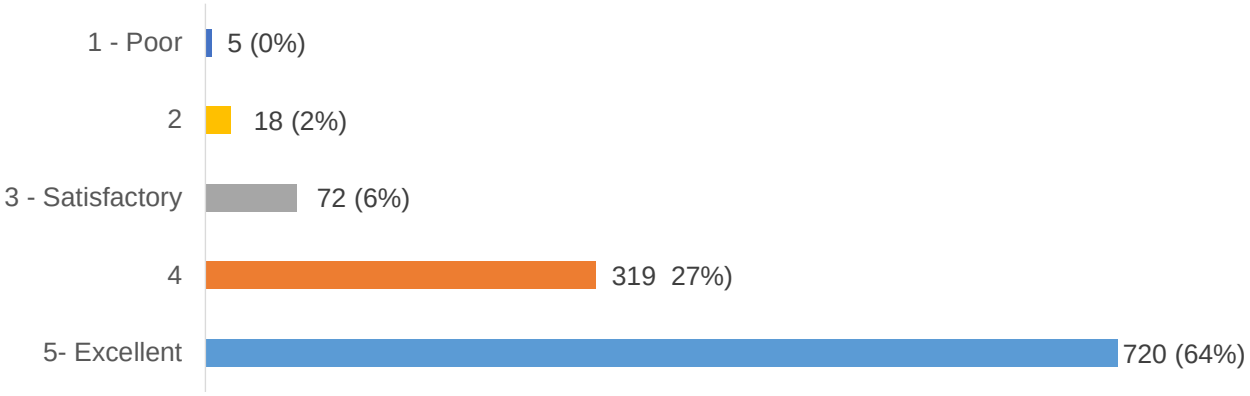
SUPERVISORY ARRANGEMENTS

Frequency of contact with supervisor

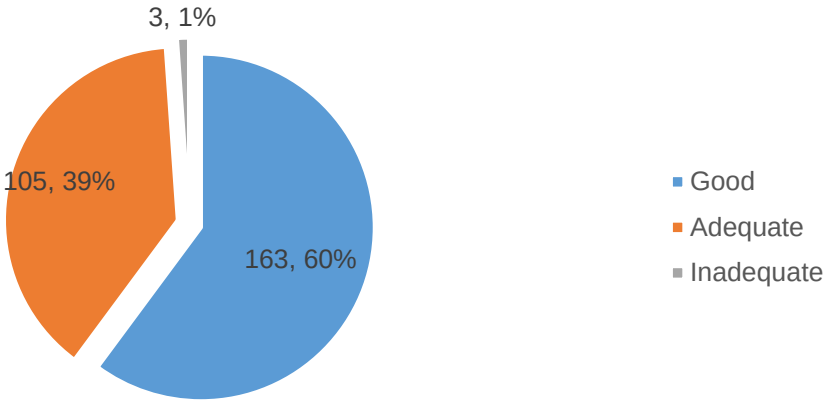


82% of students stated that they received help/advice from a second supervisor or other people in their department.

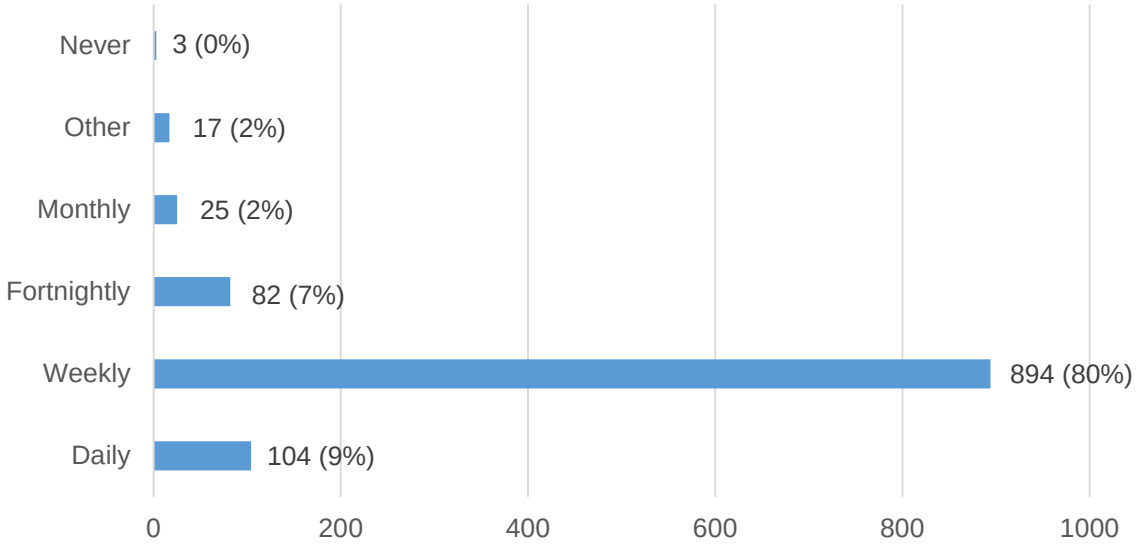
Usefulness of Supervision



Rating of Induction Programme (1st year students only – 271 responses)



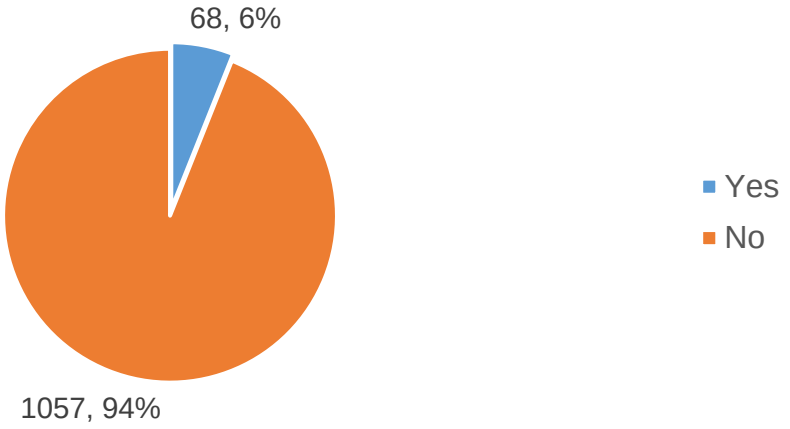
Attendance at group/departmental seminars



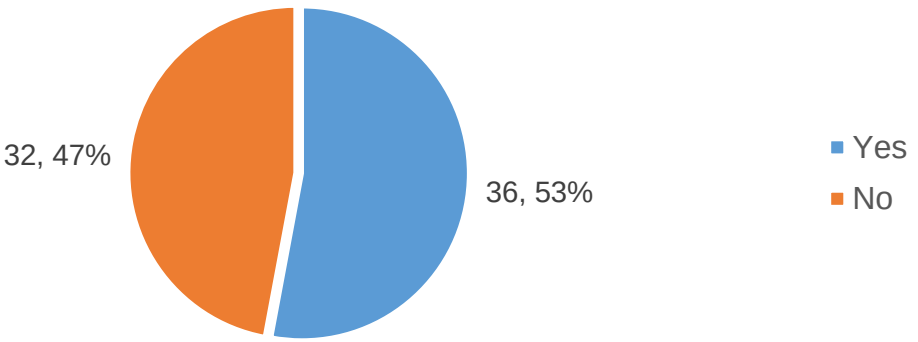
89% of students attended group/departmental seminars once a week or more.

WELLBEING

Have you encountered problems or difficulties with your **supervisory team**, whether professional or personal?

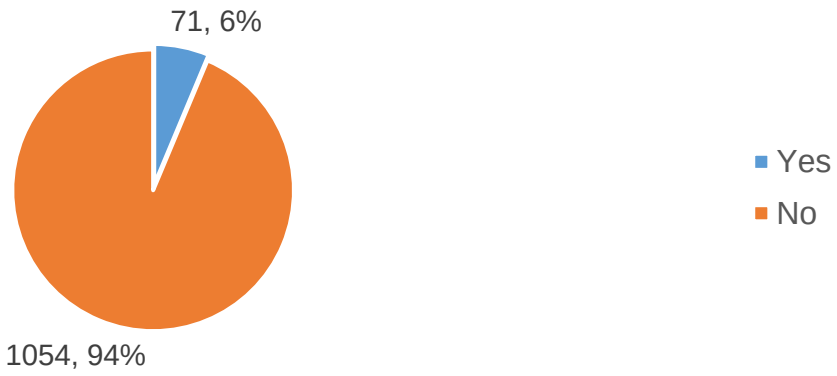


Did you report this to your institution?

