

REACH FOR THE SKY CHALLENGE FUND MONITORING AND EVALUATION

Process and impact evaluation of the 2024
Reach for the Sky Challenge Fund

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EXECUTIVE SUMMARY

Reach for the Sky Challenge Fund

In 2022, the Department for Transport (DfT) launched the Generation Aviation programme. This is a joint project between HM Government and industry that aims to raise the profile of aviation careers and remove entry barriers so that the sector can build a workforce fit for the future. As part of this, the Reach for the Sky (RFTS) Challenge Fund was designed to specifically focus on outreach work, inspire the next generation of aviation professionals and reach young people. Funding of £750,000 is being distributed to ten projects as part of the 2024 Fund. Previously, the 2023 Challenge Fund distributed funding of £700,000 to 11 projects.

DfT commissioned Frontier Economics (Frontier) and SYSTRA Ltd. (SYSTRA) (the “evaluation team”) to design and deliver monitoring and evaluation (M&E) activities for the RFTS Challenge Fund. The approach focused on the measurable immediate outcomes of RFTS, given the diverse range of projects funded, the long-term nature of the intended outcomes and considerations around proportionality. The approach included a process evaluation (which considers the experience of applicants when applying for funding and implementing their projects) and an impact evaluation (which focuses on outputs and immediate outcomes in terms of the type of outreach activities, scale of audiences engaged and change in awareness of opportunities in the aviation sector). This report focuses on the 2024 fund.

Approach

This light-touch evaluation does not seek to generate robust quantified estimates of impacts relative to what would have otherwise happened without RFTS (i.e. counterfactuals) but seeks to observe and record what has happened in the immediate and short term.

This evaluation consisted of:

- Development of a conceptual framework, which includes a logic model that sets out how RFTS enables activities which provide outputs (such as workshops, events, online activities), which in turn deliver immediate outcomes (such as engagement with a diverse range of young people and improved perception of the sector and awareness of its career opportunities);
- Development of process and impact evaluation questions, based on the logic model, which articulate what DfT wishes to learn about from the design, delivery and impacts of RFTS;
- Upskilling RFTS-recipient project teams in M&E best practice via an interactive workshop;

- Distribution of a process evaluation survey to successful project teams and unsuccessful applicants with analysis of responses;
- Design of monitoring data templates and analysis of project monitoring data; and
- Synthesis of all evidence using a theory-based realist evaluation approach to generate evidence on the mechanisms that help to explain how the outcomes were realised and variations across different contexts. This generates evidence on what outcomes were observed, for whom and the mechanisms through which they arose.

Process evaluation findings

Survey responses were received from almost all successful 2024 RFTS applicants (9 of 10) and around half of the unsuccessful applicants (19 of 41).

There were high levels of satisfaction with the application process overall, including its clarity, and with how it was promoted. Most applicants heard about the competition through the Civil Aviation Authority (CAA) or through other networks or contacts.

The successful projects varied greatly in terms of the types of anticipated activities, the number of young people that project leads anticipated engaging with audience demographics and the target geographical areas.

Applicants generally expressed confidence about their organisation's ability to collect monitoring data and were satisfied with the requirements and tools for collecting and recording data.

Almost all successful applicants expected to continue delivering their projects after the funding period ends. Almost half of the unsuccessful applicants intend to deliver their project, despite not having received funding from RFTS. However, participants reported that this delivery would likely be on a smaller scale without RFTS funding.

Impact evaluation findings

Key findings

- Across the five projects explored as part of this evaluation, more than 30,000 individual young people were directly engaged. The projects engaged a diverse set of young people.
 - Satisfaction with events was high. A high proportion of attendees learnt what they wanted to as a result of taking part or would recommend the programme to others.
 - Most projects impacted participants' awareness of jobs and opportunities in aviation via school-based sessions, career courses and career fairs.
 - Participants realised for the first time that people working in aviation are themselves diverse. A significant proportion of young people could imagine themselves working in aviation in the future after their engagement.
 - Many young people were motivated to learn more about aviation or take a next step.
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The 2024 RFTS Challenge Fund has supported ten projects. Five of these ten projects were chosen¹ for this impact evaluation because they delivered a significant portion of their activities before the end of August 2024 and shared relevant monitoring data with DfT. Overall, £375,600 of RFTS funding has been provided to these five projects. The activities conducted by project teams have all aligned with their delivery plans, though some are yet to deliver all of the planned activities as their delivery schedule runs for several more months.

In terms of the **scale of outreach** activity, across the five projects, more than 30,000 individual young people were directly engaged. Some projects reached thousands of young people and other projects focused on more in-depth engagement with individual classes of students. The projects engaged a **diverse set of young people**. Across the five projects examined, young people from every region of the UK were included in specific events. Across almost all engagement, the gender balance was almost equal between male and female. However, there was some variation by project.

Qualitative and quantitative feedback collected from young participants confirmed that **satisfaction** with events was high. A high proportion of attendees learnt what they wanted to as a result of taking part or would recommend the programme to others (72%–100%), and teachers noted on multiple occasions how students enjoyed taking part in the events and engaged throughout.

The RFTS projects analysed as part of this evaluation all considered their impact on **awareness** of the aviation industry amongst participants. Most projects had high impacts on

¹ Delivered by Leicestershire Education Business Company, Air League, Education and Employers, Big Ideas, University of Leeds.

their participants' awareness of jobs and opportunities in aviation. This ranged between 58% and 100% for school-based sessions, career courses and career fairs.

RFTS projects also contributed to a positive change in **perceptions of the aviation industry** amongst participants. Participants noted how they had realised for the first time that people working in aviation are themselves diverse and from a range of different backgrounds. Some projects also explored whether participants could imagine themselves working in aviation in the future after the engagement; a significant proportion of young people responded positively to this question. For example, over 90% of young people could imagine themselves working in the aviation industry after attending a careers event which included a RFTS-funded stand that introduced young people to the wide range of aviation and aerospace career opportunities.

Finally, the RFTS projects also helped to contribute to a **change in motivation of participants** to further explore the aviation industry. Across the five projects, many young people were motivated to learn more about aviation or take a next step. For example, 95% of attendees at a careers fair reported that they were motivated to learn more about aviation as a hobby and, after a series of school-based workshops (which included employability modules aimed at broadening the horizons of young people), 80% of attendees reported that they were motivated to learn more about aviation as a job.

The five projects analysed varied significantly in terms of their target audiences, mode of delivery (online or in-person), frequency of engagement, geographical focus and type of engagement (information delivery, interaction with people who work in aviation). However, when results are synthesised across the five projects, on aggregate, the projects were designed with their target audiences in mind and each of them was able to realise the anticipated outcomes of reaching out and engaging with their audiences. This in turn increased awareness and consequently impacted participants' perceptions and motivation to consider aviation as a career. There are, however, some target audiences who were relatively harder to reach. In particular, overall, younger children and those from ethnic minorities were less well represented and a narrow majority of attendees were male. In general, this was because selected projects did not target these groups specifically.

Implications for future policy design

Responses to the survey of successful and unsuccessful applicants suggest that DfT/CAA may wish to consider expanding promotion of RFTS through some additional networks, such as via university bid channels, social media platforms or wider networks relevant to the aviation sector. In addition, successful and unsuccessful applicants suggested that certain aspects of the application process could be clarified. These included the assessment criteria, the level of detail required for each question, the alignment of the current application with past performance and the weighting placed on the quantity of outputs versus the total costs. This could broaden the range of organisations which apply in future years.

DfT/CAA may also wish to consider continuing to support projects with collecting their own monitoring data in a proportionate way and sharing this with the DfT and CAA to inform continued learning. In most cases, the monitoring data that has been provided to date has been of high quality. However, this only relates to five of the ten funded projects.

The impact evaluation emphasises the importance of tailoring projects to meet different specific objectives and engage with different target audiences. For example, there is evidence that high quality online virtual engagement can be an effective aspect of an outreach package with some younger groups. However, this will not be suitable for younger children (e.g. those in primary school). Future waves of RFTS could consider more explicit targeting of younger participants (e.g. Key Stage 2) alongside continued outreach to young people from all ethnic groups, people with disabilities or special educational needs and disabilities (SEND), neurodivergent audiences and areas across the country.

As one RFTS project in this study suggested, co-production of the design, content and delivery of outreach programmes with representatives from intended audiences can provide valuable innovative ideas, tailoring options, and in itself can increase awareness and perceptions to further consider aviation opportunities among participants.

Although this impact evaluation is light touch and focuses on only five projects, it shows the learning that can be generated from proportionate monitoring data collection, surveys and analysis. This suggests that there is value in continuing to monitor the level of outreach and specific outcomes (such as awareness, perception and motivation) across diverse types of projects to build the evidence base on which activities reach different types of audiences.

1 Context and approach

1.1 Reach for the Sky (RFTS) Challenge Fund

In October 2022, the Department for Transport (DfT) launched the Generation Aviation programme.² This is a joint project between HM Government and industry that aims to raise the profile of aviation careers and remove entry barriers so that the sector can build a workforce fit for the future. As part of this, the Reach for the Sky (RFTS) Challenge Fund was designed to specifically focus on outreach work.³ Jointly administered by the DfT and the Civil Aviation Authority (CAA),⁴ the RFTS 2024 Challenge Fund has three objectives:

- Inspire the next generation of aviation professionals, championing the opportunities available in the sector;
- Reach individuals who would not otherwise be aware of opportunities available within the aviation sector; and
- Have a broad impact by reaching and engaging multiple people.

