



University of Strathclyde Young Strathclyder Accelerate 2023

Programme Report

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Executive Summary

Programme Overview

- 2023 saw the 14th year of the Accelerate programme, run by the Access, Equality & Inclusion team at the University of Strathclyde. The programme is the senior phase of the University's flagship Widening Access programme, Young Strathclyder, and aims to provide S5 & S6 school pupils with a targeted focus on their chosen area of potential University study.
- Participants chose from seven one-week subject-specific Challenge programmes, with new Business and Education challenges added for 2023 in order that Accelerate represent the four Strathclyde faculties. Pupils were led through the different challenges by undergraduate and postgraduate student mentors from the relevant Strathclyde departments.
- 185 pupils, from 49 schools and 14 local authorities across Scotland, completed the programme. Since its inception in 2009, 2,892 pupils have participated in the Accelerate programme.
- Partly funded by the Nairn Foundation, Accelerate is a dedicated widening access programme, with all 185 pupils selected according to widening access criteria and receiving fully funded places.

Pupil Breakdown by Widening Access Criteria

- 71% of Accelerate participants in 2023 were from MD40 postcodes, 45% from MD20 and 26% from MD10.
- 78% of participants in 2023 came from one of the University of Strathclyde's targeted low progression schools.
- Four care-experienced young people and eight young carers successfully completed the Accelerate 2023 programme.
- 29% of participants were in receipt of free school meals.
- Several Ukrainian pupils, staying in different areas of Scotland as refugees from the war in their home country, also attended the 2023 programme.

Impact on Participants

- The programme is very successful in increasing pupils' confidence that they can successfully undertake a University degree and follow a career in their chosen subject area.
- The programme is very effective in providing participants with useful information; on University courses and related careers and on University and student life in general.
- The programme has a very strong impact on participants' confidence with regard to communication, team working, leadership and presentation skills, as well as specific skills related to their Accelerate subject area.
- Many pupils report that the programme has helped them reach important decisions related to their future, both about which University subject they wish to study and which career they wish to pursue.
- Pupils perceive great benefit in having the opportunity to work with current undergraduate and postgraduate student mentors. Mentors are regarded as positive role models and valuable sources of relevant information.
- Many pupils both enjoy and feel that they benefit greatly from the opportunity to meet other like-minded young people from a wide range of geographical areas.

- A large majority of pupils find the course very enjoyable, with many also commenting that they find it inspirational in terms of their future career and academic ambitions.

SCQF Accreditation

- Four of the 2023 Accelerate Challenges (Business, Chemical Engineering, Chemistry and Product Design) are officially credit-rated on the Scottish Credit and Qualifications Framework. Pupils who pass the formal assessments on this challenges are awarded 5 credit points at level 7; the equivalent to Advanced Higher level or first year University work.
- From the 95 pupils who completed these challenges in 2023, 74 have so far passed all the assessments and gained 5 credits at level 7 for doing so.

2021 Accelerate Participants

- 68 pupils participated in the 2021 Accelerate programme which took place online.
- 69% of 2021 participants have so far applied to study at Strathclyde with 24% of participants now current students at the University, all of them studying a degree related to their Accelerate subject area. In total, 59% of 2021 participants, who applied to Strathclyde, are currently studying at a University.
- 89% of applicants to Strathclyde received an offer from the university with 55% receiving a conditional offer and 34% receiving an unconditional offer.

2022 Accelerate Participants

- 92 pupils participated in the 2022 Accelerate programme.
- 41% of 2022 participants have so far applied to study at Strathclyde with 22% of participants now current students at the University, all of them studying a degree related to their Accelerate subject area. In total, 40% of 2022 participants, who applied to Strathclyde, are currently studying at a University.
- 92% of applicants to Strathclyde received an offer from the university with 50% receiving a conditional offer and 47% receiving an unconditional offer.
- Many more participants from 2022, i.e. those who were starting S5 when they took part in the programme, are expected to apply to the University for 2024/25 entry.

Tutoring Support for 2022 Participants

- Funding from the Nairn Foundation allowed 15 participants from the 2022 Accelerate programme to receive tutoring support, in Higher Maths, English or Chemistry, during 2022-23. Strathclyde PGDE students supported pupils on an individual basis, providing a total of 140 sessions of online tutoring.
- Overall, tutees achieved mixed grades in their exams, with many pupils performing well but with 5 pupils receiving a D grade. Analysis of pupil attendance demonstrates that pupils were more likely to achieve an A grade if they attended at least 9 tutoring sessions.

Impact on Strathclyde Student Mentors

- 40 mentors worked on the 2023 Accelerate programme. These were comprised of 37 undergraduate and three postgraduate Strathclyde students. Four mentors had worked on Accelerate previously. Twelve mentors had worked during the year on other outreach

programmes run by the Widening Access team mentors, including the Young Strathclyde Primary programme, FOCUS West and the Accelerate tutoring programme.

- Two student mentors had been previous participants on the Accelerate programme while at school.
- Evaluation of mentors who work on the programme shows that they find the work challenging, rewarding and enjoyable. Mentors feel that the work allows them to have a very positive impact on the lives of young people and feel a strong degree of satisfaction from taking part in work they consider to be worthwhile and important.
- The wide range of roles and responsibilities offered by work on the Accelerate programme is very beneficial in allowing mentors to develop a wide range of employability skills. Principal among these are communication, team-work, leadership and organisational skills. 100% of mentors on the 2023 programme felt the skills they developed on the programme would directly benefit them in their current or prospective career. The programme is perceived to be especially beneficial for mentors wishing to pursue a career working with young people.

Recommendations and Action Points

- The Access, Equality & Inclusion Team plan to expand the Accelerate programme to 10 challenges in 2024, with the subjects offered giving a more balanced representation of all four of Strathclyde's faculties. This will include the reinstatement of the Accelerate Law Challenge. The AEI Service will look to formally credit-rate new challenges on the SCQF.
- Analysis of the 2022-23 tutoring programme will be carried out to identify the reasons for the inconsistent exam results of tutees and make adjustments for the 2023-24 tutoring programme for participants on the 2023 Accelerate programme.
- The AEI Service will work with colleagues across the University in order to develop methods of engaging parents/guardians with the Accelerate programme.

Programme Overview

Summer 2023 saw the 14th year of the *Accelerate* programme, run by the Access, Equality & Inclusion Team at the University of Strathclyde. The one-week programme is the senior phase of the Young Strathclyder programme and to provide new S5 and S6 pupils with a targeted focus on their chosen area of potential academic study, allowing them to find out about the University study and career opportunities open to them.

The programme ran from 19th to 23rd and from 26th to 30th June and featured seven subject areas for pupils to choose from:

- Business
- Chemical Engineering
- Chemistry
- Computer Science
- Education
- Electronic & Electrical Engineering
- Product Design (Design, Manufacture and Engineering Management)

Partly funded by the Nairn Foundation, Accelerate is a dedicated widening access programme with fully funded places offered to pupils based on the following widening access criteria:

- Pupil's postcode being in the 20% or 40% most deprived in Scotland, based on the Scottish Index of Multiple Deprivation.
- School Higher Education Progression Rate
- Care Experienced status
- Young Carer status
- Receipt of Free School Meals

Programme Aims

The main aims of the Accelerate programme are:

- To provide participants with information and guidance on the University courses and careers within their field of interest.
- To give participants an opportunity to experience study within a University department and life as a University student.
- To allow participants to take part in interactive group challenges that allow them to put into practice the subject-specific knowledge that they acquire during the week.
- To allow participants to work alongside student mentors who provide pupils with information, advice and encouragement and act as inspirational role models.
- To allow pupils to work with other young people from a wide range of geographical areas and socio-economic backgrounds.
- To provide participants with advice and guidance on University applications and student finance.
- To support pupils in their applications to Strathclyde and other Higher Education institutions by offering them the opportunity to gain credits at level 7 on the SCQF.

- To act as the entry point to programmes of sustained, subject-specific support for pupils from widening access backgrounds, providing them with an extended induction process that will produce confident, engaged and informed students of the future.
- To ease the transition into first year of study at University and therefore help to improve retention rates for students from WA backgrounds.

The programme provides a subject-specific focus that is missing from many University outreach programmes, in particular many widening access initiatives. The need for such opportunities to ‘try before you buy’ with regard to University courses is highlighted by much educational research in which a lack of knowledge of University courses, and subsequent poor choice of course, is identified as a significant reason for first year students dropping out of University.

Summary of Programme Activity

As the senior phase of the Young Strathclyde programme, it is important that the Accelerate programme represents subjects from all four of Strathclyde’s faculties. The programme was expanded to from five to seven challenges in 2023, with the introduction of a Business Challenge to represent the Strathclyde Business School and an Education challenge to represent the HaSS faculty. Further HaSS subjects will be introduced to the Accelerate programme in 2024.

The seven different Accelerate Challenges were created by staff from the relevant academic departments working in conjunction with the Access, Equality & Inclusion team. Led by a Challenge Leader and a team of undergraduate and postgraduate student mentors, pupils undertook a variety of interactive activities and worked towards the completion of a final group challenge, culminating in a presentation of their work to a panel of industry and academic experts on the final day of the programme.

Each Challenge also hosted a careers/industry event during the programme, featuring presentations from academics and professionals from the specific challenge areas. The programme also included an interactive lecture on student finance, delivered by the Student Awards Agency for Scotland, and a presentation on UCAS applications. The three Engineering challenges also came together for a presentation on making applications to University Engineering courses from the Engineering Faculty’s Senior Faculty Officer in charge of Admissions.

Individual Challenge Information

- **Business**
Participants were given a brief from the Marketing Manager at AG Barr to develop a new product. They were introduced to key elements of marketing, data analysis and market research and pitched their products to representatives of AG Barr on the Friday of the programme. Pupils could undertake three assessments that would allow them to gain 5 credits at SCQF level 7 and were given access to the University’s online MyPlace system.
- **Chemistry**
Working in the Department of Pure and Applied Chemistry’s laboratories, the Chemistry Challenge participants synthesised paracetamol and tested its purity through thin-layer chromatography. They also undertook Titration and Spectroscopy analysis. Pupils could

undertake four assessments that would allow them to gain 5 credits at SCQF level 7 and were given access to the University's online MyPlace system.

- **Chemical Engineering**

Pupils on the Chemical Engineering challenge carried out a series of practical activities in the laboratories of the Department of Chemical and Process Engineering, focussing on key areas and exciting new developments in Chemical Engineering. This included work on polymers, product design and costing, plastic recycling, bioplastics and waste. Pupil presentations on the final day of the programme focussed on their bioplastic and polymer experiments and research into sustainability. Pupils could undertake four assessments that would allow them to gain 5 credits at SCQF level 7 and were given access to the University's online MyPlace system.

- **Computer Science**

Pupils on the Computer Science challenge were charged with designing a new interactive wearable or mobile device or application that is socially inclusive and would improve people's lives. They had to conduct market research, sketch designs, storyboard their concept and develop an interactive and/or physical Prototype before pitching their ideas to an expert panel.