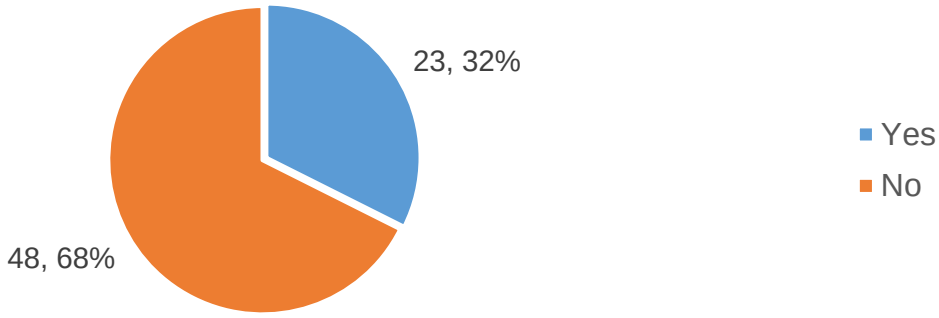


Of the **36** students that reported difficulties **27** students were satisfied with the way their problems were handled and **9** were not.

Have you encountered any problems or difficulties with other members of your **department**, whether professional or personal?



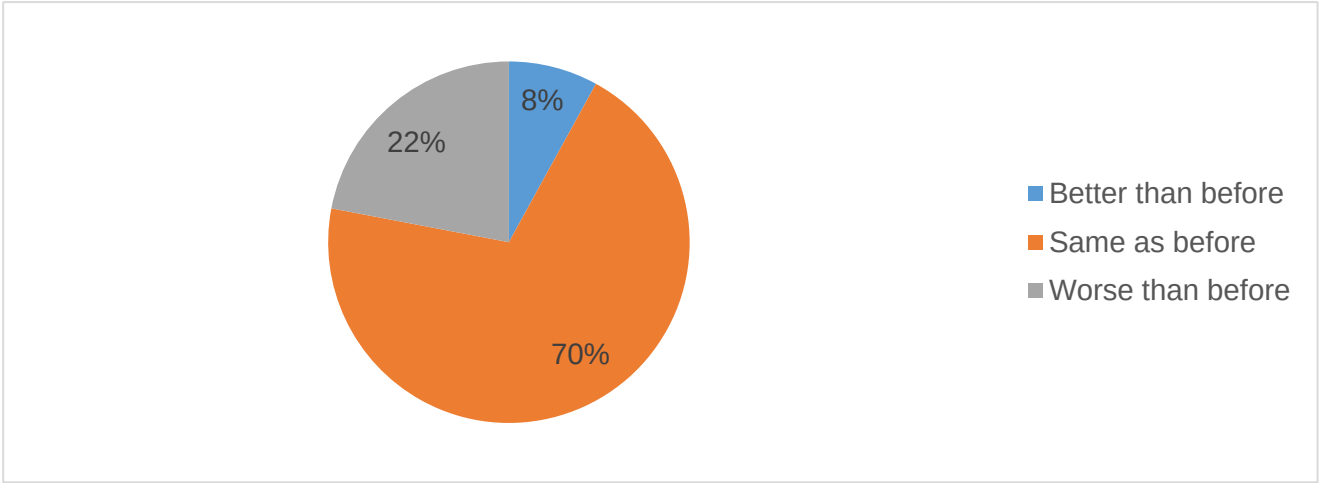
Did you report this to your institution?



Of the **23** students that reported the problems to their institution **13** were satisfied with the way their problems were handled and **10** were not.

SUPPORT DURING PANDEMIC

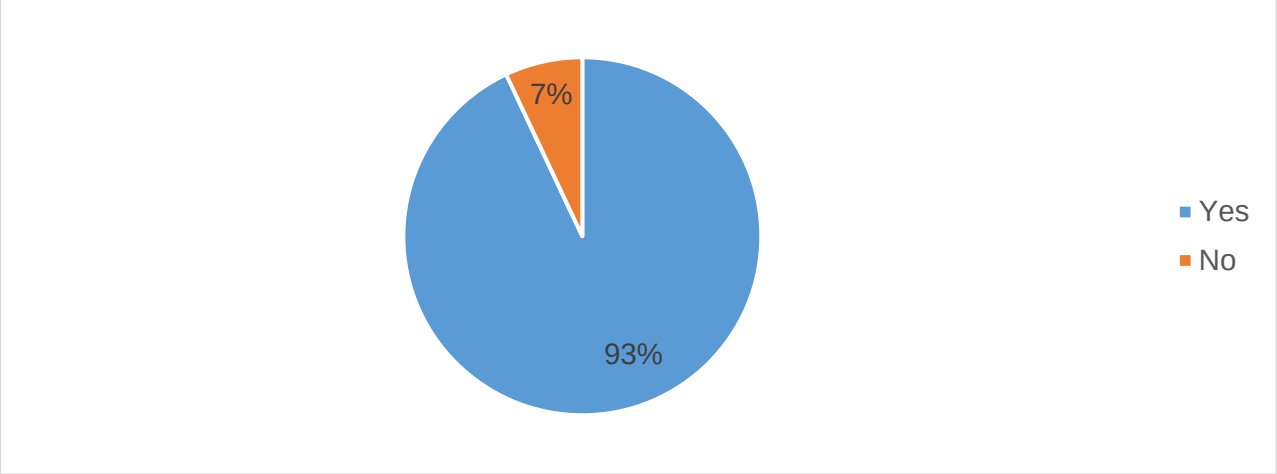
Students were asked to indicate what level of supervisory support they received during periods of remote working compared with that received prior to the pandemic. First year students were not asked the question as they had nothing to compare with previously.



Students provided comments on what they found helpful and what didn't work so well:-

BETTER	WORSE
Frequency of supervision became more regular	Pressures of caring and home schooling responsibilities
Greater pastoral care due to situation	Missed informal and spontaneous discussions
Supervisors found it easier to stick to regular meetings	Harder to communicate and discuss details virtually. Slower progress made.
More group meetings were organised	Supervisor heavily involved in managing COVID situation within department and had less time for supervisory work
Increased contact with overseas supervisor	Communication not so effective online
Online working made it easier for others to drop into meetings	In between meetings responses could be slow to respond to emails
Being able to share screens for interactions	Supervisors were overburdened with online teaching responsibilities
More structured support	Reduced interactions and contact time
Easier to set regular meetings when no one is travelling	Overseas in different time zones
Could record meetings to refer back to	Did not receive support in research or personal issues
	Supervisors were struggling with their own issues and found it difficult to provide support to students
	Difficulties with supervisors harder to manage

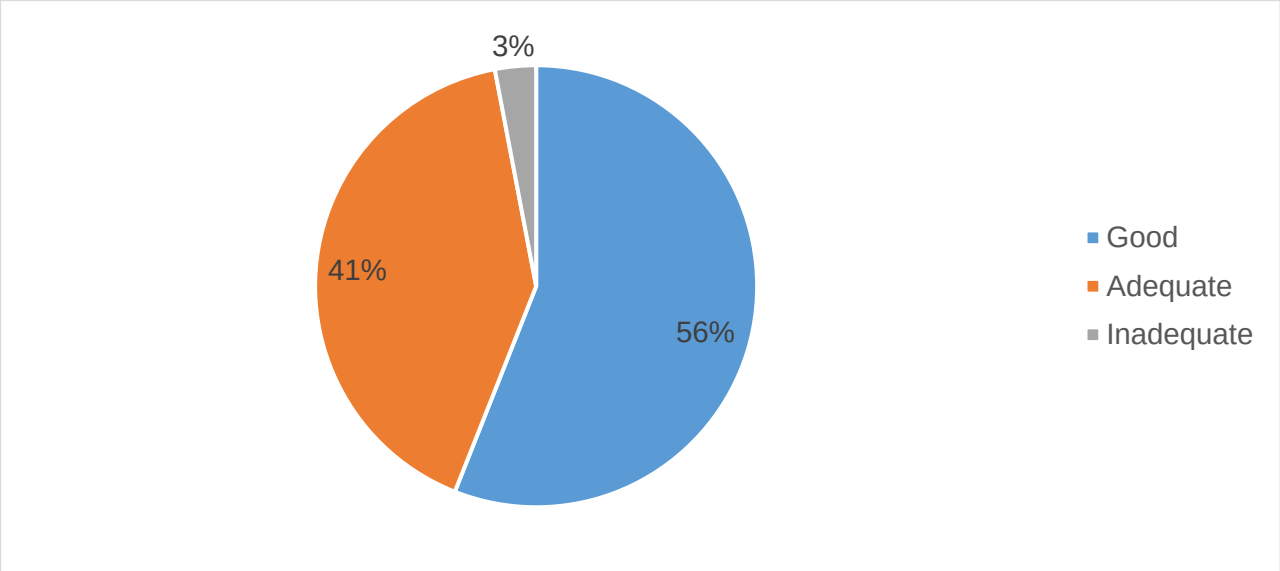
Was training required available in an online format?