During the first year of RFTS funding, £700,000⁵ was distributed to eleven projects (2023 Challenge Fund), and £750,000⁶ is being distributed to ten projects in 2024 (2024 Challenge Fund). The third wave of RFTS opened for applications in July 2024 and is now closed (2025 Challenge Fund).⁷

1.2 Scope of this evaluation

DfT commissioned Frontier Economics (Frontier) and SYSTRA Ltd (SYSTRA) (the “evaluation team”) to design and deliver monitoring and evaluation (M&E) activities for the RFTS Challenge Fund. The approach focused on the measurable immediate outcomes of RFTS, given the diverse range of projects funded, the long-term nature of the intended outcomes and considerations around proportionality. The approach included a process evaluation (which considers the experience of applicants when applying for funding and implementing their projects) and a light-touch impact evaluation (which focuses on outputs and immediate outcomes in terms of the type of outreach activities, scale of audiences engaged and change in awareness of opportunities in the aviation sector). This report focuses on the 2024 fund.

² <https://www.gov.uk/government/news/government-launches-new-campaign-to-boost-aviation-recruitment>

³ <https://www.gov.uk/government/news/boost-for-aspiring-young-aviators-as-government-provides-funding-for-outreach-programmes>

⁴ <https://stem.caa.co.uk/reach-for-the-sky-challenge-fund/>

⁵ <https://www.gov.uk/government/news/boost-for-aspiring-young-aviators-as-government-provides-funding-for-outreach-programmes>

⁶ <https://stem.caa.co.uk/reach-for-the-sky-challenge-fund/>

⁷ <https://stem.caa.co.uk/reach-for-the-sky-challenge-fund/>

The aim is to develop the evidence base on outreach programmes in the aviation sector, including how they work in practice, whether they have immediate impacts and whether some types of outreach programmes may be more effective than others. This evaluation does not seek to generate robust estimates of impacts relative to counterfactuals but seeks to observe and record what has happened.

The evaluation activity carried out included:

- **Process evaluation:** generating evidence on the experience of applicants when designing their outreach projects, applying for funding and implementing their projects; and
- **Impact evaluation:** generating evidence on the outputs and immediate outcomes in terms of the scale and type of outreach activities, magnitude of audiences engaged and their characteristics, as well as changes in awareness of opportunities in the aviation sector.

This report focuses exclusively on the 2024 Challenge Fund. Previously published outputs from the evaluation covered the 2023 Challenge Fund.⁸ The 2025 wave of RFTS was beyond the scope of this evaluation, as the project selection process started in autumn 2024.

1.3 Summary of approach to generate evaluation learnings

This evaluation seeks to generate learning and insights in a pragmatic way, recognising the need for proportionate data collection.

Aligning with best practice evaluation approaches in the HM Treasury Magenta Book (HMG, 2020),⁹ this evaluation was underpinned by three core elements: a conceptual framework (including a theory of change); evaluation questions; and data.

1.3.1 Conceptual framework

To capture the anticipated mechanisms through which RFTS was to deliver its intended outcomes, a theory of change was developed in collaboration with DfT. This drew upon a range of sources including a desk-based review of background material¹⁰ and engagement with relevant stakeholders at DfT and CAA.

The logic model maps how **inputs** like financial resources and guidance from DfT and the CAA are used to support RFTS recipients to carry out **activities**, such as the development of outreach plans and engagement with potential host venues. These activities are then expected to deliver tangible **outputs** such as workshops or speaking events at schools, or online

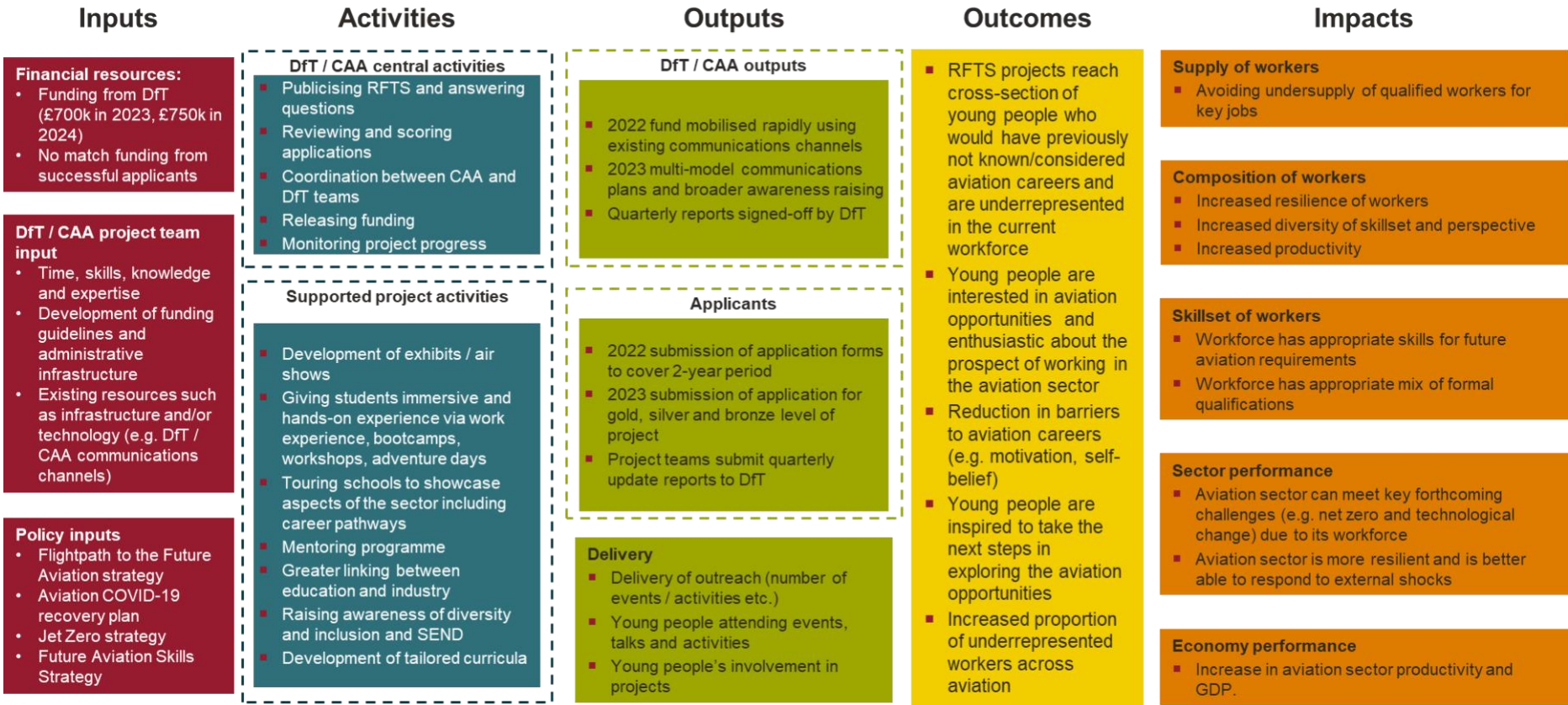
⁸ <https://www.gov.uk/government/publications/reach-for-the-sky-evaluation>

⁹ HM Treasury (2020). The Magenta Book. Available at: <https://www.gov.uk/government/publications/the-magenta-book>

¹⁰ This included policy documents relating to the aims and objectives of the fund, the guidance issued to applicants, the criteria by which successful applicants were selected and successful application forms.

workshops. Some outputs are anticipated to deliver immediate **outcomes** such as increased awareness of career opportunities in the aviation sector and interest by young people to further consider aviation opportunities. Over time, it would be expected that those immediate outcomes would lead to longer-term **impacts** such as an increase in the diversity of people choosing to work in the aviation sector. However, other outcomes such as the reduction in barriers to aviation careers and increased proportion of underrepresented workers across aviation are not immediate outcomes, and will take longer to achieve. The theory of change is visually illustrated in a logic model, shown in Figure 1.

Figure 1 RFTS Logic model



Source: Frontier and SYSTRA based on stakeholder engagement and desk-based synthesis of existing evidence

1.3.2 Evaluation questions

To provide a focus for the analysis, evaluation questions were articulated to reflect the key aspects of interest for DfT. These were used to underpin the fieldwork carried out to collect data for this evaluation (see Section 1.3.3) and the data to be collected by project teams (see Section 1.3.5).

The evaluation questions agreed with DfT were:

- **Process evaluation questions:** (1) how did applicants experience applying for funding; (2) how did applicants implement their projects; (3) how did applicants collect monitoring data; and (4) how would those who were unsuccessful proceed with their projects without RFTS funding?
- **Impact evaluation questions:** (1) what scale of outreach activity was delivered (e.g. number of events/participants); (2) what types of audiences were reached (e.g. demographic and locational details); (3) how satisfied were participants with the engagement; (4) how did engagement contribute to a change in awareness of the aviation industry amongst participants; (5) how did engagement contribute to a change in perceptions of the aviation industry among participants; and (6) how did engagement contribute to a change in the motivation of participants to further explore the aviation industry?