- **Electronic & Electrical Engineering**

The EEE students took part in a number of exciting challenges, designed to demonstrate the range of course and career options open to EEE students, including Aerospace, Electronics Design, Cybersecurity and Renewable Energy. Participants also took part in tours of the EEE department and the Technology and Innovation Centre. The week culminated in each group presenting a poster of their work related to Sustainable Cities. The challenge was supported by two Junior Mentors who had been programme participants in 2022.

- **Education**

The Education Challenge showed participants how Education takes many forms, looking at Philosophy, Psychology, Schools and Schooling and Creativities. The programme included a trip to the Botanic Gardens for a session on Sustainability.

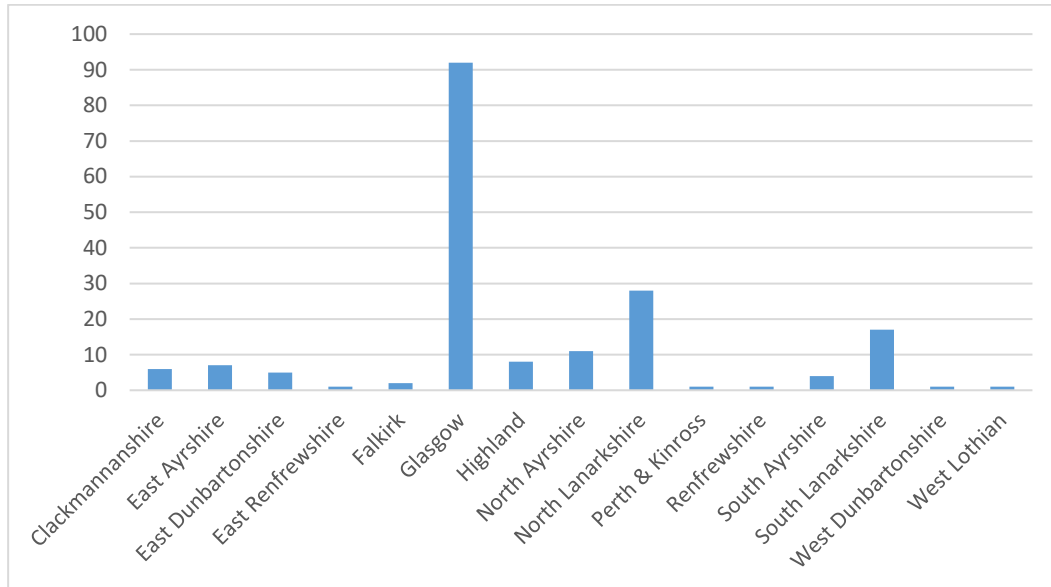
- **Product Design**

Run by the Department of Design, Manufacture and Engineering Management (DMEM), the Product Design challenge gave pupils a brief to design applications that would make the transition into University life easier for students. They produced models of their products using the Design, Manufacturing and Engineering Management department's rapid prototyping equipment. They then designed the packaging, branding and marketing campaigns for their products and pitched them to a panel of Design and Engineering experts. Pupils could undertake three assessments that would allow them to gain 5 credits at SCQF level 7 and were given access to the University's online MyPlace system.

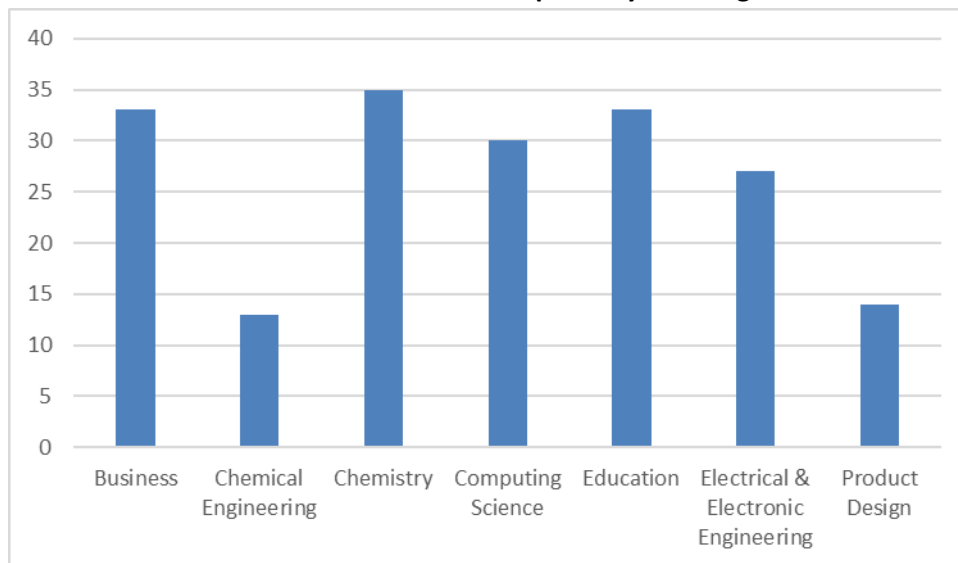
Programme Participants

185 pupils, from 49 schools and 14 local authorities across Scotland, completed the Accelerate 2023 programme.

Breakdown of 2023 Participants by Local Authority



Breakdown of 2023 Participants by Challenge



Widening Access

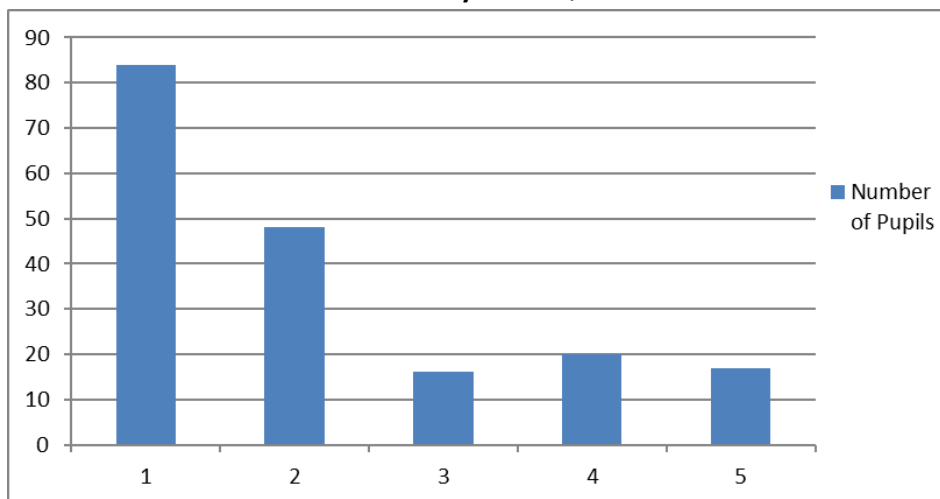
As a dedicated widening access programme, the 2023 Accelerate programme offered funded places to pupils based on the following widening access criteria:

- MD20 or MD40 postcodes as measured by the Scottish Index of Multiple Deprivation (SIMD)
- Attendance at a school with a low Higher Education Progression Rate (HEPR)
- Care Experienced
- Young Carer
- Receipt of Free School Meals

Breakdown of Accelerate Pupils by SIMD

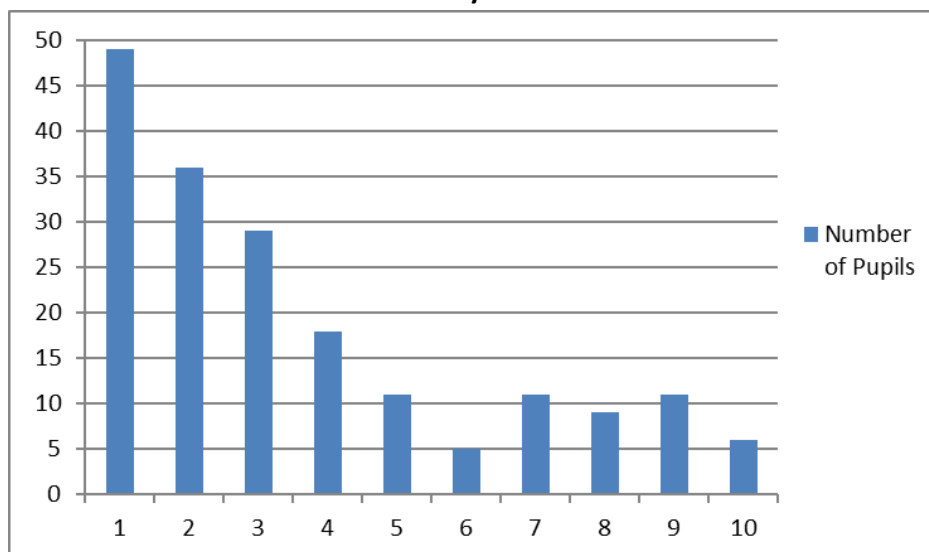
The tables below show the breakdown of Accelerate 2023 attendees by SIMD Quintiles and Deciles. 71% of participants in 2023 were from MD40 postcodes i.e. the 40% most deprived postcodes in Scotland. 45% were from MD20 postcodes and 26% from MD10 postcodes.

Breakdown by SIMD Quintiles



(1 = most deprived 20% postcodes in Scotland, 5 = least deprived 20% postcodes in Scotland)

Breakdown by SIMD Deciles

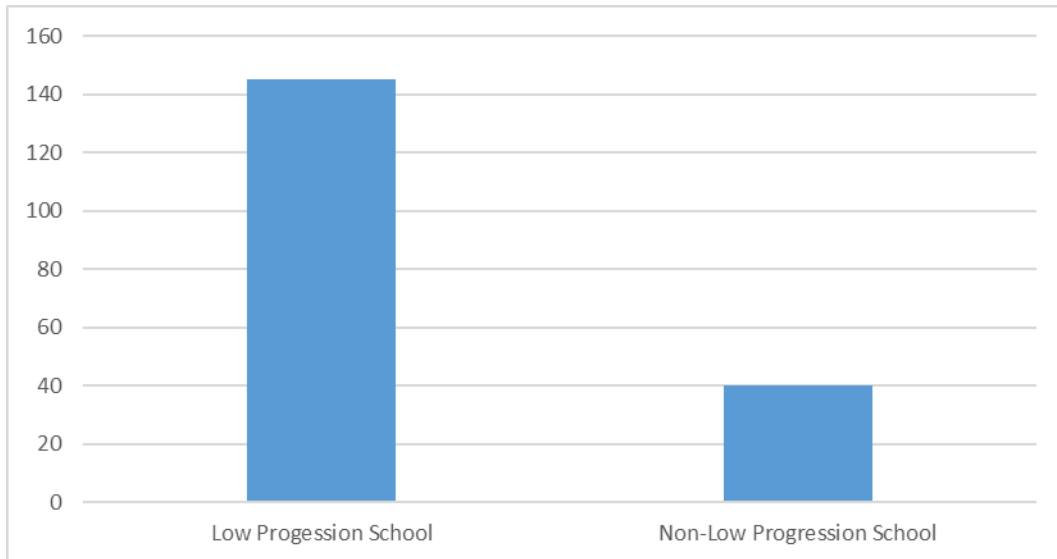


(1 = most deprived 10% postcodes in Scotland, 10 = least deprived 10% postcodes in Scotland)

Breakdown of Participants by School

78% of participants attended low progression schools as measured by the University of Strathclyde's widening access policy.