What wasn't available and how did it impact on training:-

- Self taught programmes which slowed work and left gaps in knowledge.
- Unable to access laboratory and specialised training on equipment which slowing progress and delaying practical experimentation.
- Unable to work at industrial partner organisation.
- Summer schools cancelled rather than moved online so lacking that knowledge.
- University led training courses have been postponed or cancelled and miss opportunities.
- Schools that were moved online had reduced content and no hands on elements.
- Needed to access data which was unavailable during lockdown.
- Experience using a telescope overseas that was cancelled could not be replicated online.
- A lot of courses run by the University stopped.
- Unable to access training required for work in collaboration.

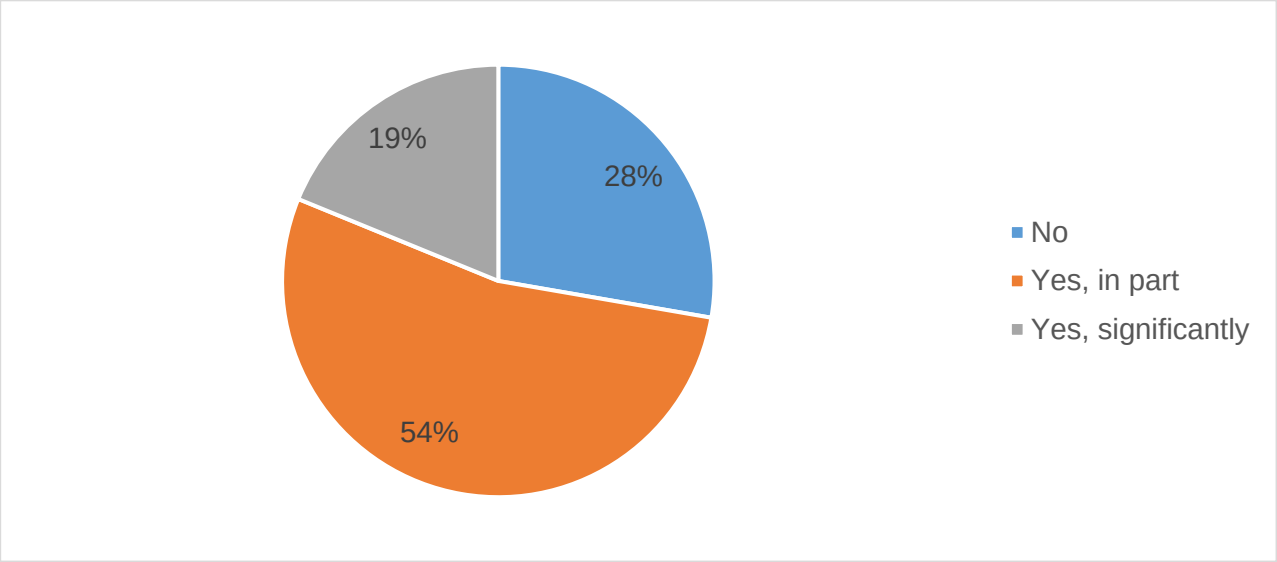
How effective was the online training received?



For those that rated the online training as inadequate these were the improvements suggested:-

- Provide more mental health support
- Move courses online instead of cancelling
- Make online training more engaging
- Create more opportunities to meet other PhD students
- More training focussed on software and tools useful for PhD
- More interactive training rather than one person lecturing a whole group on a practical exercise such as coding
- Improve standards of computer science within Physics
- More online delivery preparation
- Advertise training available more widely
- More advice required to help with future career job applications both academic and non-academic

Was your ability to continue research affected?

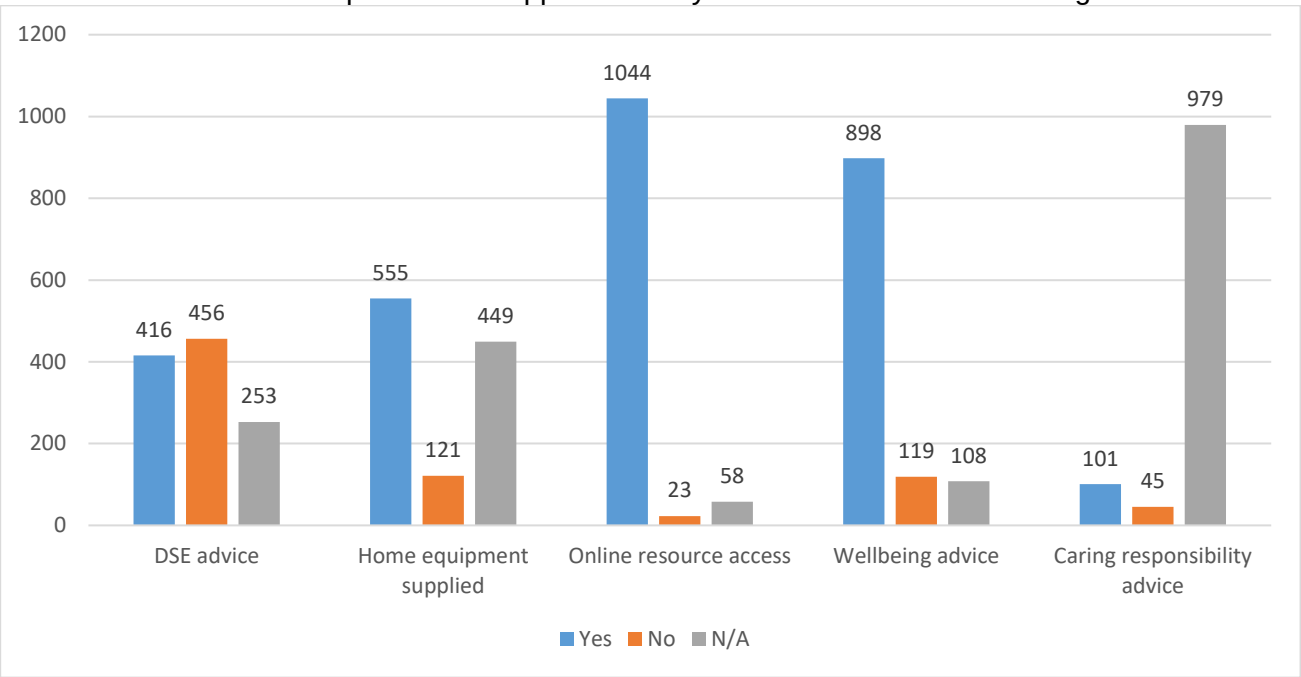


The main factors cited as reasons why research was affected were:-

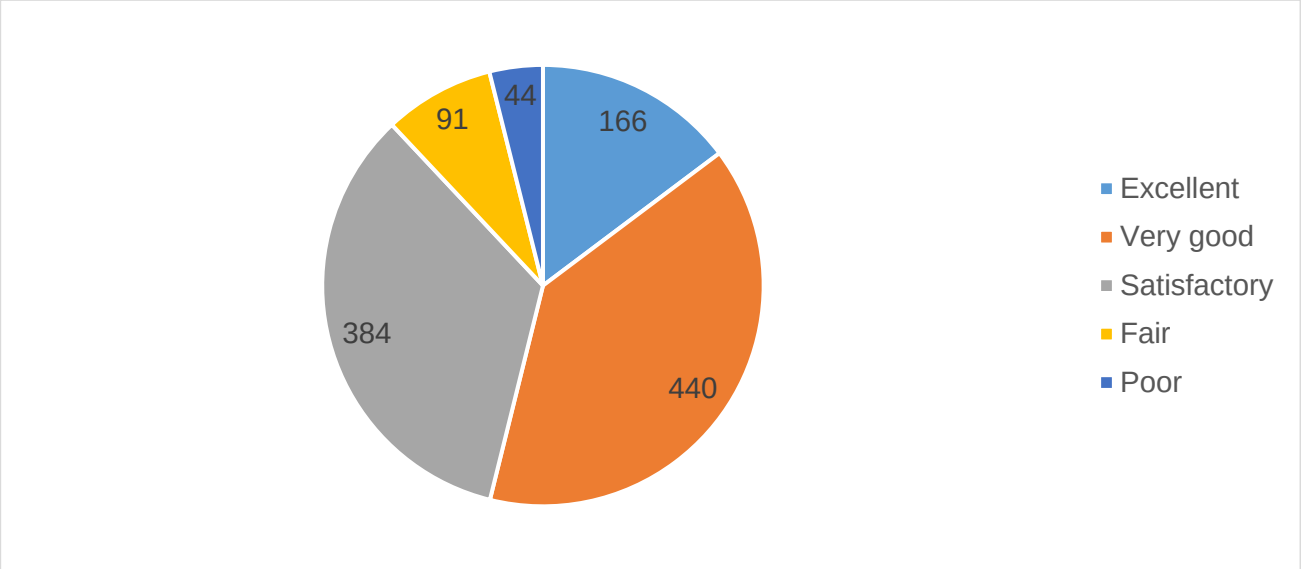
Unable to access equipment, facilities, and data / delays to LTAs
Poor internet connection and computing facilities
Poor working environment
Working in isolation, poor mental health and other illness