1.3.3 Survey data collected

To inform the process evaluation of the 2024 funding, an online survey was distributed to all scheme applicants, both those who were successful and those who were unsuccessful. The survey was designed and carried out by the evaluation team but was distributed by DfT via email.

1.3.4 Upskilling project teams in M&E best practice

To support the project teams which received 2024 funding, a 1.5-hour interactive online upskilling session was designed and delivered to project teams by the evaluation team in January 2024. This session provided an accessible introduction to the foundations of M&E. This included what M&E is, how it can help project teams and what would be required from the project teams as they delivered their projects.

The evaluation team developed data collection templates (aligned with the data needed to address the evaluation questions) and tailored guidance on what to collect, methods that could be used to collect it and how to complete the data template (or adjust it to match their own projects). Worked examples and a frequently-asked-questions help sheet were also provided. The data collection templates provided space for project teams to collect both delivery information (*what outreach activities were carried out and who attended*) and impact

information (*how did the outreach impact participants' awareness, perceptions and motivations*) in a standardised format.

Throughout the session, flexibility was emphasised, recognising that the nature of the different RFTS projects varied significantly in terms of their design, timing of delivery, etc. The session aimed to equip teams to tailor the data collection template to match their specific outreach activities and target audiences. The evaluation team was available throughout their delivery to address any queries.

1.3.5 Monitoring data

Project teams delivered their outreach activities over the course of 2024.¹¹ Project teams were required to submit quarterly monitoring data to DfT. This monitoring data was specific to each project team, though all data on the young people engaged in the outreach projects was anonymised (no personal sensitive information was shared). Projects were responsible for ensuring that their research and data collection with young people was conducted ethically, i.e. through seeking informed consent from teachers or guardians, if appropriate. This data was passed onto the evaluation team and was analysed to inform the impact evaluation. Results are presented in Section 3. In many cases the monitoring data available at the time of drafting did not cover all outreach activity and further engagement was planned during the remainder of 2024. This is noted in Section 3.

1.4 Analysis methods selected

This evaluation includes a process evaluation and impact evaluation. The respective analysis methods are outlined below.

1.4.1 Process evaluation analysis method

Due to the small number of applicants who responded to the online survey for the 2024 funding (9 of 10 successful applicants and 19 of 41 unsuccessful applicants), findings are presented in numbers rather than as percentages.

1.4.2 Impact evaluation analysis method

Given the evaluation questions set out in Section 1.3.2, the number of projects funded and the data that it was proportionate to collect for this light-touch evaluation, the evaluation team considered the most appropriate and proportionate evaluation methods. A theory-based realist evaluation was considered feasible and would generate the insights and evidence aligned with the aims of this evaluation. Other quantitative impact evaluation methods which measure the scale of impact by comparing outcomes observed with a best view of what would have happened without RFTS (counterfactuals) were not feasible.

¹¹ A small number of activities also took place in late 2023.

The realist approach seeks to:

“...identify the, often psychological, mechanisms that change human behaviour as a result of an intervention, taking into account the context within which the intervention occurs...It develops and tests a set of hypotheses (or theories) about the factors or processes that explain why an intervention has had a particular result (called a mechanism), and what effect the context of an intervention has on these mechanisms” (HMT, 2020, p43).¹²

Using this approach, the available data on RFTS 2024 projects could be used to test the theory of change up to the delivery of immediate outcomes (longer-term impacts were not available at the time of the analysis).

Working closely with DfT, a sample of five projects were selected as these had sufficient data available, had completed or were close to completion, and varied in terms of their design, timing of delivery, geographical location and form of delivery (in-person or online). The five RFTS projects are further described in 3.1.

There are inevitable limitations in focusing on five of the ten RFTS projects funded in 2024, not least because other projects have distinctive designs and delivery approaches, so the nature and scale of immediate outcomes is likely to vary. However, by undertaking a realist evaluation approach which looks at each of the five projects separately and then comparatively across them as a group to generate insights, valuable learning can still be generated to inform policy making.

Furthermore, the combination of a process evaluation and impact evaluation provides richer insights given that how an intervention is delivered can affect its outcomes.

1.5 Structure of this report

The remainder of this report is structured as follows:

- Section 2 sets out the findings from the process evaluation of the 2024 Challenge Fund;
- Section 3 sets out the findings from the impact evaluation of the 2024 Challenge Fund; and;
- Section 4 presents initial policy implications which arise from the evaluation as a whole.

¹² https://assets.publishing.service.gov.uk/media/5e96cab9d3bf7f412b2264b1/HMT_Magenta_Book.pdf

2 Process evaluation findings

This section sets out findings from the process evaluation, which collected data from successful 2024 RFTS Challenge Fund projects and unsuccessful applicants.

2.1 Profile of applicants

Responses to the survey were received from almost all successful 2024 RFTS applicants (9 of 10) and around half of the unsuccessful applicants (19 of 41).

Around half of 2024 Challenge Fund applicants that responded to the survey (5 of the 10 successful applicants and 11 of the 19 unsuccessful applicants) classified the organisation that they represented as a charity, not-for-profit organisation or community interest company. Almost all the remainder classified themselves either as an academic institution or a business with a social mission or clear objectives in its corporate social responsibility policy toward increasing social action.

Successful applicants were awarded funding for their gold, silver or bronze bids, depending on the strength of their application, the strength of other applications and the demand on the overall fund. Gold represented the maximum amount that could be requested, and bronze represented the minimum funding request. Of the nine successful applicants who responded to the survey, three had received bronze level funding, five had received silver level funding and one had received gold level funding.

Of the three RFTS objectives, the two that successful and unsuccessful applicants most often felt their projects were aligned to were (almost equally):

- Inspire the next generation of aviation professionals championing the sector and acting as role models for young people; and
- Reach individuals who would not otherwise be aware of opportunities available within the aviation sector.

Fewer felt that their project was aligned with the objective:

- Have a broad impact by reaching and engaging multiple people.

2.2 Application process

Summary: there were high levels of satisfaction with the application process overall, including its clarity, and with how it was promoted. Most applicants had heard about the competition through the CAA or through other networks or contacts.

Most applicants to the 2024 Challenge Fund had heard about the competition either through the CAA (9 of the 28 respondents) or through other networks or contacts (13 of 28). A small

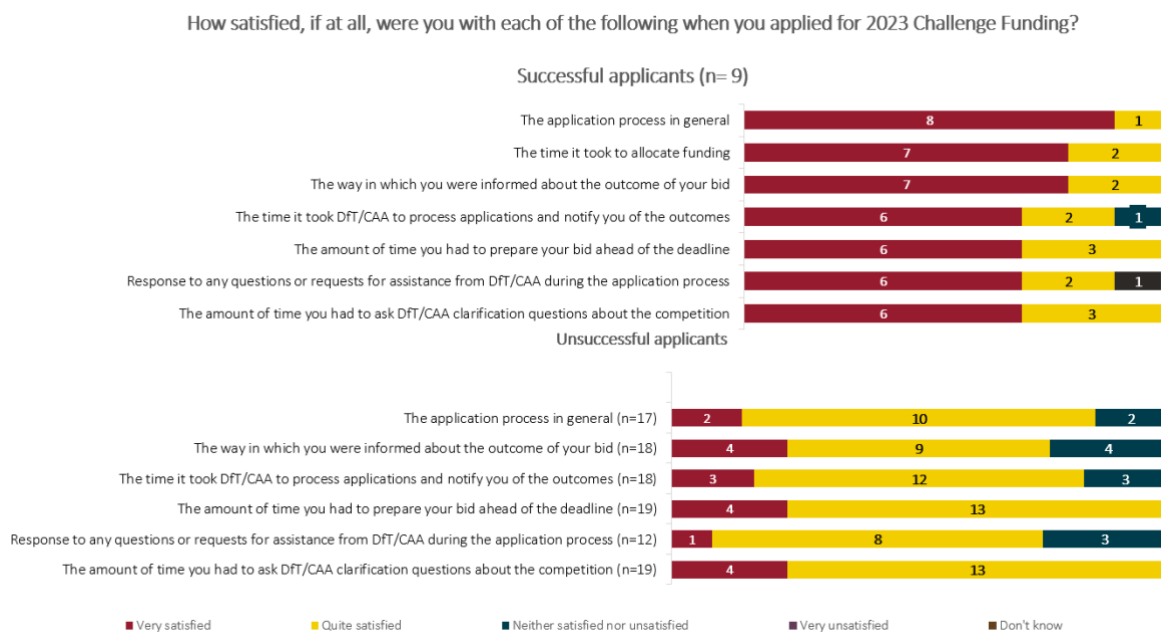
number had heard about it from DfT (4 of 28) or through social media (3 of 28 respondents). Some applicants had heard about it from more than one of these sources.

Just over half of applicants (17 of 28 respondents) were satisfied with how RFTS was promoted by the DfT and CAA. A similar proportion of successful and unsuccessful applicants expressed this view. Two of the unsuccessful applicants and no successful applicants stated they were dissatisfied, and the remainder were neither satisfied nor dissatisfied, or did not know.