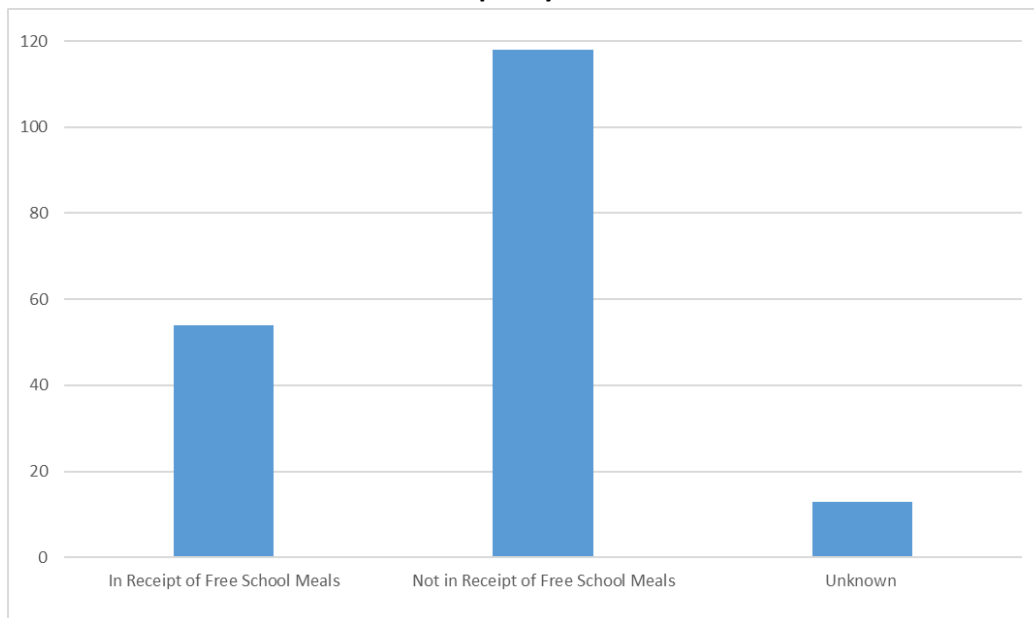
Breakdown of Pupils by School Progression Rate



Free School Meals

29% of participants on the Accelerate 2023 programme were in receipt of free school meals.

Breakdown of Pupils by Free School Meals



Care-Experienced Young People and Young Carers

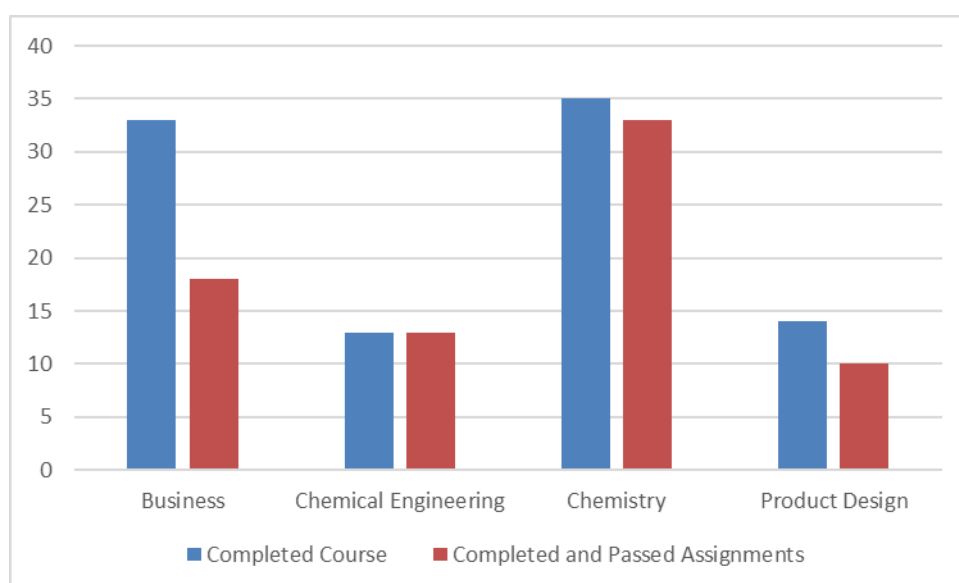
The Strathclyde Widening Access team work closely with schools, local authorities and other external partners in order to improve the educational outcomes for children who have experience of the care system. The University is also dedicated to supporting young people and students who have caring responsibilities that may impact on their studies and school work. Four care-experienced young people and eight young carers successfully completed the Accelerate 2023 programme.

SCQF Accreditation

Four of the Accelerate Challenge programmes (Business, Chemical Engineering, Chemistry and Product Design) are credit-rated on the Scottish Credit and Qualifications Framework (SCQF). If participants on these challenges pass the programme assessments, they are awarded 5 credit points at level 7 on the SCQF. Level 7 is the equivalent to Advanced Higher or first year University level work. This allows successful pupils to demonstrate that they are capable of successfully undertaking first year level University work in a specific subject area. This is a significant confidence boost for pupils and means that the programme carries more recognition within Strathclyde and in other institutions. It is hoped that this will encourage pupils to include the programme in their applications to University, as well as to FE and employment, and in their portfolios of attainment and wider achievement in the senior phase.

Recognizing the Accelerate programme on the SCQF allows the credits that pupils gain on the programme to be transferrable, increasing opportunities for participants to benefit from a successful performance on the programme. It is hoped that academic selectors from the relevant departments across different institutions will now have a greater level of certainty that potential students, particularly those from a widening access background, could successfully make the transition to becoming a first-year student and work successfully at that level.

From the 95 pupils who completed the four credit-rated Accelerate challenges in 2023, 74 have so far completed and passed all the assessments and gained 5 credits at level 7 for doing so. The graph below details the figures for the numbers of pupils who participated in each of these challenges and the number of students who have, so far, gained the 5 credits on each.



Programme Evaluation

Accelerate 2023 Qualitative Data

From qualitative data gathered from the pupils who attended the 2023 programme, there appear to be six main areas in which participants felt that the programme had been beneficial to them:

1) Insight into Future Study and Career Possibilities

The most common benefit of the programme mentioned by participants was that it provided them with useful information;

Personally I loved the Accelerate Education programme not only for finding out viable information but for meeting new people with different interests/opinions.

Very helpful, comfortable, learned a lot of unknown information, clearer idea on what I choose to do in the future.

I thought it was a good experience and I now know a lot more of the career I want to have.

I also think the programme is very good for me to help choose a career path.

I think it has been very helpful for knowledge on how a university works and has shown me the level I need to get to for my future career.

It has given me a real insight to what uni can look like and has made me very excited for the future and what my career could look like.

Many participants felt that the programme had offered them a valuable insight into what would be involved in studying a course in their field of interest at University;

Hearing talks from academics, lecturers and those who have studied different chemistry courses also gave further insight and idea to what I would like to achieve/learn at and from university, whether it be chemical engineering or drug discovery.

I feel I now know what part of the business course I would like to pursue.

A good way to understand some of things I might learn when studying business.

A good way to learn different courses I could take under business.

This course has shown me that uni is something I want to apply for & business will be the subject I will take.

I now know that the business school has various different departments that you can try out when studying.

I learnt a lot about what studying computing science in university is like and the others courses I could apply for.

This opportunity has allowed me to learn more about what studying chemical engineering will be like at university.

I thought the Accelerate programme helped me think more about careers in education and what that degree would entail.

Many also felt that the course allowed them to see the different career options available within a particular field and what it would be like to work in that area;

I thought the programme was very well carried out and planned, as it gave useful insight into the world of engineering. I thought the activities that we did were well diverse, covering all aspects of the engineering industry and not just focusing on specific areas.

Enjoyed it and learned new things related to chemical industry.

I enjoyed learning about the career paths in EEE and I really liked building the circuits and soldering.

Allowed me to look more into what EEE involved and let me think more about my future career.

Some participants found benefit in learning, in a more general sense, about University study and student life;

I believe that the accelerate was a great opportunity to get a major insight into Strathclyde that I would not have been able to see through open days.

I found out general information about University that I didn't know before.

Learned more about the university and what studying at Strathclyde involves.

Good opportunity to understand what it would be like to study at university.

I thought it was very helpful and helped me understand what it will take to study in uni.

It was a good opportunity to find out what it's like to study at Strathclyde and what it involves.

It was a great opportunity to find out & experience a taster of university life.

I think that the Accelerate Programme was a great way of getting a taste of the University life. It was good to experience some of the activities and routines of a university student.

I really enjoyed the experience, I feel like I understand what uni life entails.

It was fun to do something different, meet new people and learn about university life.

2) Influence on Study and Career Aspirations and Choices

Many pupils commented that the course had influenced their future study and career aspirations, with some also indicating that participating in the programme had allowed them to decide that they specifically wanted to study at the University of Strathclyde;

I now know that I wish to study here and pursue a career in product design.

I have learned of different career paths and has helped me decide that chemistry is definitely for me and something I hope to study in the future.

This course shifted my perspective on what education is as a whole and helped me confirm that in the future I would wish to either go into a career in education or employment with a similar skill set.

I would love the chance to study at Strathclyde.

I definitely think that Strathclyde is an option for me & I think it is an incredible uni to study at.

I think the university of Strathclyde is a nice welcoming place and is somewhere I would love to study.

Overall I found the experience helped me make up my mind, I know I now want to go to University, possible Strathclyde.

I also have a better understanding at Strathclyde University as a whole and will apply here next year.

Along with being at the uni for the first time and seeing it has really made me want to go to Strathclyde.

This opportunity has made me put chemistry at the top of my list as well as Strathclyde University.

It has definitely encouraged me to apply to Strathclyde.

3) Working with Student Mentors

Pupils' feedback about working with undergraduate and postgraduate student mentors was overwhelmingly positive. Mentors were seen as a friendly and approachable source of valuable information about all aspects of University study, student life and applying to University;

I enjoyed working with new people and our mentor included everyone.

...the mentors were great to work with and I learned a lot and thought it was a great experience.

My mentors were very kind and friendly and were willing to answer questions or help with tasks.

I found the course really interesting and we had the best mentor.

Mentors were great and helped throughout the week and were super helpful.

The mentors have been great and have provided help, support and reassurance when needed.

The mentors were amazing at leading helping us when we are stuck.

Working with the group and my mentor really improved the experience.

My mentor was great, without her I wouldn't of presented, generally she really boosted my confidence into thinking I can be like other, and have the ability to present in front of a crowd. Staff were amazing really positive attitudes making me smile more than I usually do.

The mentors were very helpful and informative.

...our mentor was funny and very nice and helped a lot.

The mentors were also really good help and made the experience better.

The mentors were incredible, not only did they provide a sense of security but also insight into what 'university life' is like (especially at Strathclyde).

The student mentors (Thanks Shaun) also offered a lot of advice and support and I feel I have learned more about chemistry and feel more confident in my own abilities.