Caring responsibilities
Lack of motivation / decrease in productivity
Lack of collaboration and opportunity to mix with peers to discuss problems
Delays to papers published
Slow communication/response times
Harder to ask for help
Harder to access resources and learn from online training

Please tell us about the departmental support/advice you received for home working.



Overall, how would you rate your university advice and support with the changes in the global climate?

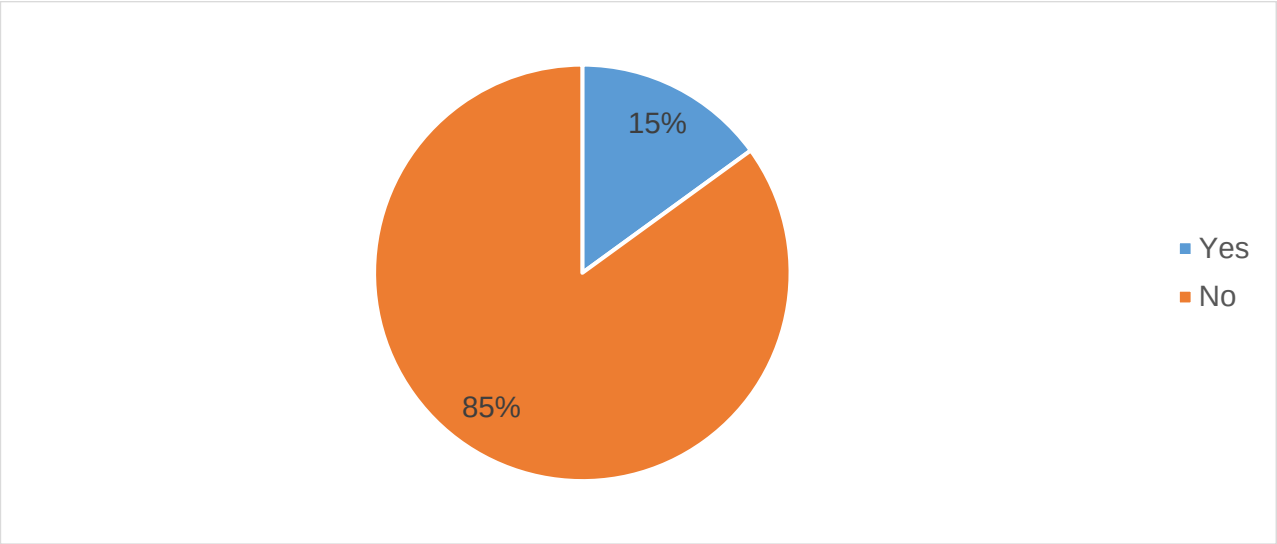


If you answered fair or poor please indicate what could have been improved.

Integration of students back to lab based work could have been quicker.
More rapid support required for funding extensions.
Not enough information for postgraduates generally more focused on undergraduates.
More wellbeing checks from the department.
Technical support would have been useful and advice on how to access equipment for home working a lot earlier than it was.

More support and flexibility for students with unsuitable home working environments.
Counselling should have been made available.
Clearer and more rapid communications required relevant to PhD students.
A clear statement on how student funding would be affected and how office/work space could be used going forwards.
More certainty regarding funding and submission deadlines.

Have your career plans now changed as a result of the global pandemic?

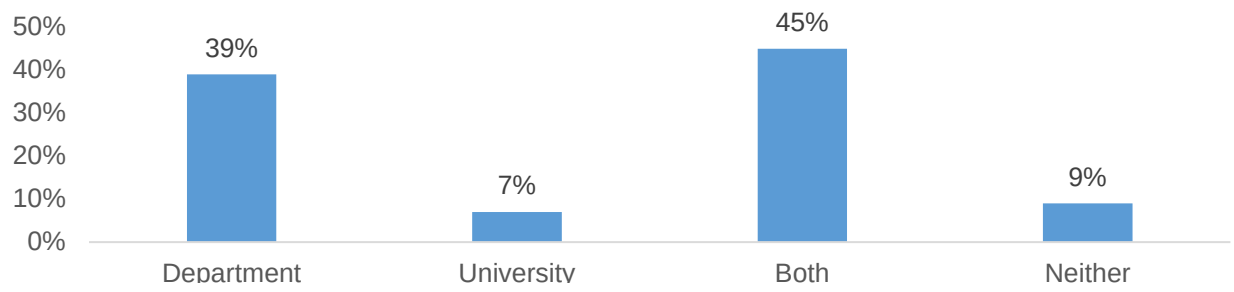


If yes, please tell us what has changed?

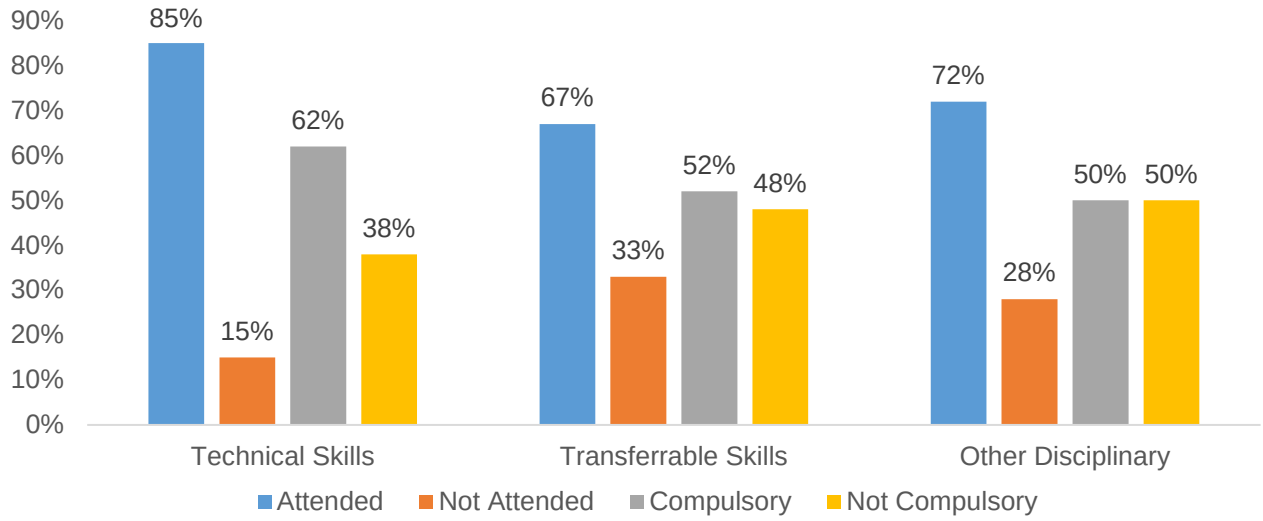
Disillusioned, burnt out, lost confidence
Considering a different career not in the area of study
Reluctant to move away from family
Less inclined to apply for postdocs as more concerned about long-term job security
Delaying job applications – taking time out
Concerns PhD is not competitive and reduces employability
More certain want an academic career
No longer wish to work in academia
Considering a broader range of careers
Potentially more doors have opened for online working from any location
Finishing PhD significantly later than expected
Planning to move overseas
Prefer to stay in UK
More interested in using technical skills for social good
Pandemic has made it harder to make plans
Prefer to work collaboratively after working alone