Two applicants suggested that it would be good to promote the fund through more channels and networks in future. University bid channels were specifically suggested.

There were high levels of satisfaction with the application process overall and with individual elements of it. Figure 2 shows that all successful applicants were satisfied with the process overall and almost all (8 of 9) were very satisfied. The picture was similar for each individual element of the application process. No successful applicants expressed dissatisfaction with any individual element.

Figure 2 Levels of satisfaction with the RFTS application process



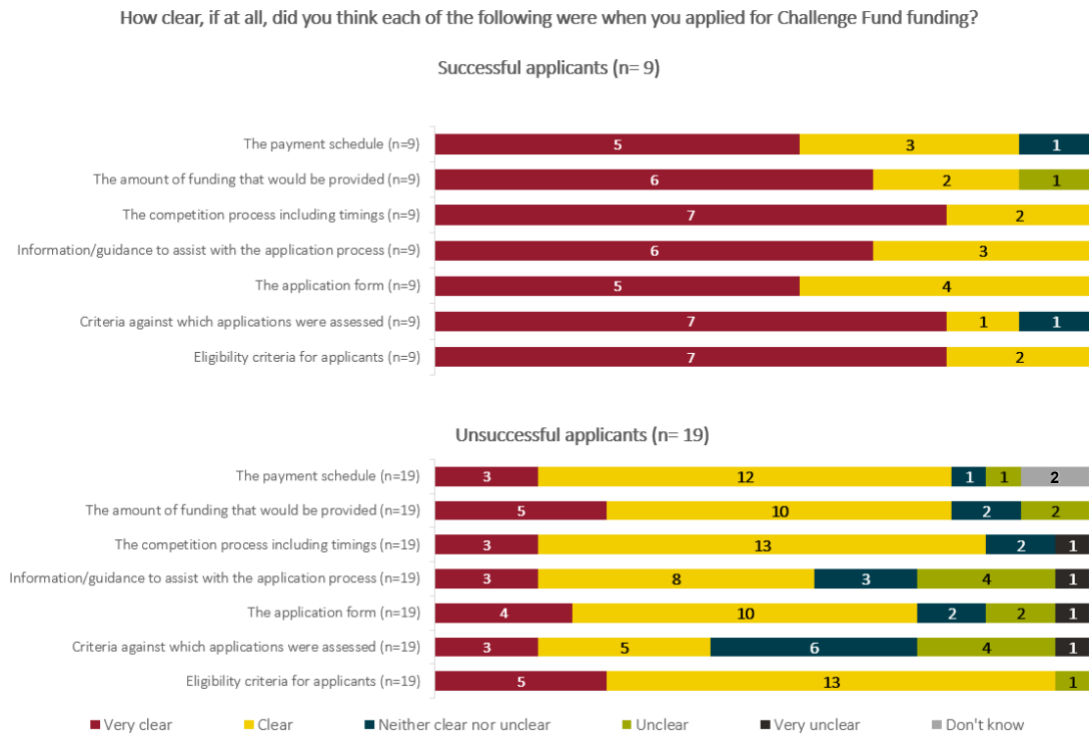
Source: Survey data. SYSTRA analysis. Non-applicable respondents have been removed

Around three-quarters of unsuccessful applicants (13 of 17) were satisfied overall, two were neither satisfied nor dissatisfied, and three were dissatisfied. Two unsuccessful respondents were dissatisfied with the amount of time they had to prepare their bid: two with the amount of time they had to ask DfT/CAA clarification questions about the competition, and one with the way they were informed about the outcome of the bid.

Of the five applicants who had applied for funding in 2023 and 2024, two (one successful and one unsuccessful) thought the process had improved in 2024, citing in particular the timings of the application process. Two unsuccessful applicants thought the 2024 application form was more restrictive than the previous year as they were no longer able to provide supplementary evidence via email. One unsuccessful applicant suggested establishing a forum during the application stage where cross-working opportunities could be identified.

Figure 3 illustrates applicants' mostly positive views regarding the clarity of the application process. Most found the different elements of the application process to be clear, though successful applicants were more likely to find them clear than unsuccessful applicants.

Figure 3 Views on clarity of different aspects of the Challenge Fund funding



Source: Survey data. SYSTRA analysis

The aspects of the application process most likely to be described as clear by successful applicants (7 of 9 respondents) were the eligibility criteria, the assessment criteria and the competition process (including timing). One successful applicant indicated that they had found the amount of funding that would be provided to be unclear, but none had found the other aspects of the application process to be unclear.

A small number of unsuccessful applicants described various aspects of the application process as unclear. These included the assessment criteria (4 of 19 respondents), the information/guidance to assist with the application process (4 of 19), the application form (2 of

19) and the amount of funding they would be provided with (2 of 19). Individual applicants found the payment schedule and the eligibility criteria to be unclear.

2.3 Implementation and delivery

Summary: the projects that successful applicants expected to deliver at the time of the survey varied greatly in terms of anticipated activities, number of children engaged, demographics of the participants and their geographic focus.

Prior to delivery of their projects, almost all applicants anticipated using social media/the internet and schools to promote and/or recruit for their projects. At least half anticipated also using local interest groups, other educational institutions and after-school activities.

The number of young people that applicants anticipated would take part in their projects ranged from between 1–100 and more than 10,000. Table 1 shows that there was a wide range in the size of projects for both successful and unsuccessful applicants.

Table 1 Number of young people anticipated to take part in the activities they sought funding for

Number of young people intended to take part (2024)	2024 Successful (n=9)	2024 Unsuccessful (n=19)
1–100	0	2
101–500	2	8
501–1,000	2	0
1,001–4,999	1	4
5,000–9,999	2	1
10,000 or more	2	4

Source: Survey data. SYSTRA analysis

The types of activities that respondents anticipated would take place were also very varied. Table 2 shows that most were one-off activities. Recurring activities were most often intended to be offered in educational settings or online.

Table 2 Types of activities intended to be delivered by projects

Types of activities that projects intended to deliver	Setting	Successful (n=9)	Unsuccessful (n=19)
One-off activities	Educational settings	2	12
	Other locations	5	8
	Online	4	5
Activities for a few consecutive days for each participant	Educational settings	4	3
	Other locations	1	5
	Online	1	4
Repeat activities for each participant	Educational settings	2	5
	Other locations	0	5
	Online	3	2
Other		0	5

Source: Survey data. SYSTRA analysis

Applicants indicated the demographics of the children and young people they planned to target for their projects from a list provided. Of the nine successful projects:

- All planned to target children/young people from lower-income households and girls/women;
- Six planned to target ethnic minorities and five planned to target those from geographical areas with an underrepresentation of aviation professionals; and
- Three planned to target those with SEND and two planned to target disabled people.

Of the unsuccessful applicants, the most common group they intended to target were girls/women (14 of 19 respondents). Other frequently stated target groups of the unsuccessful applicants (each reported by 12 respondents) were people from geographical areas with an underrepresentation of aviation professionals, children/young people from lower-income households and ethnic minorities.

The most frequently targeted age group for successful applicants were Key Stage 3, 4 and 5 children.¹³ None intended to target pre-Key Stage 1 children, and only one intended to target people aged 18–24 and 25+. Unsuccessful applicants, however, most frequently intended to target young people aged 18 to 24 (11 of 19 unsuccessful applicants).

The regions of the UK that successful applicants most frequently highlighted as their target area were evenly distributed throughout England. However, only one applicant each intended to implement their project in Scotland,¹⁴ Wales or Northern Ireland. This is to be expected as the eligibility criteria stipulated that the projects had to focus primarily on England. The spread of intended areas of implementation were similar for the unsuccessful applicants.

Most applicants, whether successful or not, intended to collaborate with other organisations in delivering their projects. The most popular collaborator organisations were schools (16 of 28 respondents), further education institutions (15 of 28) and industry (15 of 28), but some also intended to collaborate with community groups (10 of 28), universities (8 of 28) and local councils (6 of 28).

2.4 Project monitoring

Summary: applicants generally expressed confidence about their organisation’s ability to collect monitoring data and were satisfied with the requirements and tools for collecting and recording data.

All nine successful applicants reported being confident about their organisation’s ability to collect monitoring data (e.g. information on how they used RFTS funding, what forms of engagement they delivered and the impacts that engagement had on young people). Six of the nine reported being very confident.

Around half of the successful applicants found the requirements set out in the application process for collecting and producing monitoring data to be clear (5 of 9) and the other half found them to be very clear (4 of 9). Following a workshop on 23 January 2024 to explain the requirements of the fund with regards to M&E, all but one found the requirements to be clear.

All applicants were satisfied with the different aspects of data monitoring, including templates provided, monitoring meetings, frequency of monitoring updates and types of data they were asked to collect, and most were very satisfied with each of these.