The mentors especially my group's mentor was great to work with and I learned a lot from they were extremely patient and helped wherever we needed.

I liked meeting new people and working with them, especially the mentors as they were incredibly friendly and helpful throughout.

I really felt like a proper university student and I'm very thankful that I was given this opportunity and I really wanna thank the member of staff and the mentors for giving up their time to make this happen.

I enjoyed working with the mentors (who were very helpful & fun to be around).

The mentors were really nice and helpful.

The mentors and lecturers were awesome, thank you so much!

4) Development of Personal Skills and Abilities

As well as learning about their chosen subject area, a large number of participants felt they had developed other abilities. Prominent among these were communication, team-working and problem-solving skills;

I enjoyed the accelerate programme and I feel I have developed new skills. I have developed my communication, teamwork and organisation skills. I have also developed timekeeping and resource management skills.

I got to practice and develop my leadership skills and get to know and work with new people.

...was great for helping me develop my communication skills with others.

I developed great presentation skills.

I was able to improve my teamwork and collaboration skills. I also developed skills like designing prototypes using websites and also how to use various stages like paper prototyping to create a very good sign.

Was good for developing teamwork.

Accelerate program really developed my speaking skills and communication.

I am typically reclusive and antisocial but I feel this helped me develop as a person.

I have gained many new skills, improved my confidence and developed my skills for working in a lab.

It has developed my understanding along with communication skills, group skills and even friendship skills.

I feel I have developed new skills. I have developed my communication, teamwork and organisation skills.

I got to practice and develop my leadership skills

5) Meeting New People

Many young people on the Accelerate programme spoke positively about being able to meet and work with a wide range of other young people from across Scotland who shared their academic interest and whom many felt they would not otherwise have the opportunity to meet.

I enjoyed meeting other people from other schools and have definitely met new friends.

I got the chance to meet new people and friends.

I really enjoyed meeting new people and am glad I joined this challenge.

It was fun meeting new groups of people

This has helped me feel more confident meeting new people.

I had enjoyed meeting new people

...meet new people that have similar interests to me.

I got the chance to meet new people who were very nice and I thoroughly enjoyed working with my group in experiments and challenges.

I also feel it helped my confidence when meeting new people

It is really good to meet new people.

I loved meeting new people

I thought the programme was a great opportunity to meet new people from other schools

I think the programme brought me out of my shell as I have made lots of new friends.

6) Enjoyment

One of the strongest themes emerging from the qualitative responses was the high level of enjoyment that the pupils experienced on the programme;

I think the Accelerate Programme was the best program I have ever take part in when it comes to getting to know what the education system looks like and what the university life looks like generally. I am really happy and enjoyed it from the first day the last week of the day. I want to thank the university staff, the mentors and everyone who made contribution for this programme to run and help us to this extent. <3

I think this Accelerate Business Programme gave me a great opportunity to decide what I wanted to do in Uni and be excited for it. I LOVED IT.

I thought it was a really fun experience.

It was fun I enjoyed my time here.

I really enjoyed and would recommend to others.

Personally I loved the Accelerate Education programme.

Overall, I loved the programme and it was a very good confidence/intelligent boost.

It was a great experience.

It was a fantastic experience.

I really enjoyed taking part in the accelerate chemistry program.

Overall really good experience and would do it again in a heartbeat.

Overall, I thought the programme was very high quality, engaging, informative and enjoyable.

Overall a great experience and glad I applied and attended.

First time I fully enjoyed a programme. I fully enjoyed everything in the course.

I thought the accelerate programme was an incredible experience that I would definitely tell people to experience if they had the choice.

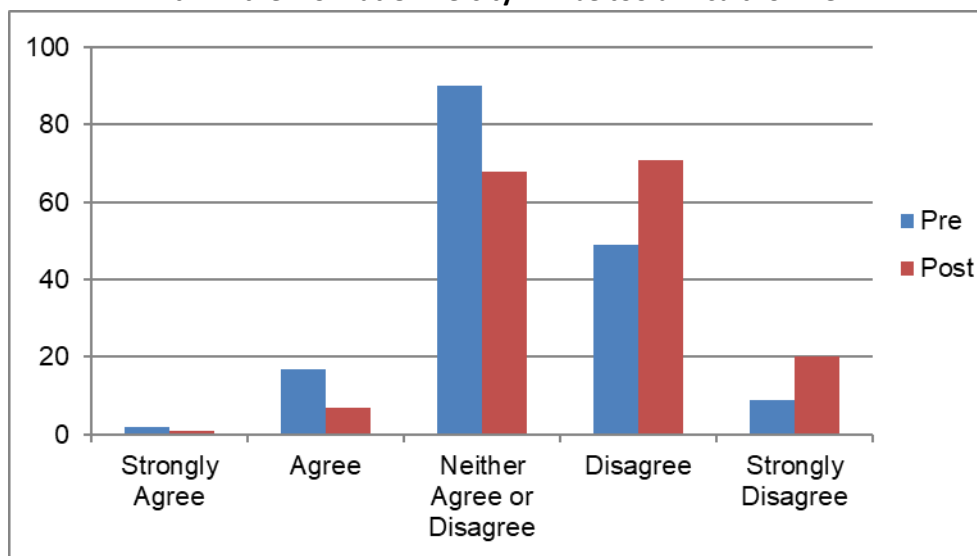
Pre and Post Quantitative Data

Participants on the Accelerate programme complete pre and post-programme questionnaires which feature a number of quantitative questions designed to measure the programme’s impact. The following graphs display the pre and post results gathered from the Accelerate 2023 participants. The number of pupils whose pre and post responses were recorded for each question is indicated next to the corresponding graph.

These results demonstrate that the programme has a significant positive impact on pupils with regard to the following areas:

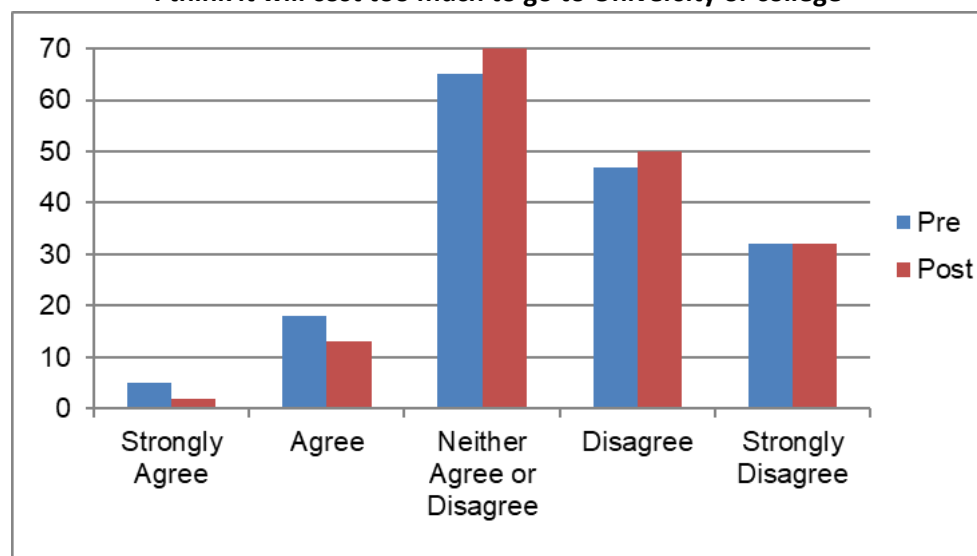
- Attitude Towards University Study
- Knowledge of Courses and Careers in the Challenge Subject Area
- Leadership, Communication and Team Working Skills
- Attitude to Academic Ability