TRAINING PROGRAMME

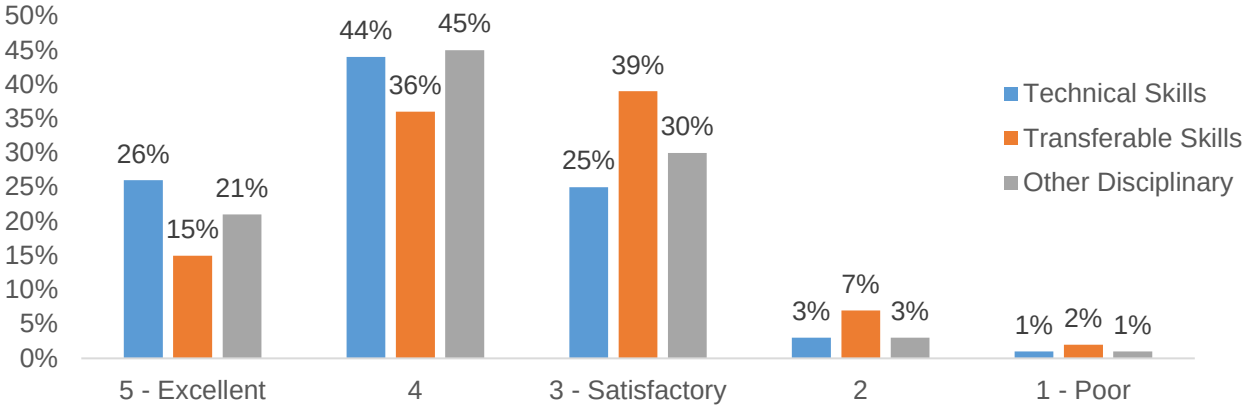
Formal training (e.g. lectures) provided during first year



Take up of technical, transferable and other disciplinary skills

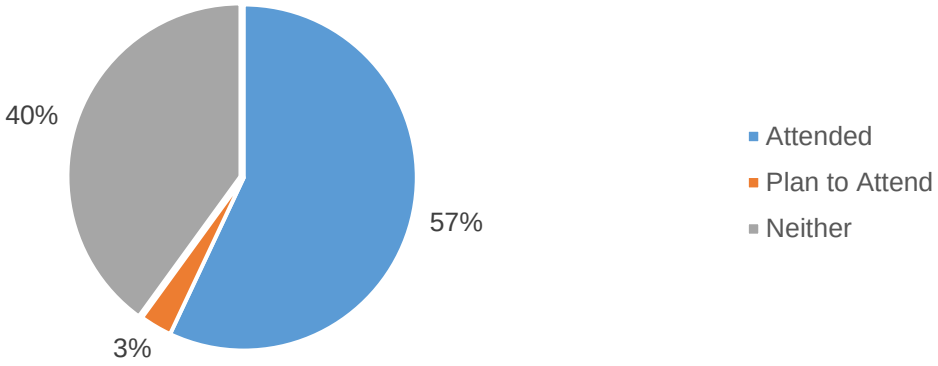


Usefulness of technical, transferable and other disciplinary skills training –

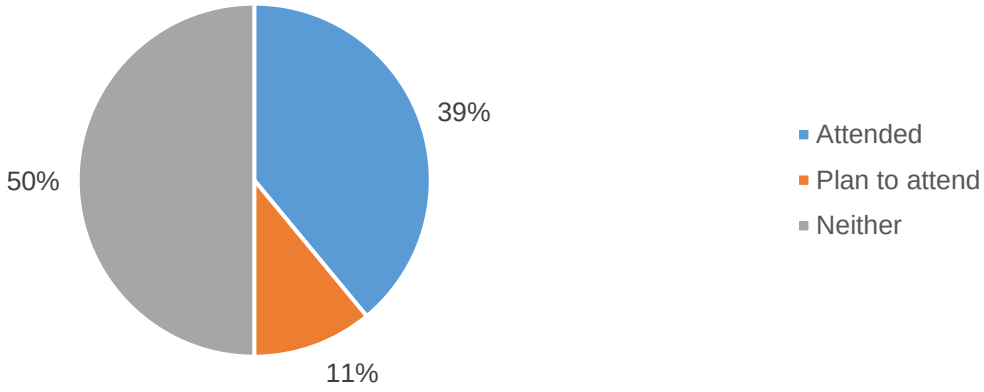


78% of students cited that their department had a nominated Postgraduate tutor with overall responsibility for co-ordinating their research training.

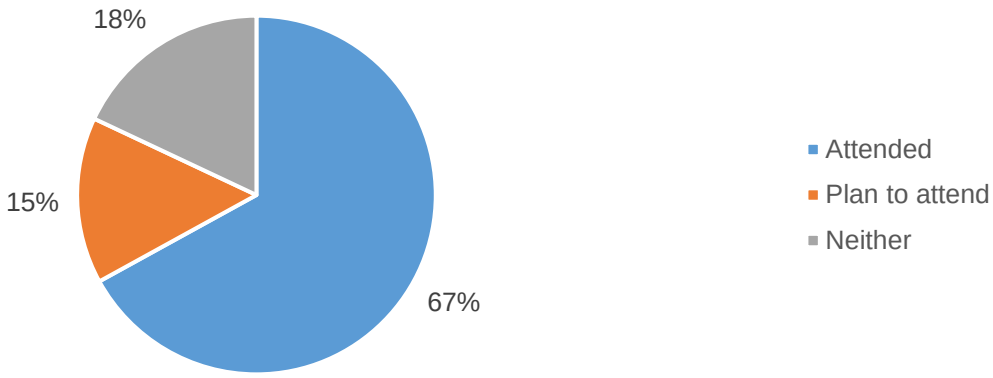
Astronomy students' attendance at the Introductory to Astronomy Summer School
417 Astronomy students responded to questionnaire



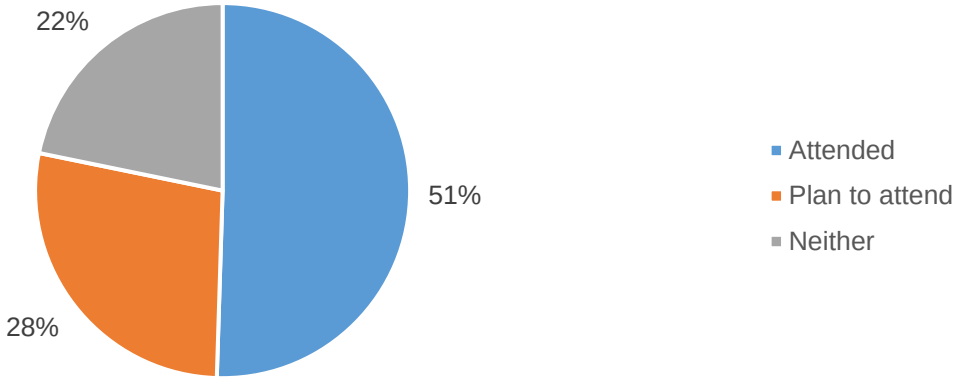
Solar students' attendance at Introductory to Solar System Science Summer School
135 Solar System students responded to questionnaire



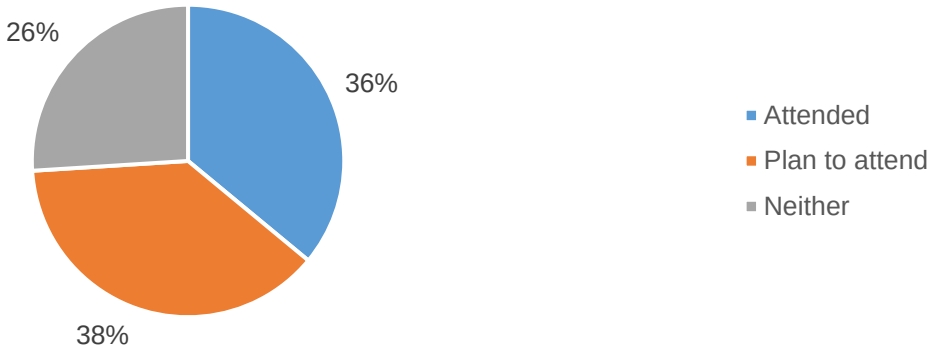
Particle Physics students' attendance at BUSSTEPP – British Universities Summer School in Theoretical Elementary Particle Physics
134 Particle Physics Theory students responded to questionnaire