Of the nine successful applicants:

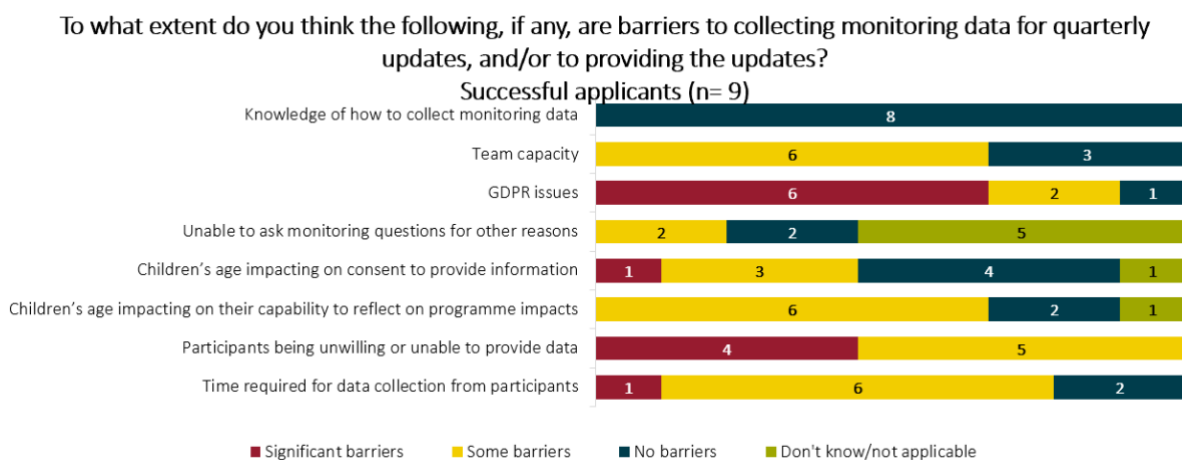
¹³ <https://www.gov.uk/national-curriculum> Key Stage 3: Ages 11–14, which includes years 7–9 of secondary school. Key Stage 4: Ages 14–16, which includes years 10 and 11 of secondary school. Key Stage 5: Ages 16–18, which includes college or sixth form.

¹⁴ Skills policy is devolved in Scotland.

- All intended to record, or had already recorded, data on participants' intentions to explore aviation careers, their awareness of aviation careers and the number of people they engaged with;
- Most intended to collect data on the gender of participants (8 of 9), area of residence (7 of 9), age (7 of 9) and knowledge of aviation (6 of 9);
- Most intended to collect information on the number of schools/educational institutions involved (8 of 9), the number of events delivered (8 of 9) and the number of visitors to online resources (7 of 9); and
- Around half intended to collect data on the ethnicity (5 of 9), socioeconomic status (5 of 9), SEND status (4 of 9) and disabilities (4 of 9) of those engaged with.

Figure 4 shows that some successful applicants anticipated that there would be significant barriers to collecting monitoring data and/or providing updates to the DfT and CAA. These included General Data Protection Regulation (GDPR) issues (6 of 9 respondents) and participants being unwilling or unable to provide data in the same way (4 of 9). Knowledge of how to collect monitoring data was not perceived as a barrier.

Figure 4 Levels of satisfaction with the RFTS application process



Source: Survey data. SYSTRA analysis

2.5 Funding and future

Summary: almost all successful applicants expected to continue delivering their projects after the Challenge Fund funding ends and almost half of the unsuccessful applicants intended to deliver their project (often on a smaller scale), despite not having

received funding from RFTS. Most applicants expected to apply to other competitions in the future.

Among successful applicants, almost all (8 of 9 respondents) expected to continue delivering their projects after the Challenge Fund funding ends. Almost half of the unsuccessful applicants (8 of 19) intended to deliver their project despite not having received funding from RFTS, although five of these stated that they intended to provide a scaled-back project from that described in their application. Most of the remainder (9 of 19) stated that they would not deliver their project, and two did not know what the future of their project would look like. Most applicants, both successful (8 of 9) and unsuccessful (13 of 19), expected to apply to other DfT or CAA competitions in the future. All nine successful applicants, and 14 of the 19 unsuccessful applicants, stated they would apply to RFTS in future if subsequent rounds of funding were available.

3 Impact evaluation findings

As described in Section 1.4.2, this evaluation focuses on five projects funded as part of the 2024 wave of the RFTS Challenge Fund. This section first describes how those projects were selected for evaluation before presenting analysis of each in turn, followed by a comparative realist evaluation across all five.

3.1 Selection of five RFTS projects

The 2024 Challenge Fund supported ten projects, five of which were chosen for this impact evaluation. These five projects were primarily chosen for practical reasons. These projects had either completed all their activities or had delivered a significant portion of their activities before the end of August 2024. Also, some monitoring data was collected by the respective project teams and shared with the evaluation team in each case. The volume of monitoring data collected varied across each project. The timing of some of the other funded projects meant that no monitoring data was available at the time of this analysis. The five projects selected collectively represent a diverse set of engagement formats, target audiences and geographical areas, which facilitates learning through the realist evaluation approach.

There are five key metrics of interest: (1) engagement, covering scale of outreach activity and the types of audiences; (2) satisfaction of participants; (3) change in participant awareness; (4) change in participant perceptions; and (5) change in motivation of participants.

The magnitude of engagement and the audiences reached (*impact evaluation questions 1 and 2*) by each project are presented in the *Delivery Information* sections. This is in keeping with the realist evaluation approach as it covers the mechanisms used for engagement, the specific outputs that were delivered and the audiences that were engaged as part of each project.

Participant satisfaction, change in participant awareness and perceptions of the aviation industry, as well as change in participant motivation to further explore the aviation industry (*impact evaluation questions 3–6*) are set out in the *Outcome Information* sections. This covers the overall impact to date of the projects.

The aims and objectives of each project along with the specifics of the outreach delivered are set out in the next sub-sections.

3.2 Leicestershire Education Business Company: AeroDiscover

3.2.1 Project context

Leicestershire Education Business Company (LEBC) was set up in 1992 as an independent charity. LEBC opens up career opportunities for young people and supports employers to find talent. Its services reduce the challenges young people face when transitioning from education

to the workplace.¹⁵ LEBC aims to create a one-stop shop for employers, schools and colleges, with the purpose of helping young people to prepare for working life.

LEBC's RFTS project aimed to inspire primary and secondary students from diverse backgrounds to explore careers in aviation. This programme offered immersive experiences (e.g. enabling students to engage directly with aviation technology) and career insights (e.g. via career pathway seminars) and made use of STEM (science, technology, engineering and mathematics) ambassadors to empower students to pursue aviation careers.

The programme focused on pupils from disadvantaged backgrounds among school populations (e.g. those living in disadvantaged wards, rural and coastal areas). The programme consisted of Aviation Exploration Labs (e.g. hands-on aerospace labs within schools), Career Pathway Seminars (sessions to introduce students to the wide range of aviation and aerospace career opportunities), a Digital Exploration Hub (online resource platform with industry information), Dreams Take Flight Workshops (soft skills development workshops) and Industry Insight Days (e.g. visits to aviation companies). The programme also included collaboration with the British Model Flight Association and the Air and Space Institute.

3.2.2 Monitoring data: delivery information

LEBC used the RFTS funding to design and deliver the programme described above. The monitoring data provided by LEBC to date covers a subset of these activities: four separate school-based Aviation Exploration Labs, which were all delivered in May 2024, and LEBC's participation in an Air and Space careers fair, which occurred in August 2024.

Each of the school-based sessions lasted two hours. In total, 117 young people attended these four outreach events. Questionnaires were distributed to students after each event. The male–female gender split was equal (50% each). The majority of attendees were white (88%), and Asian ethnicities (2%), mixed or multiple ethnicities (6%) and other ethnicities (5%) were also represented. SEND students accounted for 9% of attendees. All of the school-based attendees were classified as Key Stage 3¹⁶ and, in line with LEBC's geographical focus, all of these four outreach events were delivered in the East Midlands.

A further 1,100 young people attended the Air and Space careers fair, which lasted five hours. The LEBC stand was facilitated by two coordinators. Two hundred young people completed a standalone survey of attendees. In this case, the majority of respondents were female (57%).¹⁷ All attendees were in Key Stages 3, 4 or 5. The majority were in Key Stage 3 (78%).

¹⁵ <https://www.leics-ebc.org.uk/>

¹⁶ <https://www.gov.uk/national-curriculum> Key Stage 3: Ages 11–14, which includes years 7–9 of secondary school.

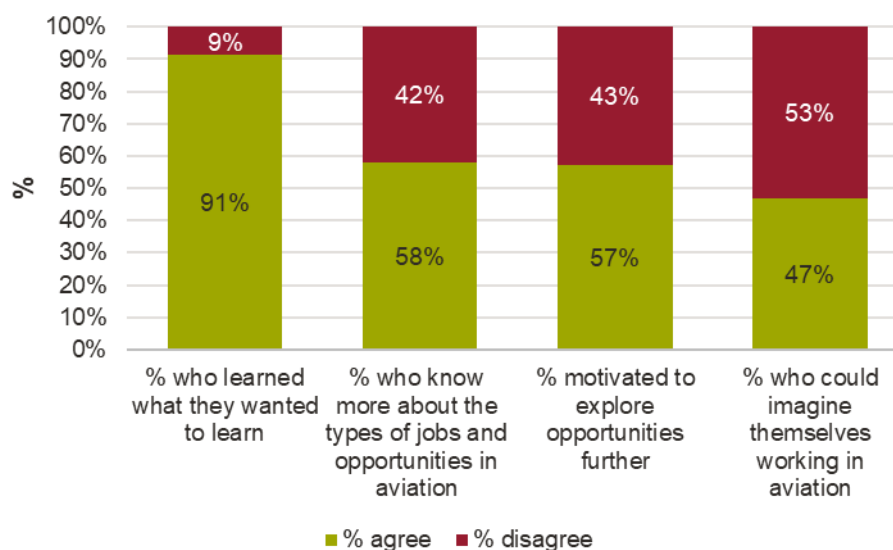
¹⁷ No ethnicity information was collected by the project team as part of the careers fair survey.