I think the work at University will be too difficult for me



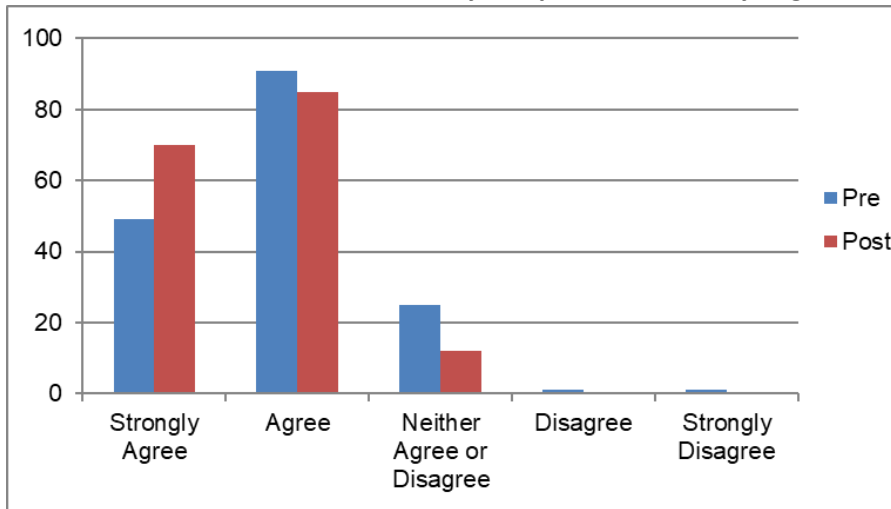
167 Respondents

I think it will cost too much to go to University or college



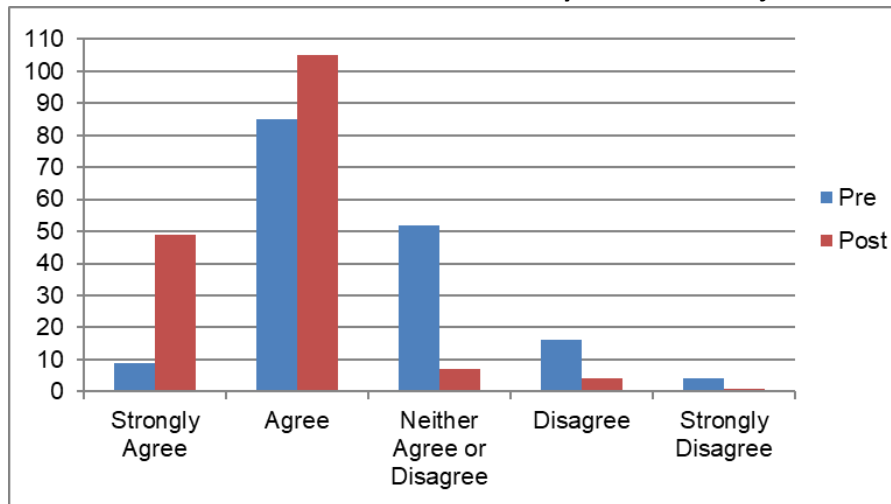
167 Respondents

I am confident I could successfully complete a University degree



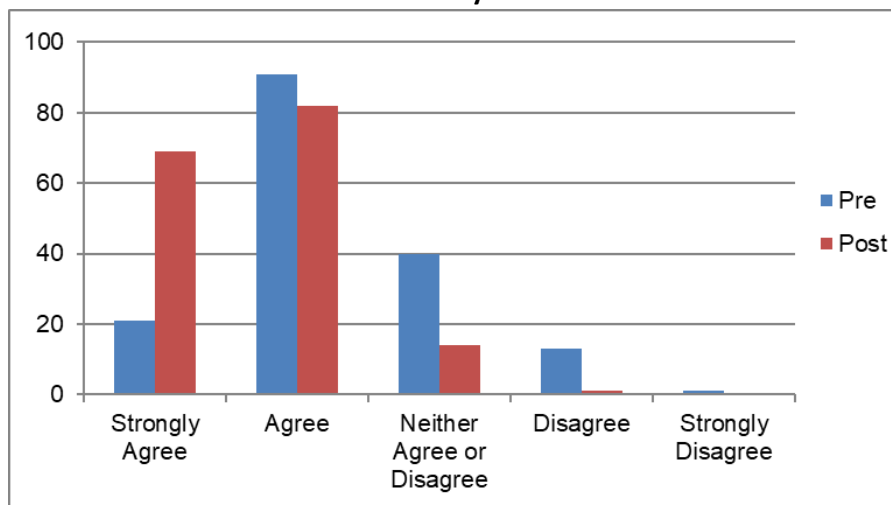
167 Respondents

I feel confident that I know what a career in my Accelerate subject involves



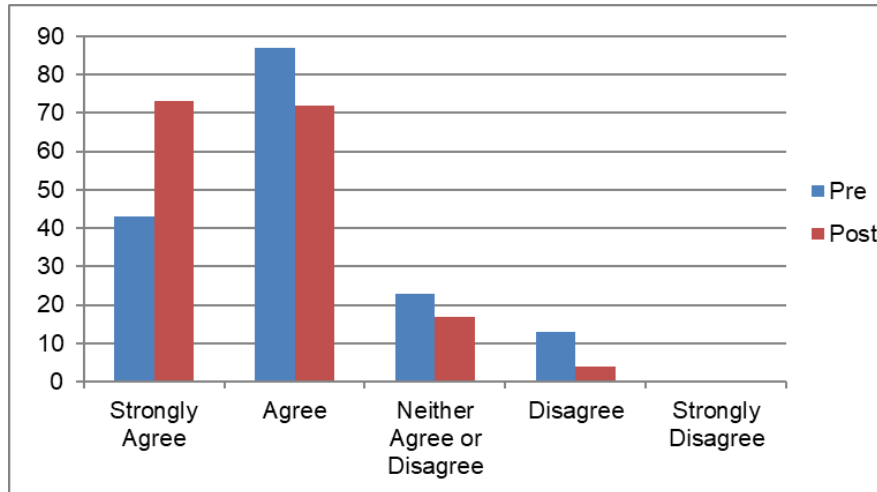
167 Respondents

I know what I would need to study to follow a career in this area



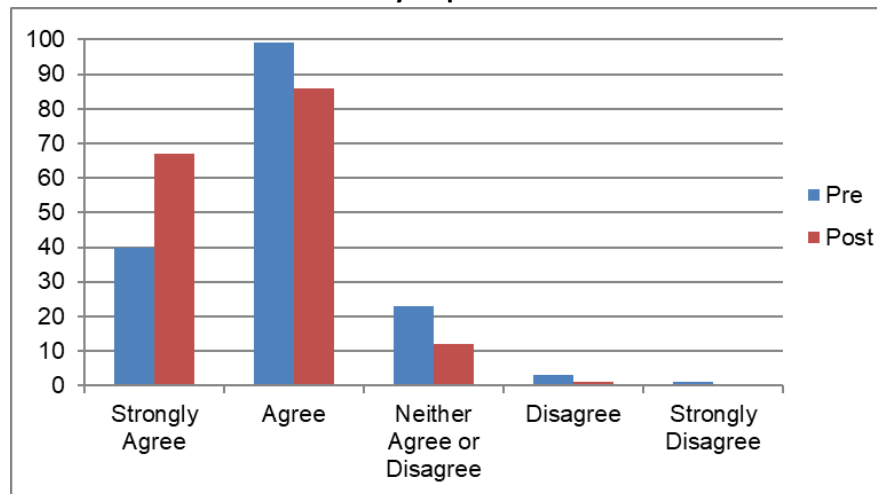
167 Respondents

I know what exam results I need from school in order to follow a career in this area



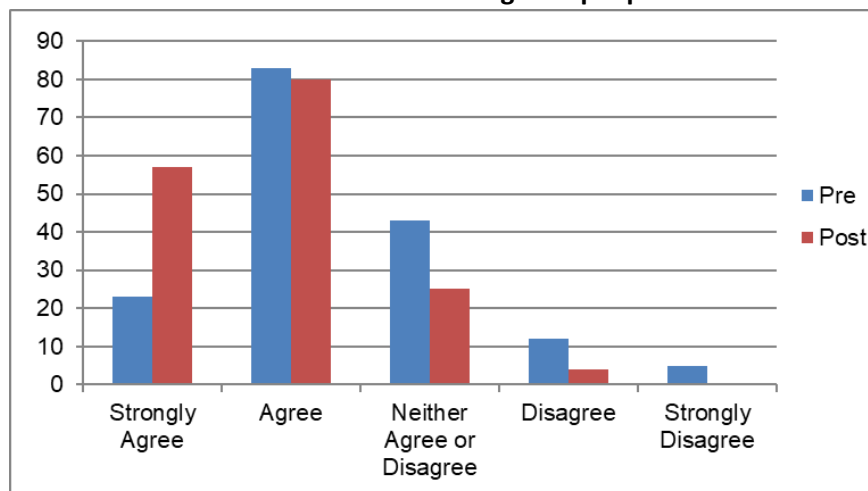
167 Respondents

I feel confident that I have the ability to pursue a career in this area if I wished to