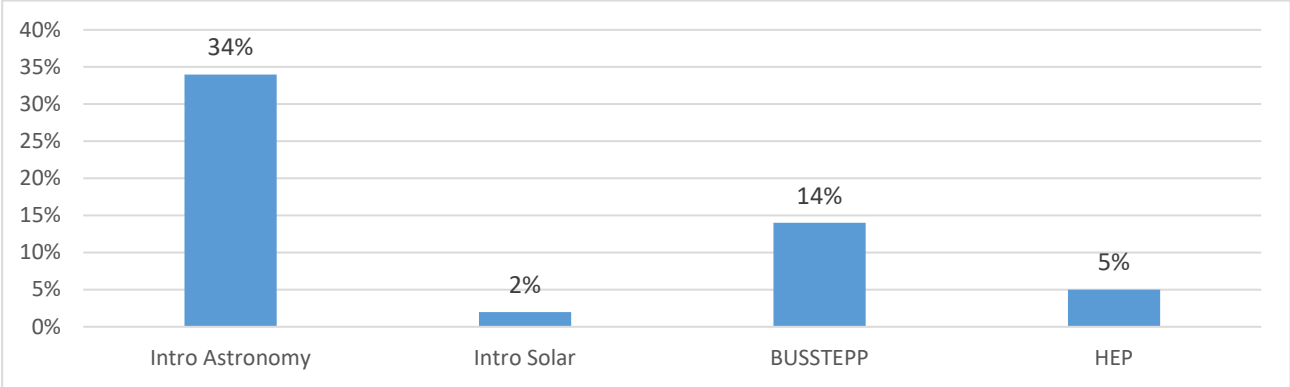
Particle Physics students' attendance at High Energy Physics Summer School (HEP)
287 Particle Physics Experimental and Accelerator Science students responded to questionnaire



Nuclear Physics students' attendance at Nuclear Summer School
53 Nuclear Physics students responded to questionnaire

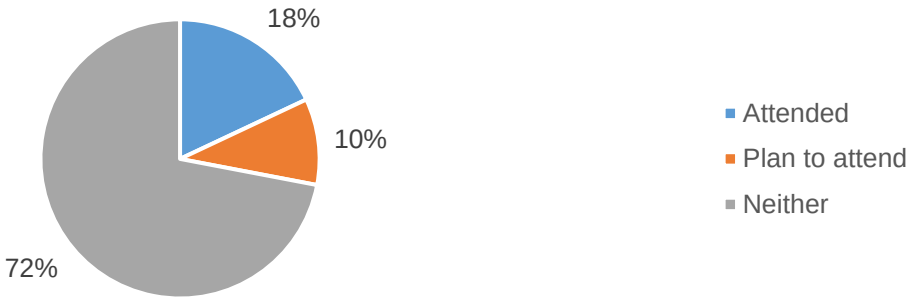


Particle Astrophysics and Cosmology students' attendance at summer schools
95 Particle Astrophysics and Cosmology students responded to the questionnaire



Research Councils' Graduate Schools Programme

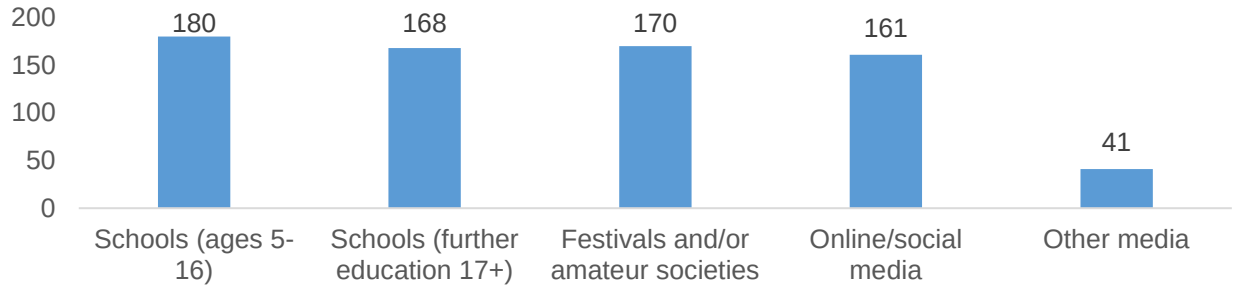
Other STFC Funded Summer Schools or Short Courses



PUBLIC ENGAGEMENT

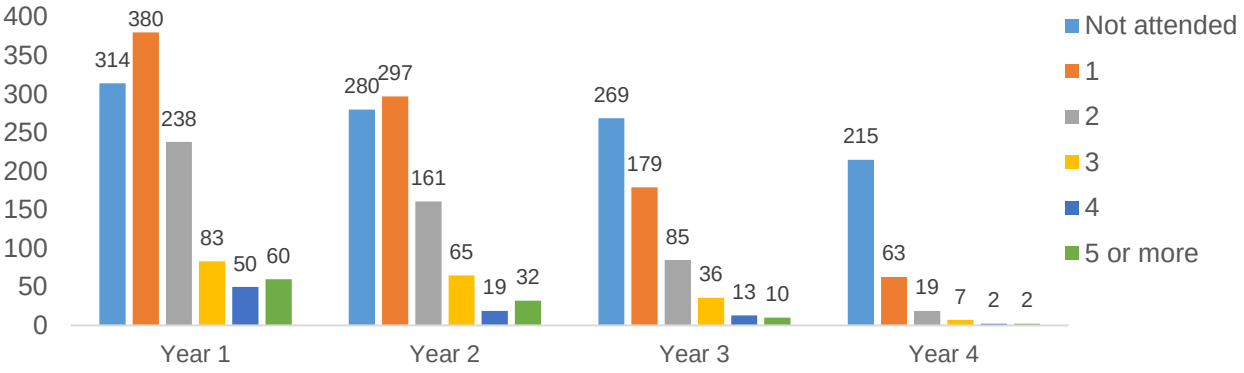
Communicated research to wider public audience

31% of students had communicated research to a wider public audience and many communicated to more than one audience.

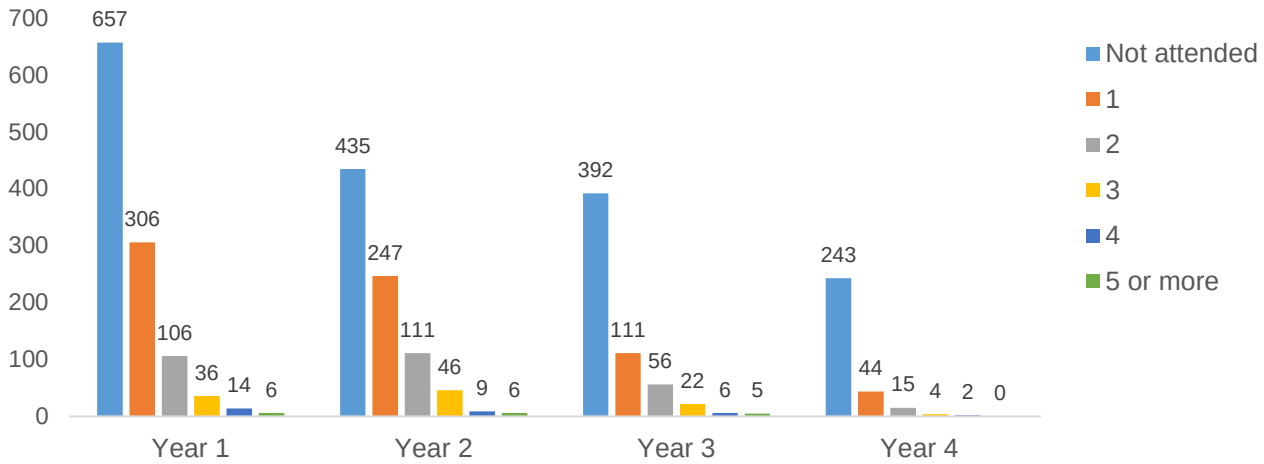


'Other' forms of public engagement students mentioned were talks, artwork, presentations to industry partners, radio, blog, workshop, demonstrations, television, poster competition, three minute thesis, guided tours, created website, IoP event, mobile phone games, magazines, museum event, podcast, lectures and press releases.