3.2.3 Monitoring data: outcome information

Monitoring information on outcomes was collected after each of the four school-based events via questionnaires distributed to young people. Across all school-based events, participant satisfaction was very high. For example, 100% of attendees reported that they had enjoyed their experience and 91% of participants reported that they had learnt what they wanted to as a result of taking part. Participant awareness was also enhanced in most cases. Over half of students (58%) agreed with the statement that they knew more about the types of jobs and opportunities in aviation after attending an event.

In terms of future behaviour, slightly over half of the participants (57%) reported that they were motivated to explore aviation opportunities further, and slightly fewer than half of respondents (47%) could imagine themselves working in aviation in the future.

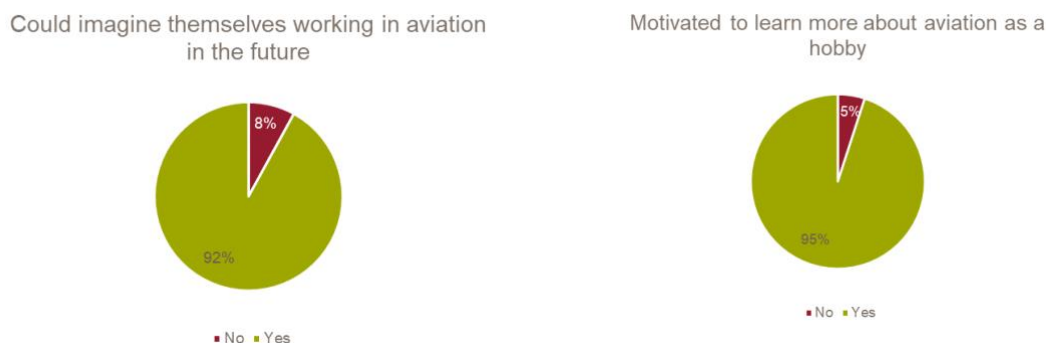
Figure 5 LEBC Aviation Exploration Labs: outcome metrics



Source: LEBC

Outcome monitoring information was also collected for the careers fair stand event via a standalone survey completed by 200 respondents. All respondents indicated that they had enjoyed their experience and 92% of respondents reported that they now knew more about the types of jobs that exist in the aviation industry.

In terms of industry perception, the majority of attendees (92%, see below) also noted that they could imagine themselves working in the aviation industry in the future after attending the careers fair. A similarly high proportion (95%) were now motivated to explore more about aviation as a hobby.

Figure 6 LEBC careers fair: perception and motivation metrics

Source: LEBC Survey

3.2.4 LEBC monitoring data: summary

- **Participation:** 117 young people attended the school-based Aviation Exploration Labs and a further 1,100 young people attended the Air and Space careers fair. The lab sessions attracted an equal mix of male and female attendees. The careers fair attracted a slightly higher proportion of female attendees. All the school-based attendees and most careers fair attendees (78%) were in Key Stage 3.
- **Participant satisfaction:** Across both the school-based lab sessions and the careers fair, all participants enjoyed their experience. 91% of lab attendees reported learning what they wanted to learn while the equivalent figure for the careers fair was 100%.
- **Participant awareness:** Awareness of the types of jobs and opportunities in aviation was higher amongst those who attended the careers fair (92%) compared to those who attended the school-based lab sessions (58%). This may be because the careers fair had a dedicated focus on employment and a slightly older audience.
- **Participant perception:** Likewise, 92% of those who attended the careers fair could imagine working in aviation compared to 47% for attendees of the school-based lab sessions.
- **Participant motivation:** Slightly over half of school-based lab participants (57%) reported that they were motivated to explore aviation opportunities further. Again, this was higher amongst attendees of the careers fair (95%).

3.3 Big Ideas: Flight for All

3.3.1 Project context

Big Ideas specialises in innovative community engagement. Big Ideas seeks to bring individuals and communities together to create lasting change.¹⁸ Its RFTS project involved the

¹⁸ <https://www.big-ideas.org/about-us/>

development of bitesize employability modules which were aimed at young people in secondary schools across England. Target participants were aged 11–16 from lower socioeconomic backgrounds, young people from Black and ethnic minority backgrounds, girls, young people excluded from education and young people with SEND.

The employability modules aimed to broaden the horizons of young people and raise their aspirations by introducing the target group to diverse and inspiring role models from the world of aviation. The modules also sought to develop the audience's key employability skills through completion of a series of challenges. The delivery model included both digital resources and remote workshop delivery.

3.3.2 Delivery information

This project is being delivered in two phases: an initial co-production phase to inform the design of later outreach activities and a delivery phase of wide-scale outreach. Information gathered to date covers both the co-production phase (to demonstrate the scale of preliminary engagement and to explore what value this early co-production adds) and some of the wide-scale delivery of workshops and resources (with additional engagement planned for the future).

Outreach during the co-production phase has been limited in terms of size of audience. However, this detailed co-production was intended to enhance the effectiveness of future broader engagement. This is in line with Big Ideas' RFTS project plan, which sets out how to ensure the final outreach activities are successful.

All co-production activities took place in the North West of England. In total, ten separate co-production activities were delivered between March 2024 and May 2024. Five of these activities were classroom based (physical and virtual scoping workshops with schools) and the remaining five consisted of production of the bitesize modules described above at industry locations. The classroom-based activities had a total audience of 27 (the vast majority of these were young people in Key Stages 3, 4 and 5¹⁹ as well as a small number of staff members). Slightly more than half of these classroom activity attendees were male (52%). Two young people with SEND were included in these activities. The resource production activities took place in three separate airports/aerodromes and involved audio visual personnel (e.g. camera operators, directors and producers) as well as industry stakeholders (e.g. aerodrome managers, airport representatives and flight information service officers).

At the time of drafting, Flight for All had also delivered three virtual workshops as part of the Big Ideas project, with 151 young people attending these. Of these attendees, 92 were male (61%). One of the three workshops focused entirely on young people with SEND. All attendees were either in Key Stage 3 or Key Stage 4.

¹⁹ <https://www.gov.uk/national-curriculum> Key Stage 3: Ages 11–14, which includes years 7–9 of secondary school. Key Stage 4: Ages 14–16, which includes years 10 and 11 of secondary school. Key Stage 3: Ages 11–14, which includes years 7–9 of secondary school. Key Stage 5: Ages 16–18, which includes college or sixth form.

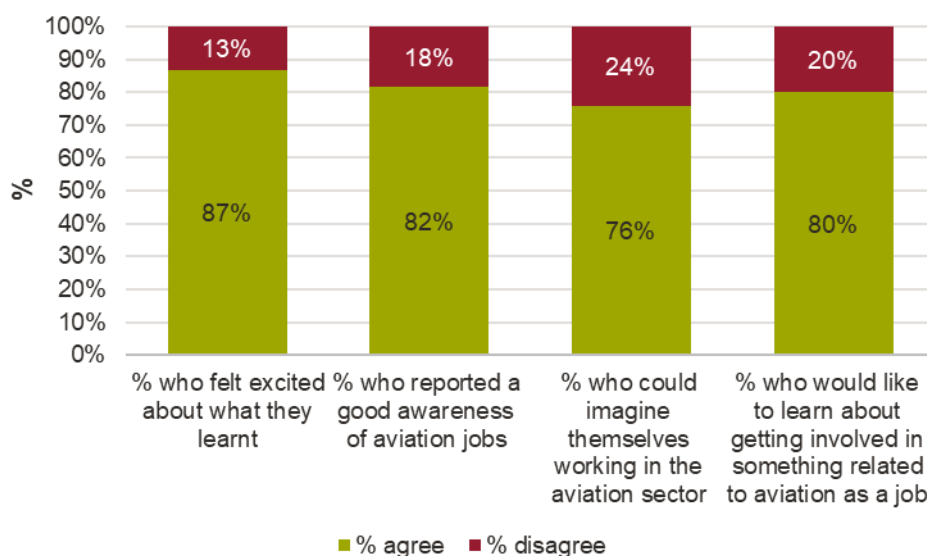
Finally, online resources created by Big Ideas as part of this project have been downloaded over 9,800 times to date by young people. These young people cover Key Stages 1–5 and almost every region of the UK is represented (with the exception of North East England).

3.3.3 Outcome information

Outcome information for the Big Ideas co-production activities was made available on aggregate across all ten co-production activities combined. This was collected via informal qualitative engagement. All participants said that they had enjoyed their experience. Furthermore, their perception of the aviation industry had been universally enhanced. All participants reported that they could imagine themselves possibly working in the aviation sector in the future.