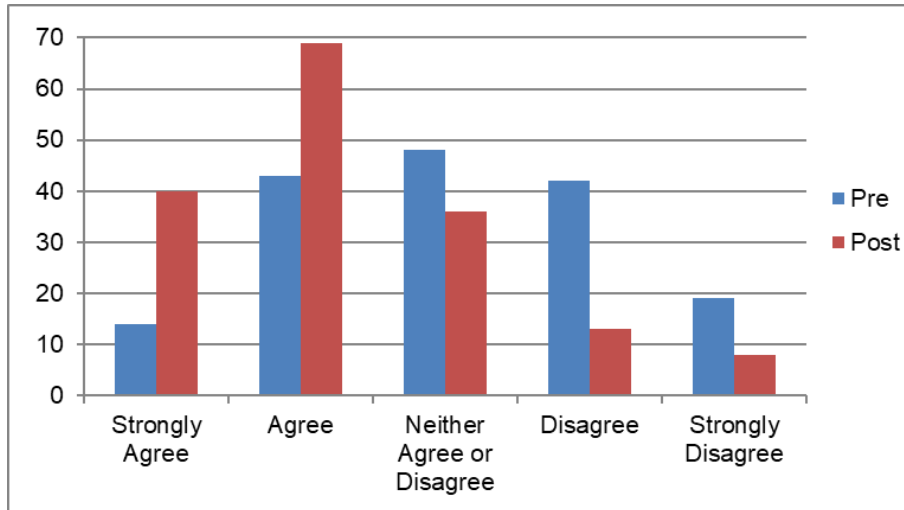
167 Respondents

I feel confident meeting new people



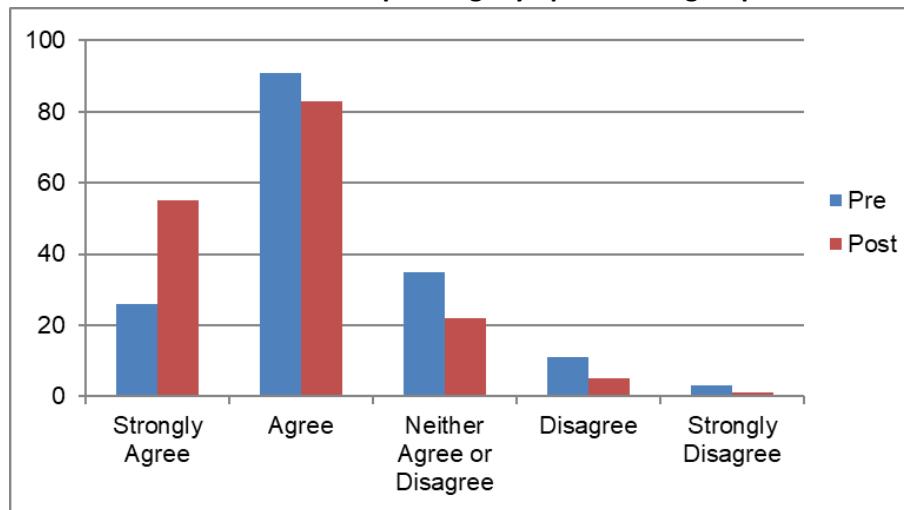
166 Respondents

I feel confident giving presentations in front of people



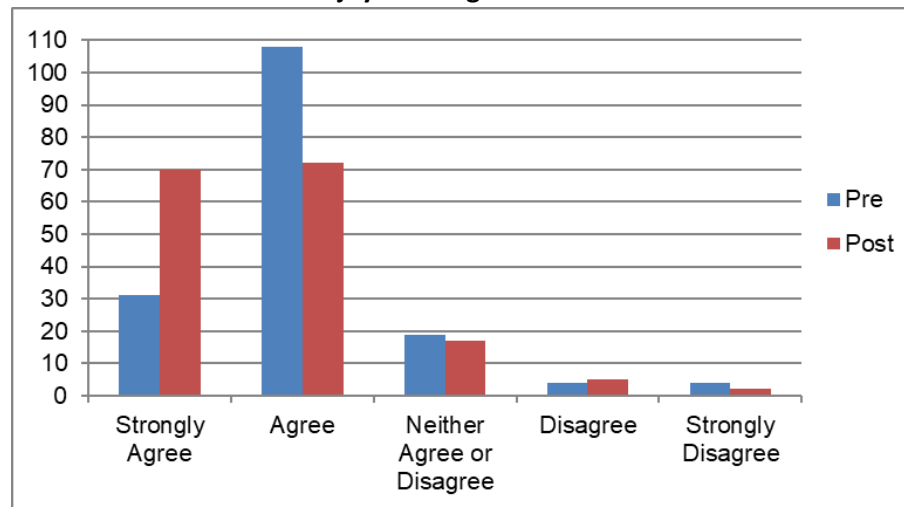
166 Respondents

I feel confident expressing my opinion in a group



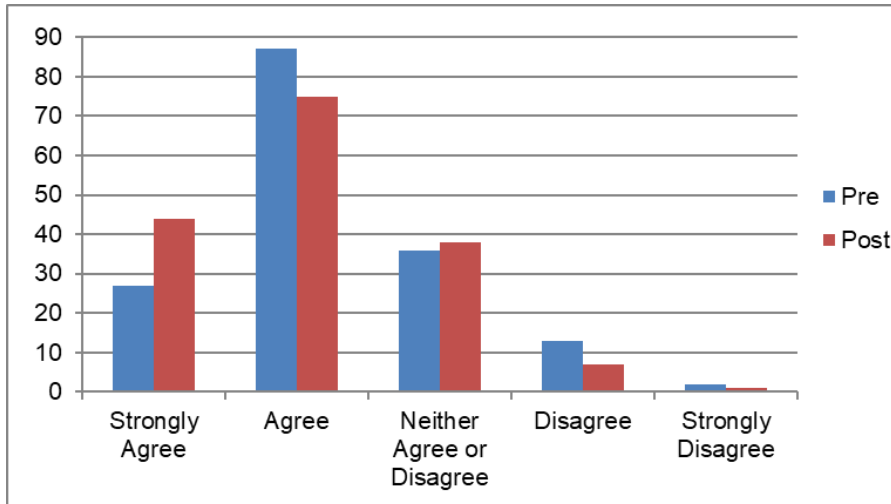
166 Respondents

I enjoy working with others



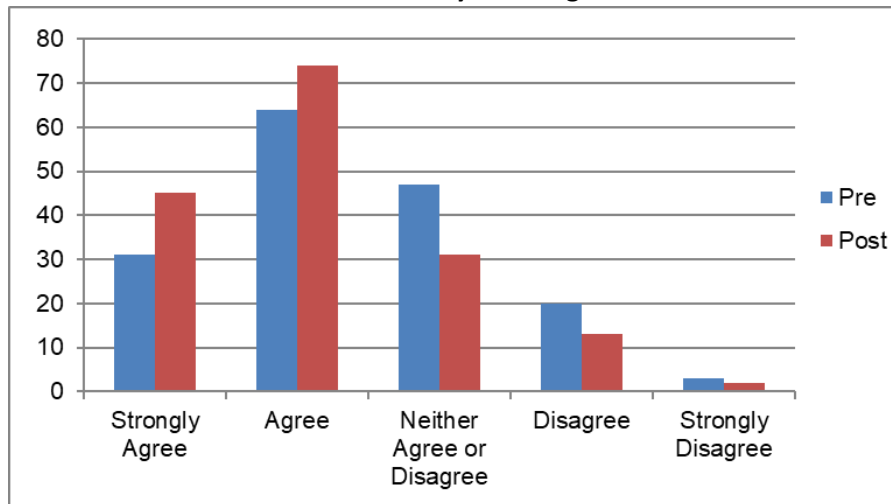
166 Respondents

I feel I can organise groups and activities well



166 Respondents

I feel I have the ability to be a good leader



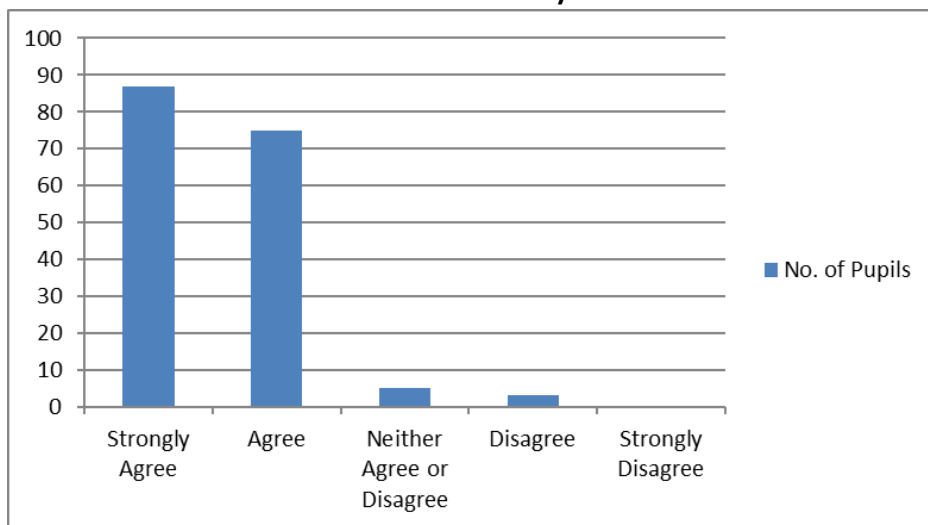
165 Respondents

Participant Impressions of the Programme

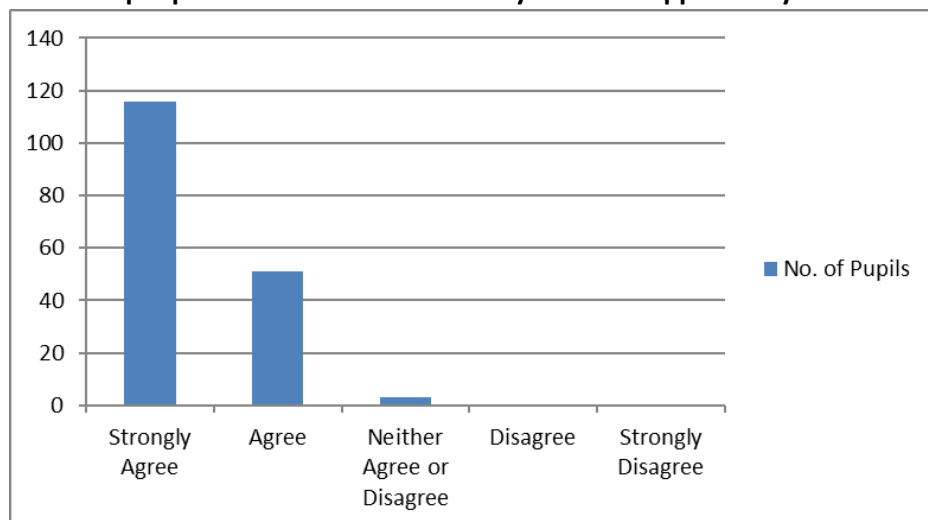
Participant evaluations also feature several post-programme questions designed to assess what pupils thought of their Accelerate experience. These results are based on responses from 170 of the Accelerate 2023 participants.

The results are very positive and underline many of this report's other evaluative findings, in particular with regard to pupils finding the programme to be a valuable source of information and very useful in terms of helping them decide on future study and career options. It is again clear that pupils very much enjoy working with student mentors and meeting other young people from different schools who are interested in the same subject area.

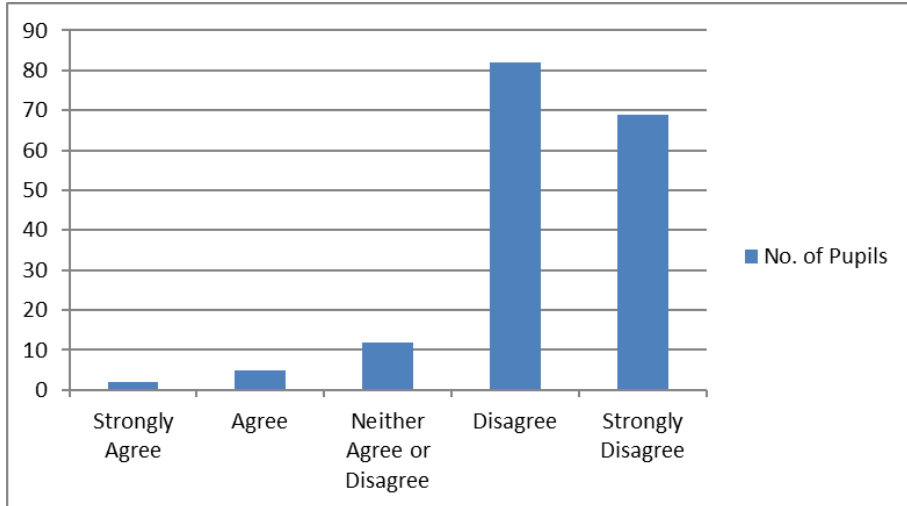
I found out information about University that I didn't know before



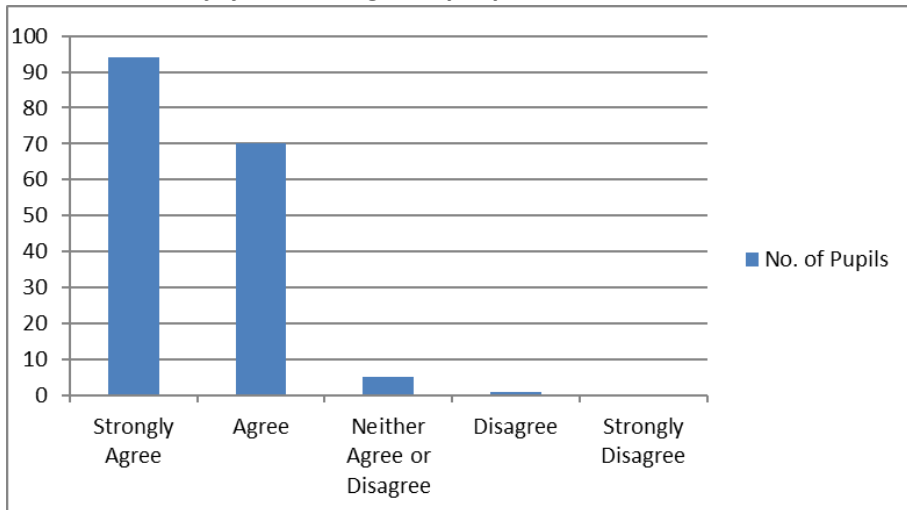
I met people that I would not normally have the opportunity to meet



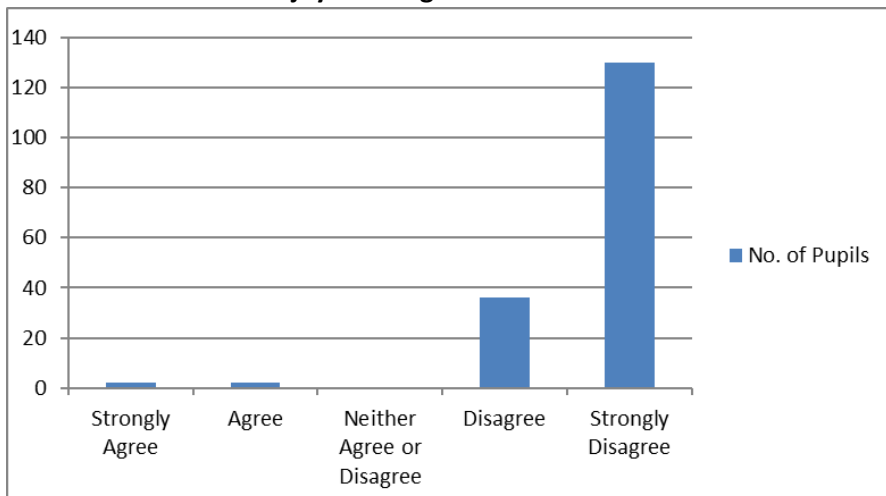
The course did not develop my team-working and communication skills