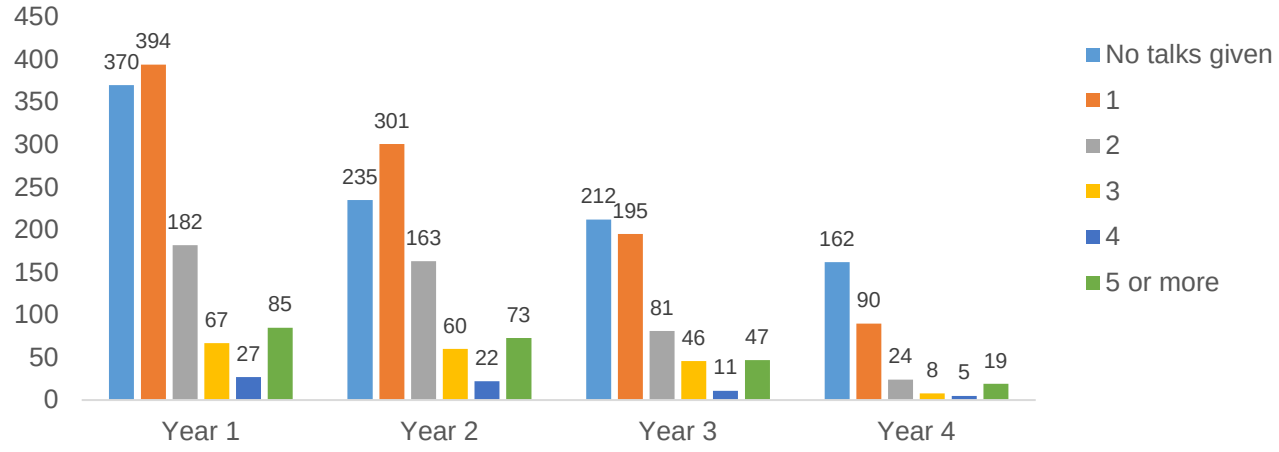
Attendance at UK workshops or conferences by year



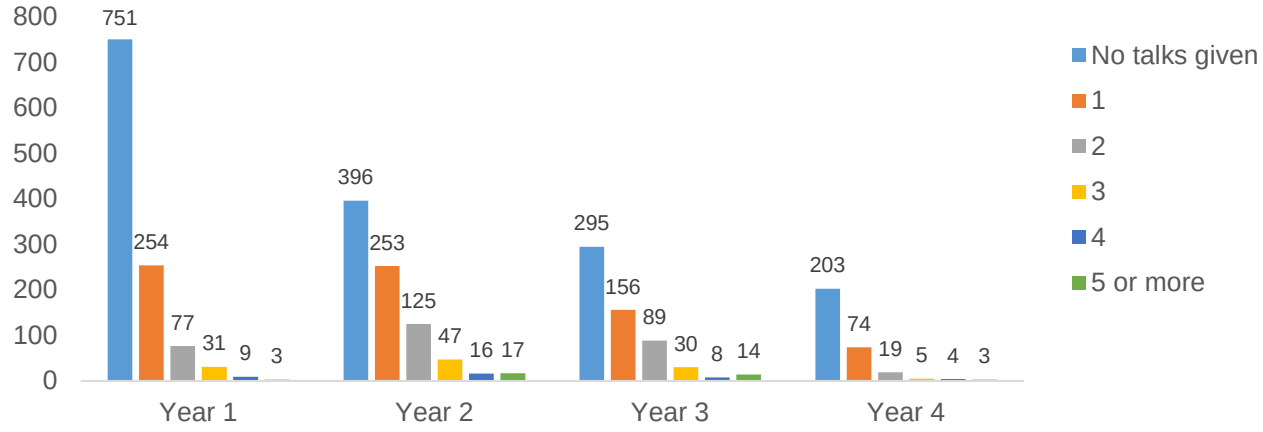
Attendance at overseas workshops or conferences by year



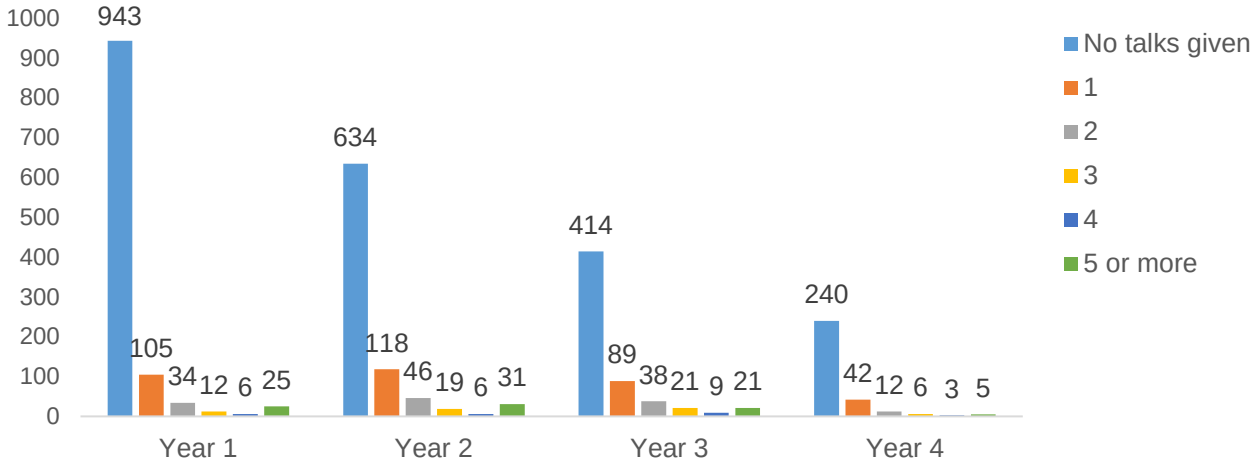
Research talks given within institution per year



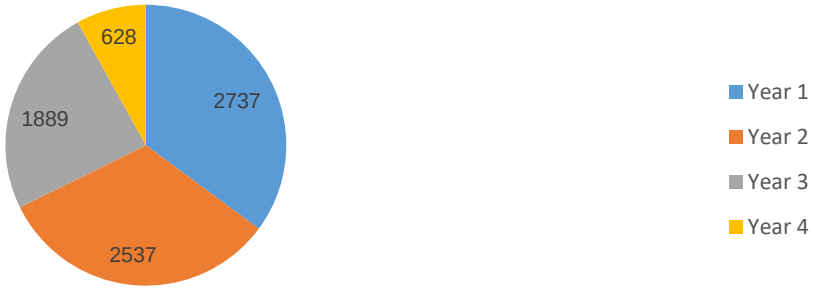
Research talks given at conferences and or workshops per year



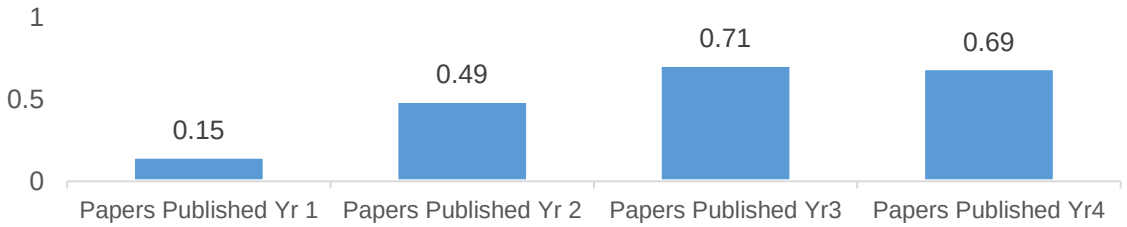
Research talks given at other external events



Total number of Research talks given



Average Number of Papers Published per student in each year

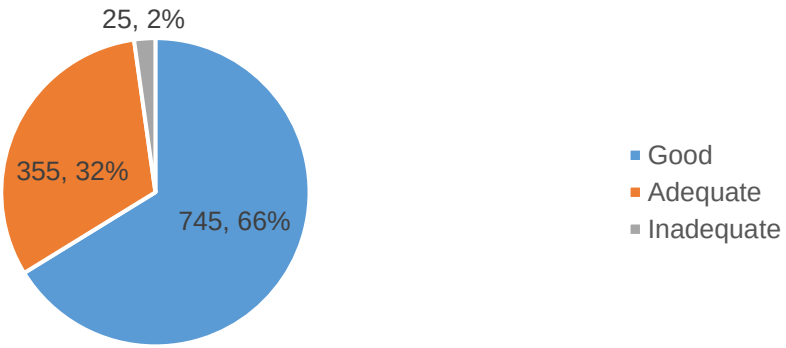


Year	No of Students	No of Papers Published in year	Average per student per year
1	1125	169	0.15
2	854	423	0.49
3	592	425	0.71
4	308	215	0.69

In total the current 4th year students have published **752** papers during their awards. This equates to an average of **2.44** papers each during their studentship.