Big Ideas noted that these findings were not surprising as many of the participants who took part in the co-production phase already had an interest in the aviation industry prior to taking part. However, some participants had no knowledge of the aviation sector, having never flown or been to an airport. Big Ideas reported qualitatively that this sub-group was also inspired by their participation in the project, and some were now considering careers in civil aviation.

Figure 7 Big ideas: outcome metrics



Source: Big Ideas. Frontier analysis

Outcome information is also available for three virtual workshops delivered by Big Ideas. This information was collected via an online survey (Figure 7). All statistics refer to post-engagement data collection unless otherwise specified. Satisfaction was high, with 87% of respondents noting that they felt excited about what they had learnt. After taking part, 82% of attendees also agreed that they had a good awareness of aviation jobs. In terms of industry perception, over three-quarters of participants (76%) could imagine themselves working in the aviation sector. Finally, 80% of participants would like to learn more about aviation jobs.

A small survey of those who had downloaded online resources was carried out. Given the limited sample size (5) relative to the total number of downloads, this information was not analysed as part of this evaluation.

3.3.4 Big Ideas monitoring data: summary

- **Participation:** The classroom-based activities had a total audience of 27. Flight for All also delivered three virtual workshops as part of the Big Ideas project. These were attended by 151 young people in total. Online resources created by Big Ideas as part of this project have been downloaded over 9,800 times to date by young people.
- **Participant satisfaction:** All co-production participants (27) said that they had enjoyed their experience. Also, 87% of workshop attendees noted that they felt excited about what they had learnt.
- **Participant awareness:** After taking part, 82% of attendees agreed that they had a good awareness of aviation jobs.
- **Participant perception:** Initial anecdotal evidence suggests that attendees' perception of the aviation industry was enhanced. Over three-quarters of workshop participants (76%) could imagine themselves working in the aviation sector.
- **Participant motivation:** 80% of workshop participants would like to learn more about aviation jobs.

3.4 Air League: Soaring to Success

3.4.1 Project context

Founded in 1909, the Air League is an aviation, aerospace and space charity which provides scholarships and outreach programmes²⁰ with the aim of inspiring and supporting the next generation of aviation, aerospace and space professionals from all backgrounds. Its programmes and projects attempt to bridge the gap between education and industry and impact communities across the United Kingdom. This in turn can contribute to greater social mobility.

The Air League's RFTS project involved the development of a careers enrichment programme for schools that provides a link to industry. The programme provided accessible, in-depth information and knowledge that highlights the range of roles available in aviation and related engineering industries. Target participants were aged 13–17 in state-funded education. Schools targeted for inclusion in the programme were primarily in low-income urban areas in the North East, Midlands and South West of England. The three-stage programme consisted of career conferences (Stage 1), e-learning courses that provided an overview and insight into

²⁰ <https://airleague.co.uk/about-us>

career pathways (Stage 2), and career and skills workshops and airport experience days (Stage 3).

3.4.2 Delivery information

Air League has used RFTS funding to deliver all three stages of its project to date.

As part of Stage 1, Air League delivered a virtual career conference in November 2023, which was streamed live to over 8,000 young people²¹ across 130 schools and further education establishments. This conference consisted of more than 20 sessions across five days. The conference was co-delivered by 43 presenters including representatives from Air League and a diverse range of other organisations and industry partners.²² All attendees were in Key Stages 3, 4 or 5.²³ Participating schools were based in every region of the UK (see Figure 8).

As part of Stage 2, Air League delivered e-learning career enrichment courses to two cohorts of young people. Its courses included input from a range of industry partners. A total of 1,500 students were registered. Among this group, 470 young people were awarded certificates for 100% completion (31% of those who registered). Slightly over half of the young people who registered were male (52.4%). Approximately one in five (20%) of the young people who registered were in receipt of the Pupil Premium, which is a grant to improve educational outcomes for disadvantaged pupils in state-funded schools in England.²⁴

The final stage of outreach consisted of 13 air experience days, which took place in May, June and July 2024 in gliding centres and aerodromes. These events took place in London, the West Midlands, and Yorkshire and the Humber. The events were supported by volunteers and ambassadors from industry. In total, 162 young people took part. Approximately 33% of these attendees were female and 21% were in receipt of the Pupil Premium. The attendees were also ethnically diverse (39% were Asian or Asian British, 9% were Black, Black British, Caribbean or African, 8% were of mixed ethnicity, 41% were white and 3% were from another ethnic group).

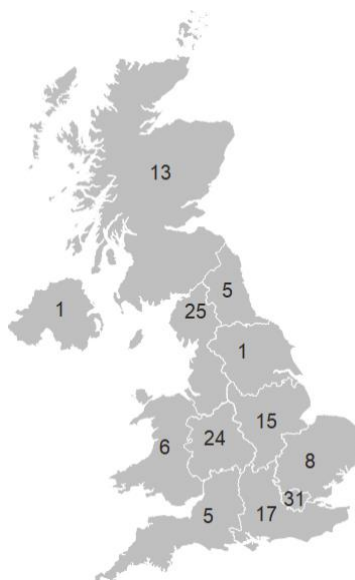
²¹ Recordings were then accessed on demand by a further 5,600 delegates.

²² Air Scouts, Air Service Training, Airbus, BAE Systems, Boeing, British Airways, Civil Aviation Authority, Clyde & Co, Department for Transport Aviation Ambassadors, Eagle Eye Innovations, Kent Ballooning, International Airlines Group, Junior Gliding, KISPE Space, Lockheed Martin, NATS, The Royal Air Force, University of West London, Zero Avia.

²³ <https://www.gov.uk/national-curriculum> Key Stage 3: Ages 11–14, which includes years 7–9 of secondary school. Key Stage 4: Ages 14–16, which includes years 10 and 11 of secondary school. Key Stage 5: Ages 16–18, which includes college or sixth form.

²⁴ <https://www.gov.uk/government/publications/pupil-premium/pupil-premium>

Figure 8 Geographical distribution of schools that took part in Air League’s career conference



Source: Air League

Note: Figures refer to count of number of schools that took part in Air League’s Career Conference

3.4.3 Outcome information

Following the career conference (delivered as part of Stage 1 of Air League’s project) a small qualitative survey of a subset of the students who attended was distributed to six teachers. The feedback was positive. A teacher noted that their students were satisfied with the experience, saying: “...students enjoyed the conference, they engaged with speakers and asked questions”. Another teacher praised the diversity of speakers, which can help to build young people’s awareness and interest in aviation, with another saying: “...the range of speakers at the virtual conference was really good and emphasised the range of careers that are available”.

Following the e-learning career enrichment courses (Stage 2), Air League also surveyed young people directly via end-of-course surveys (sample size of 467). These surveys revealed that the young people were satisfied with their experience (86% of young people enjoyed their experience). The students also reported an increase in awareness (100% of students reported that they knew more about the types of jobs and opportunities in aviation after the course) and the majority of young people were more motivated to explore next steps in the industry (81% said they would like to learn more about aviation as a job).

A subset of young people provided qualitative feedback on their experience via messages on Post-it notes after the air experience days (Stage 3). Again, the feedback was positive. One young person noted a sense of achievement after taking part: “... happy that I accomplished

something I never thought I would do” and highlighted their satisfaction: “...*the experience was amazing*”.

A survey of the teachers of Stage 3 attendees was also conducted. In terms of changed perceptions of the aviation industry, the survey showed that less than 5% of the young people who took part in Stage 3 did not want to find out more about the aviation sector after attending an air experience day. Also 70–80% of attendees could imagine themselves working in the sector.

3.4.4 Air League monitoring data: summary

- **Participation:** Air League delivered a virtual career conference in November 2023, which was streamed live to over 8,000 young people. Air League also delivered e-learning career enrichment courses, which 470 young people completed. A further 162 young people took part in air experience days.
- **Participant satisfaction:** 86% of the e-learning course attendees enjoyed their experience. Qualitative data suggested that attendees of the career conference and air experience days were also satisfied.
- **Participant awareness:** The young people who attended an e-learning course also reported an increase in awareness (100% of students reported that they knew more about the types of jobs and opportunities in aviation after the course).
- **Participant perception:** All attendees of the e-learning courses could imagine working in aviation.
- **Participant motivation:** 81% of young people who attended an e-learning course were more motivated to explore next steps in the industry.

3.5 Education and Employers: Inspiring Aviation

3.5.1 Project context

Education and Employers is a charity launched in 2009 which aims to “*provide young people with the inspiration, motivation, knowledge, skills and opportunities they need to help them achieve their potential*”.²⁵ Education and Employers uses innovative online match-making technology to connect schools and colleges across the country with tens of thousands of volunteers working in different sectors.²⁶ This aims to help broaden young people’s horizons, raise their aspirations and increase motivation to learn, which leads to improvements in attainment.

The Education and Employers RFTS project followed this model by giving secondary school pupils across England the chance to positively engage with a diverse range of role models

²⁵ <https://www.educationandemployers.org/about-the-charity/>

²⁶ <https://www.educationandemployers.org/about-the-charity/>

currently working in the aviation sector. Education and Employers partnered closely with employers across the aviation sector to deliver the campaign. The project was open to pupils in both primary and secondary schools in England, from ages 5 to 18.