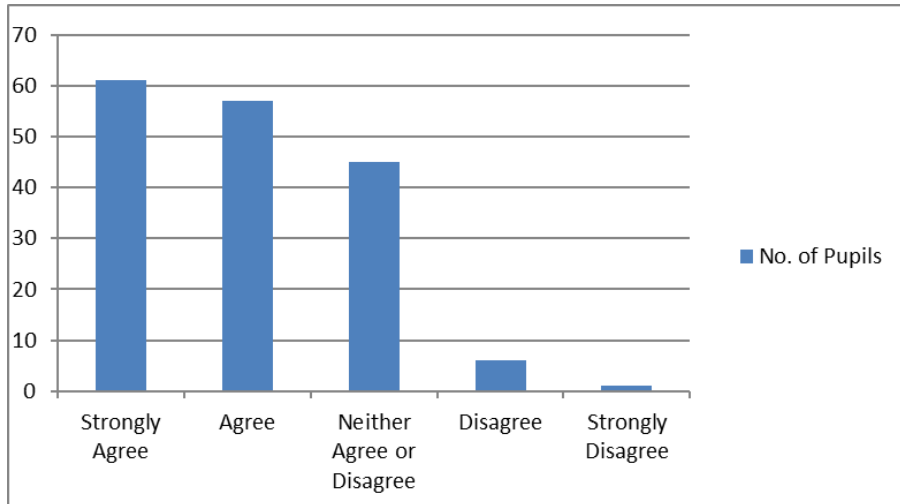
I enjoyed meeting new people from other schools



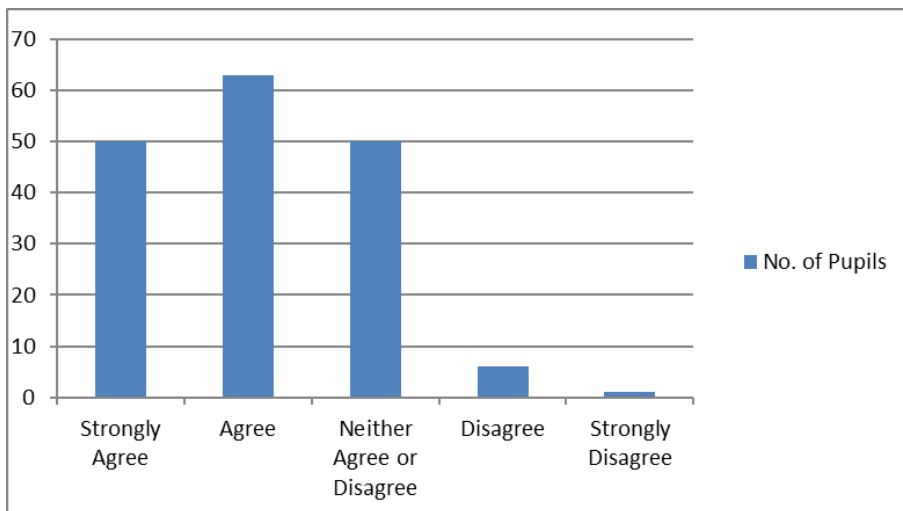
I did not enjoy working with the student mentors



I am now more certain about what I want to do study at university



I am now more certain about what I want to do as a career



2021 Accelerate Participants – University Applications

68 pupils participated in the 2021 Accelerate programme which took place online due to Covid-19. Some key findings from analysis of Strathclyde applications from these participants is below:

- 69% of 2021 participants have so far applied to study at Strathclyde
- 24% of 2021 participants are currently studying at Strathclyde, all of them in a subject related to their Accelerate subject area
- 35% of 2021 participants, who applied to Strathclyde, are currently studying at another University
- 85% of the 2021 participants who applied to Strathclyde are currently studying at a University
- 59% of all 2021 Accelerate participants are currently studying at a University. This figure only takes into account participants who applied to Strathclyde and so the actual figure is likely to be higher*
- 89% of applicants to Strathclyde received an offer from the university
- 55% of applicants to Strathclyde received a conditional offer from the University
- 34% of applicants to Strathclyde received an unconditional offer from the University

When compared with application figures from participants on previous Accelerate programmes, the 2021 figures appear to show that pupils who attended the programme remotely were less likely to become Strathclyde students than those who attended in-person. This perhaps demonstrates the positive impact of on-campus experiences.

2022 Accelerate Participants – University Applications

92 pupils participated in the 2022 Accelerate programme which took place back on the Strathclyde campus. Some key findings from analysis of Strathclyde applications from these participants is below:

- 41% of 2022 participants have so far applied to study at Strathclyde
- 22% of 2022 participants are currently studying at Strathclyde, all of them in a subject related to their Accelerate subject area
- 18% of 2022 participants, who applied to Strathclyde, are currently studying at another University
- 97% of the 2021 participants who applied to Strathclyde are currently studying at a University
- 40% of all 2022 participants are currently studying at a University. This figure only takes into account participants who applied to Strathclyde and so the actual figure is likely to be higher
- 92% of applicants to Strathclyde received an offer from the university
- 50% of applicants to Strathclyde received a conditional offer from the University
- 47% of applicants to Strathclyde received an unconditional offer from the University

It is expected that many more participants on Accelerate 2022, i.e. those who were starting S5 when they took part in the programme, will apply to start university in 2024/25.

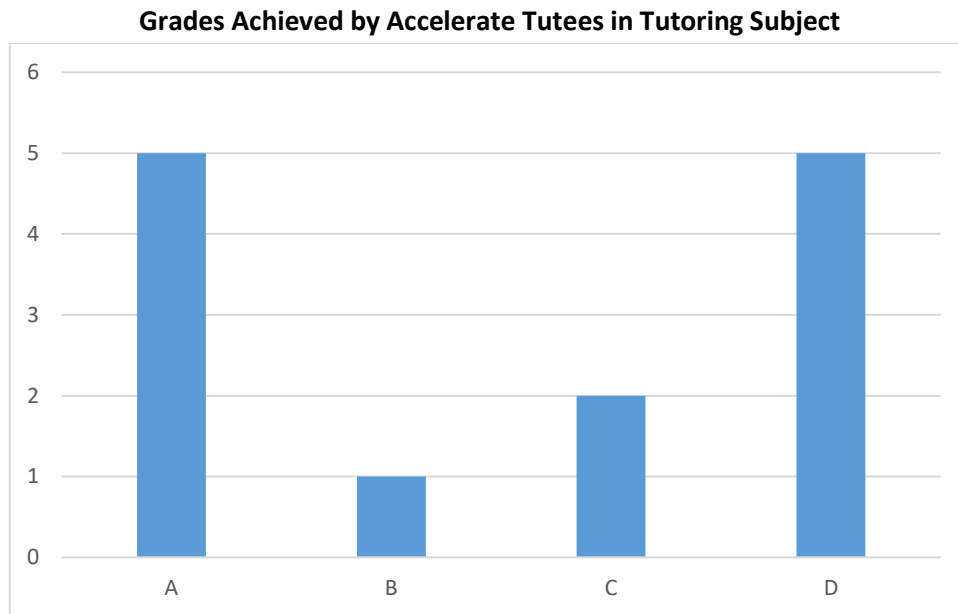
These figures are very positive with regard to the number of students who go on to apply to Strathclyde, receive offers from the University and who successfully go on to University study.

N.B. The university is unable to see the university destination of any participant who did not apply to Strathclyde.

Accelerate 2022 Participants – Tutoring Support

Funding from the Nairn Foundation allowed some participants from the 2022 Accelerate programme to receive tutoring support during the 2022-23 academic year. Pupils were matched with Strathclyde PGDE students and tutored in Maths, English or Chemistry. Overall, 15 Accelerate participants received 140 sessions of online tutoring during the year.

Below are the grades achieved by Accelerate tutees in their tutoring subject. N.B. There are two tutees' grades that are not known at the time of writing.

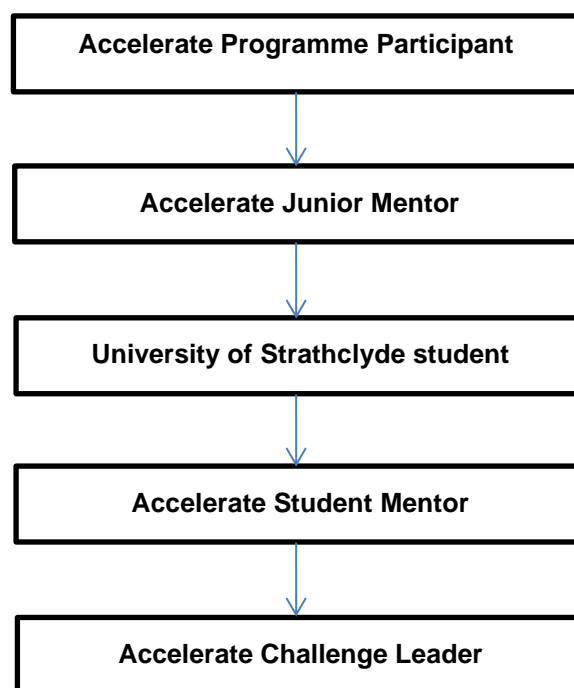


These grades are mixed, with many pupils performing well but with 5 pupils receiving a D grade. Analysis of the 2022-23 tutoring programme will be carried out to identify the reasons for these inconsistencies. It should be noted, however, that analysis of pupil attendance demonstrates that pupils were more likely to achieve an A grade if they attended at least 9 tutoring sessions.

Student Mentors

40 mentors worked on the 2023 Accelerate programme. 37 of these were current Strathclyde undergraduate students and three were postgraduate students. Four mentors had worked on the Accelerate programme previously. Twelve mentors had worked during the year on other outreach programmes run by the Widening Access team mentors, including the Young Strathclyder Primary programme, FOCUS West and the Accelerate tutoring programme. This sustained engagement of Strathclyde students on widening access programmes offers a regular source of well-paid work and continued opportunities for professional development. It also develops an in-depth understanding of widening access issues within the Strathclyde student community.

Two student mentors had been previous participants on the Accelerate programme while at school. The Challenge Leader for the Product Design Challenge, now a lecturer in the department of Design, Manufacturing and Engineering Management, was a participant on the challenge when at school and a mentor on the programme as an undergraduate student. These examples are representative of the structures of continued engagement, support and development that the programme looks to offer young people as they make the transition from school to Strathclyde student. The diagram below illustrates this progression.



Student Mentor Development

It is an integral part of the ethos behind the Access, Equality and Inclusion team's work that the development of the Strathclyde student mentors who work on the team's programmes is as important as the development of the participating pupils. The Access, Equality and Inclusion team's previous evaluation and research in this area shows that working on widening access initiatives has a range of benefits for Strathclyde students, including the development of personal and employability skills, and a strong influence on career and study choices.

Being a mentor on the Accelerate programme involves a wide range of roles and responsibilities and mentors who work on the programme over a continued period of time are often likely to gradually assume roles of greater responsibility and complexity.

The basic duties of a student mentor are to guide groups of pupils through a programme of activities, act as a role model and provide advice and information. In addition, Accelerate mentors can also take on a wide range of further roles, including:

- giving presentations
- administrative and logistical duties
- design of activities, events and programmes
- leading activities
- evaluation and data analysis

The fact that many mentors come back to work on the Accelerate programme year on year over a prolonged period of time is indicative of the importance that the Access, Equality & Inclusion team place on strong working relationships with mentors and the development of their professional skills.