MONITORING

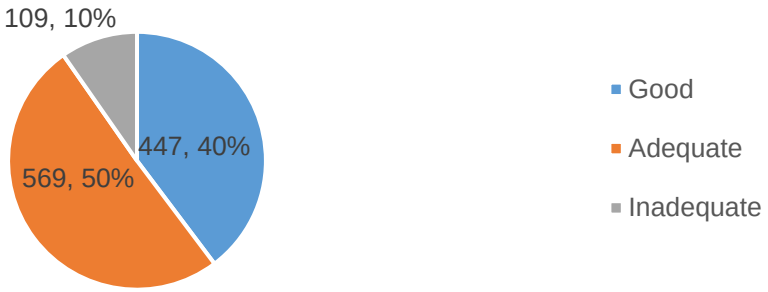
Rating of overall training



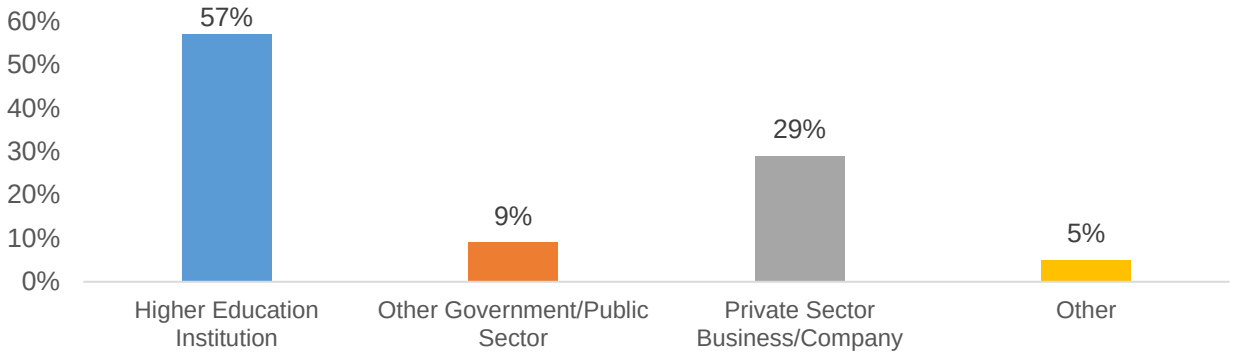
67% of students were required to submit a written progress report on their PhD in 2021. Of these students **37%** stated that their progress report was assessed by an interview with their supervisor, **55%** stated that the assessment was by interview with other staff, **29%** of which were with more than one person. Other forms of assessments included; research log, progression panel, poster presentation, presentation/seminar with Q&A, completion of thesis and viva.

FUTURE CAREER

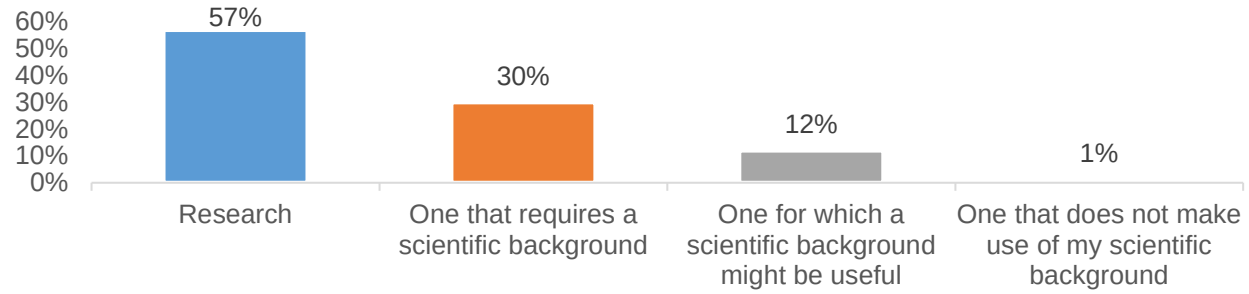
Rating of career guidance available during PhD



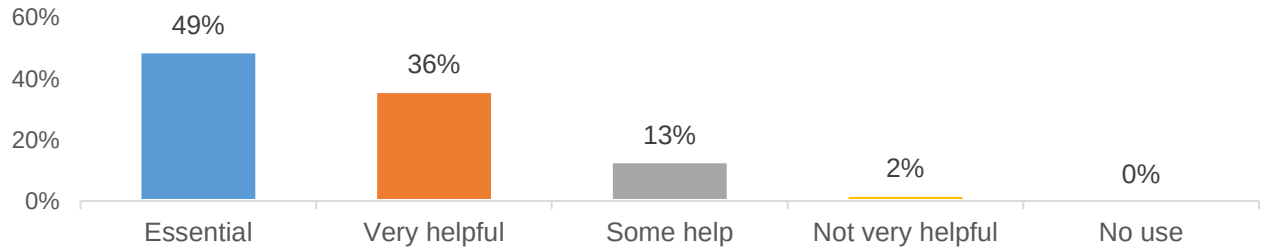
Organisation wish to work for upon completion of PhD



Sort of role intend to work in upon completion of PhD

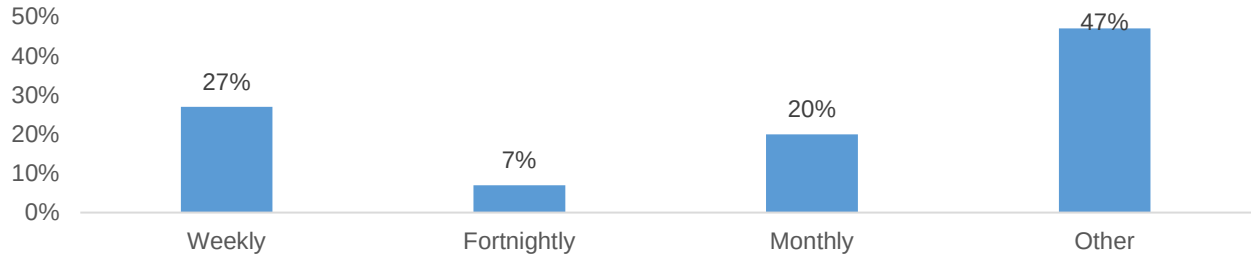


To what extent do you think your PhD will help you get a job?



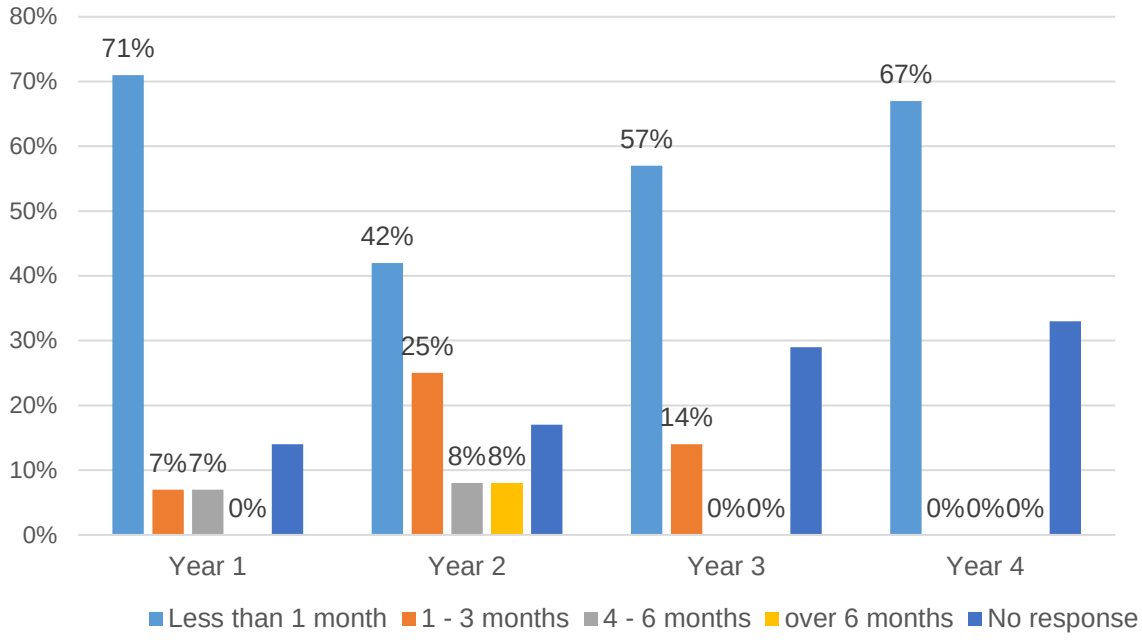
INDUSTRIAL CASE STUDENTSHIPS

Frequency of contact with Industrial partner
15 Industrial CASE students responded to the survey



The CASE industrial students had varying amounts of contact with their CASE partner from a weekly contact to infrequent contact.

Time spent on premises of Industrial partner per year
14 Industrial CASE students responded to this question on the survey; 2 in their first year, 5 in their second year and 4 in their third year and 3 in their fourth year.



Students are expected to spend 3 months a year on average at their CASE Industrial Partner premises.