Mentor Evaluations

On completion of the Accelerate programme, mentors complete a form in order to evaluate their experience and gauge the impact on them of working on the programme. The evaluation for first-time mentors and the one for returning mentors feature some of the same questions and some different ones.

Reasons for Participation

When new mentors were asked why they chose to work on Accelerate this year, many focussed on their passion for their degree subject and how they wanted to inspire the next generation to feel the same way. Other mentors felt committed to widening access and supporting young people from more disadvantaged backgrounds;

I saw the advert on the EEE mailing list and decided to apply to try and help/inspire young people to pursue a career in Engineering.

In order to help young people from similar backgrounds to me expand their knowledge and access uni.

I took part in the CSR pathway in 3rd Year which helped me to decide on a potential career choice (teaching). Hence, working with young students attracted me to work on the programme.

I decided to work on this programme as it was a great opportunity to pass on my experiences and business skills to younger groups in a fulfilling way.

I thought it would be an excellent initiative to be involved with. I thought the Programme would be excellent to assist in Widening Access, which I am passionate about.

Because I have a strong passion for science and want to share this passion with the younger generation in the hopes they will follow suit and pursue it at university.

I'm passionate about widening access, being from similar background. I want to be a chemistry teacher & am passionate about making others passionate about the subject.

Having run a science club at school - I wanted to teach younger students again but now at university level where I have further enriched my scientific knowledge. It was a great programme to get young students invested in working together in science.

I decided it would provide a valuable and rewarding process, in computer science we have underrepresented groups in society and this can help rectify this.

I felt investment for the goals of the project - social justice is an important aspect of why I want to be a teacher.

Some mentors felt the programme offered them an opportunity to develop career-related skills;

The programme was a good opportunity to gain more experience working with young people and to generate excitement around uni.

... would allow me to develop skills.

I want ways to continue to keep my teaching skills up to scratch and this was a nice way to do it, and get paid!

Wanted to gain work experience teaching in order to determine whether I want to work in academia in future, also to make a difference in repairing the world & helping young people.

To gain experience of working with young people, alongside to support them with the university experience and to realise their potential.

To acquire new teaching/mentoring experience working with young people in order to supplement existing levels of experience and consolidate future applications and teaching performance in pursuit of my professional ambitions.

To gain experience before beginning my PGDE I had previously worked in the role of a mentor and I enjoyed & engaged with the experience and so I was keen to do it again.

Some mentors who were previous Accelerate participants or had participated on other widening access programmes when at school mentioned that they felt a positive attachment to the programme and wanted to give young people the same experience that they had;

Widening Access was a personal programme to me as I also entered the university through this so I wanted to encourage students to also attend university.

I engaged in a similar programme in school it made me realise university was an option.

Many mentors who had previously worked on Accelerate or other widening access outreach programmes, especially the Young Strathclyde Primary programme, described how enjoyable and

valuable the experience had been and that this had made them want to continue working on widening access programmes:

I really enjoyed working on the Young Strathclyde programme earlier this year and wanted to continue the widening access department through their programme.

I've worked with accelerate before and was looking for more relevant work experience within the education field.

As being in the Young Strathclyde programme made me realise how much I enjoy working with young people & helping make a difference & educate them on the life at university which I wish someone had done with me.

I have previously worked on the Young Strathclyde programme, and enjoyed the experience. I applied to work on Accelerate as a continuation of this work in Widening Access programmes.

I've worked with Accelerate for the past two years and have enjoyed it previously so was happy to come back for a final year.

After working on it last year I realised how valuable the experience was and rewarding working with the children. I wanted to pass my experience on of university.

Development of Skills and Abilities

100% of both returning and new mentors believed that working on Accelerate gave them the opportunity to develop and improve their skills and abilities. Principal among these were communication, organisation and teamwork skills. Several mentors mentioned that the programme had improved their overall confidence. Many mentors mentioned the development of overall leadership skills, and it is clear that mentors employed a range of soft skills in order to build relationships with young people and encourage their groups to work together and achieve successful outcomes.

Leadership - helped lead my group. Teamwork - helped lead group/work with other mentors.

Patience - learned when to step back and let the group work.

Patience, empathy, juggling multiple tasks at once without getting too stressed.

My teamwork skills, my ability to lead a group to complete to a successful finish.

Critical thinking, team work, working on education programmes & leading a group.

Interpersonal skills, mentoring skills, definitely improved my ability to pass on information in an understandable way. Also, patience and being able to let the students learn from mistakes rather than immediately jumping in.

Group leading, problem explanation, patience.

Patience. Adaptability. Understanding.

Confidence & Leadership. Teaching Skills. Communication & Teamwork.

In addition to the personal skills, mentors also noted that they had developed and improved career related skills.

I have developed my communication and leadership skills which will be very useful in my future career and development and I am grateful to have had an opportunity to develop more skills.

Conflict management between both mentors and mentors with students. How to interact with students in an educator role.

Confidence in public speaking when working with unfamiliar groups. Timekeeping as a professional in full time work. Conceptualising new methods of teaching complex ideas to young people who didn't fully understand the first time.

Boosted my confidence in teaching at higher levels. Social skills.

Communication + teamwork are important in my work as my job involves collaborating with others.

Helps further the PHD and potentially allow me to apply for a teaching associate job.

Learning

When asked for the most important thing that they had gained from working on the Accelerate programme, most mentors said the experience had developed their own confidence, while others highlighted the improvement of their communication skills. Many mentors reflected on the experience improving their ability to work with young people while others said that they had developed a greater appreciation and enjoyment of teaching/mentoring. The opportunity to support young people from more disadvantaged circumstances was also clearly important to many mentors with many also feeling that they had gained more knowledge and awareness of widening access and disadvantage. Overall, the programme offered many mentors the chance for self-reflection and to learn about themselves.

Gained a better understanding of the barriers some face to accessing higher education.

A knowledge of the issues faced in accessing uni, alongside the importance of work to widen access.

After the Programme: 1. I'm better at encouraging Young People. 2. I'm better at communicating. 3. I realised it's an important thing to inspire pupils' interests before they go to the Uni.

Understanding the mindset of 5th-6th year students and their reservations/fears about university.

Experience for working with marginalised groups, making people see a larger future for themselves.

Made me feel more prepared for starting PDGE. Made me feel more assured in my decision to become a teacher.

Definitely a lot more perspective about all the different backgrounds people come from and understanding their challenges to coming to uni. Also the importance of young people taking part in STEM, particularly with a sustainable focus.

Better leadership and communication skills. I had to take responsibility for my group so I had to ensure they were working safely and efficiently.

I have improved my mentoring and teaching of new skills to young people.

Pride & sense of accomplishment. Great feeling to give back & improve on skills through a new opportunity.

Summary of Experience

In summarising the experience they had over the course of the week, the mentor responses were extremely positive. There is a strong sense from mentors that they feel that the work is challenging but very worthwhile, rewarding and enjoyable.

I loved it. Get me involved again.

Loved the challenge that was set, very engaging and relevant to the business school.

It was a great experience for us + the kids.

The programme is a great service and as long as it continues to develop from the feedback of students who are currently enjoying and benefitting from the course - it will continue to be great. Thank you for the opportunity!

This is one of the most important programmes that can run in any university but especially in sometimes elitist subjects like science and chemistry. It's a great way to hook people in, to science and university.

Thank you for selecting me & providing me to acquire experience in such an enjoyable environment which will be great for my future professional career.

I had a great week with the students and would love to take part in more programme like this one.

I hope the Accelerate programme continues to do for others, what it did for me.

Beneficial, Enjoyable, Pivotal.

Rewarding, Fun, Motivating.

Amazing, Positive, Memorable.

Valuable, Rewarding, Exciting.

Recommendation to others

100% of both new and returning mentors said that they would recommend working on the programme to their friends. The most common reasons for this included how rewarding and enjoyable the experience is. Mentors appreciate the opportunity to undertake meaningful work, to help young people and to see them develop during the week. Mentors also see the programme as a good opportunity to develop employability skills that will be useful in the long-term.

It was a fun week and very rewarding to see how engaged the students became during the week

It is a great way to put your own skills to the test whilst helping the next generation decide on their career

It's very rewarding seeing the young people get more inspired and also fun to mentor in tasks and activities

It's incredibly rewarding to help expand their knowledge and develop interest in university

It is extremely rewarding, fun and you make an impact on lives and get to show others why you love your degree.

The opportunity to help & guide young people is so fulfilling that it would be difficult not to do a job like this, I will forever be grateful for being able to be a part of this experience

It is very rewarding to see students learn and become more confident in a subject they wish to explore. The accelerate team is great and community of mentors and students was warm and enriching to be in.

The experience I have had has been second to none. I worked well with the young people and would do it again.

Not only is this a good addition to professional portfolio, but it gives us a unique opportunity to see what teaching would be like.

Thanks

The Widening Access Team would like to thank the Nairn Foundation for its very generous funding of the 2023 Accelerate programme.

Appendix 1: Contributors to the 2023 Programme

The following University of Strathclyde departments and centres took part in the 2023 Accelerate programme:

- Department of Computer and Information Sciences
- Department of Chemical and Process Engineering
- Department of Pure and Applied Chemistry
- Department of Forensic and Analytical Chemistry
- Department of Electronic and Electrical Engineering
- Department of Design, Manufacture and Engineering Management
- Hunter Centre for Entrepreneurship
- PGDE Chemistry
- School of Education
- Strathclyde Institute of Pharmacy & Biomedical Sciences
- Work, Employment & Organisation

The following external partners also contributed to the programme:

- A.G. Barr
- Glasgow Children's Hospital Charity
- The Student Awards Agency for Scotland

Appendix 2: 2023 Participating Schools by Local Authority

Argyll & Bute

Rothesay Academy

Clackmannanshire

Alloa Academy

Lornshill Academy

Dundee

St Paul's RC Academy

East Ayrshire

Doon Academy

Robert Burns Academy

Kilmarnock Academy

East Dunbartonshire

Kirkintilloch High School

East Renfrewshire

Barrhead High

Falkirk

Bo'ness Academy

Denny High

Highland

Kingussie High

Inverclyde

Notre Dame High

Glasgow City

All Saints Secondary

Bannerman High

Castlemilk High

Eastbank Academy

Hillpark Secondary

Holyrood Secondary

John Paul Academy

Knightswood Secondary

Lourdes Secondary

Notre Dame High

Rosshall Academy

Smithycroft Secondary

Springburn Academy

St Andrew's RC Secondary

St Mungo's Academy

St Paul's High

St Thomas Aquinas Secondary

North Ayrshire

Ardrossan Academy

Irvine Royal Academy

Kilwinning Academy

North Lanarkshire

Bellshill Academy

Caldervale High

Our Lady's High School

St Aidan's High

St Andrew's High

Perth

Perth Grammar School

Renfrewshire

Castlehead High

South Ayrshire

Carrick Academy

South Lanarkshire

Larkhall Academy

St John Ogilvie High School

Stonelaw High

Strathaven Academy

West Dunbartonshire

St Peter the Apostle

West Lothian

Whitburn Academy