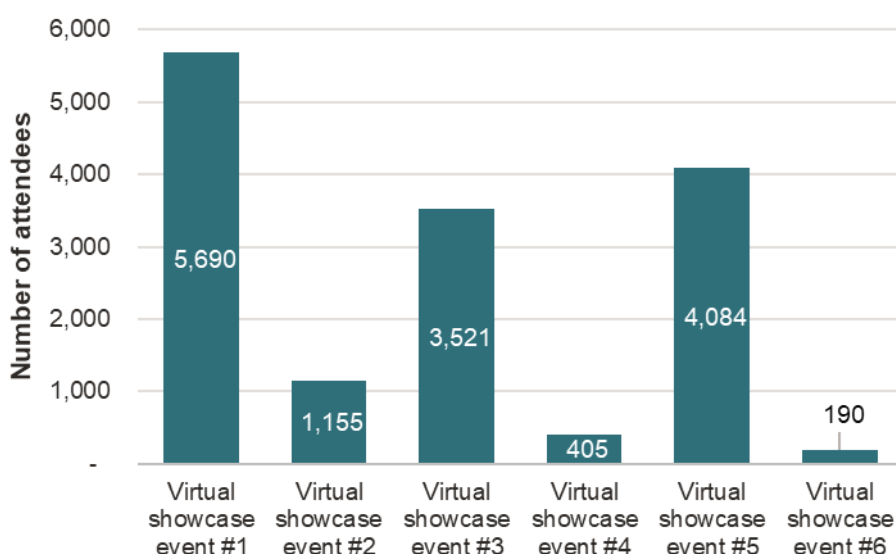
The campaign consisted of facilitated virtual and in-person events, expert training to challenge teacher misconceptions about aviation (e.g. the types of roles available), and the creation of resources and connection of students with aviation sector volunteers.

3.5.2 Delivery information

In line with the project scope described above, Education and Employers delivered eight showcase events (between March 2024 and July 2024) and more than 100 school-based activities involving DfT’s Aviation Ambassadors (between January 2024 and June 2024).²⁷

Each showcase event took place over the course of a day, either physically in a school (two events) or virtually (six events). The sessions were delivered by a small number of volunteers from the aviation sector. A further eight showcase events are planned later in 2024.

Figure 9 Education and Employers: number of attendees per virtual showcase event



Source: Education and Employers

The six virtual events were very well attended, with a total of more than 15,000 young people joining across the six events (see Figure 9). These young people were from every region of the UK with the exception of Northern Ireland.

²⁷ Aviation Ambassadors Group – GOV.UK (www.gov.uk)

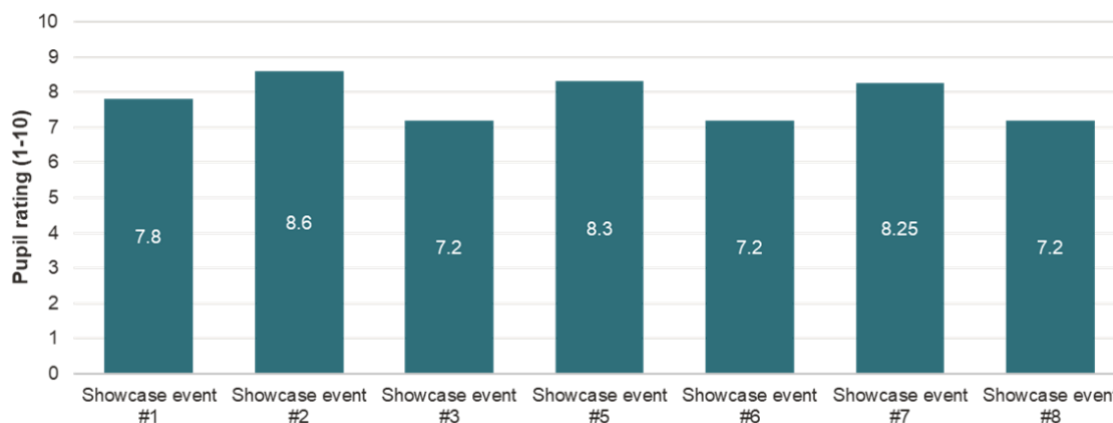
The two physical in-school showcase events were attended by a further 170 young people. These two events were delivered in Yorkshire and the Humber and the North East. Across all eight events, slightly over half of these attendees were male (51%). In addition to these showcase events, Education and Employers also facilitated another set of school-led activities involving Aviation Ambassadors (e.g. retired pilots, policy advisers, RAF officers and sustainability professionals). Between January 2024 and June 2024, 102 of these events took place in 78 schools and colleges. In total, over 23,600 young people were invited.²⁸

3.5.3 Outcome information

Monitoring information derived from surveys of participants is available for seven of the eight showcase events described above. Across each of these seven events, self-reported levels of pupil satisfaction were consistently high. Pupils were asked to rate the event they took part in on a scale of 1–10. Event averages are presented below. Each event scored at least 7.2 out of 10.

Pupils’ self-reported perception of the aviation industry was also influenced by the outreach activities. On average across all events, 75% of children reported that they felt inspired by what they had learnt.²⁹ The vast majority of participating pupils (77%)³⁰ also reported that they knew more about what they would need to do if they wanted a job in aviation after attending one of the events.

Figure 10 Education and Employers: pupil activity ratings



Source: Education and Employers

Note: No monitoring data is available for Showcase event #4

Additional qualitative feedback collected from participating pupils was also positive. One pupil noted that the speaker had had a significant impact on them and their outlook and ambitions:

²⁸ We do not know exactly how many young people attended.

²⁹ Calculated as a simple average across all engagement events.

³⁰ Calculated as a simple average across all engagement events.

“I’ll remember one of the speakers who told us that you can be whoever you want to be, you just need to be committed”. Another student specifically highlighted how their awareness of the diversity of the aviation workforce had been enhanced: *“I learned how people in aviation are doing different jobs and come from different backgrounds”.*

3.5.4 Monitoring data: summary

- **Participation:** Education and Employers delivered eight showcase events. More than 15,000 young people joined virtually and a further 170 young people joined in person. Education and Employers also facilitated another set of school-led activities involving Aviation Ambassadors. In total, over 23,600 young people were invited.
- **Participant satisfaction:** Pupil satisfaction was consistently high (each showcase event scored at least 7.2 out of 10).
- **Participant awareness:** The vast majority of participating pupils (77%) knew more about what they would need to do if they wanted a job in aviation after attending an event.
- **Participant perception:** On average across all events, 75% of young people reported that they felt inspired by what they had learnt.
- **Participant motivation:** Over two-thirds of participants (68%) reported being more interested in a future job in aviation.

3.6 STEM outreach team: University of Leeds

3.6.1 Project context

The STEM (science, technology, engineering and mathematics) outreach team at the University of Leeds aims to inspire young learners by delivering activity online and in schools and by welcoming students onto campus.³¹ This includes activities for pre-16 and post-16 learners to encourage exploration and understanding of life as a STEM student at university and the real-world applications of STEM subjects.

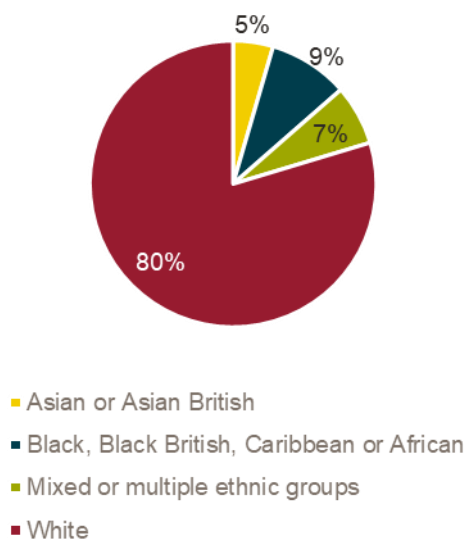
The University of Leeds RFTS project consisted of presentations and activities which were designed to raise interest in aviation and possible career opportunities in aviation. The programme focused on secondary school-aged children who lived in areas with low levels of participation in higher education and was run over two days. During Day 1 (which took place at local schools and educational centres), young people were introduced to the aviation industry through presentations and hands-on activities. Day 2 took place at the University of Leeds, where the young people performed tasks using the facilities (wind tunnel, flight simulator and jet engine) to raise interest in aviation and showcase careers available in the aviation industry.

³¹ <https://www.stem.leeds.ac.uk/>

3.6.2 Delivery information

In total, eight separate activities were delivered between March 2024 and May 2024. Three of these events took place in local schools. Another event took place in a community centre and four events took place at the University of Leeds campus.

Figure 11 STEM Outreach Events: participant ethnicity



Source: STEM outreach team: University of Leeds

In total, 271 young people attended these sessions. Slightly more than half of these attendees were male (53.7%). All activities took place in Yorkshire and the Humber, and all attendees were in Key Stages 3, 4 and 5. Ethnicity information was available for attendees across six of the eight events. The distribution is presented in Figure 11.

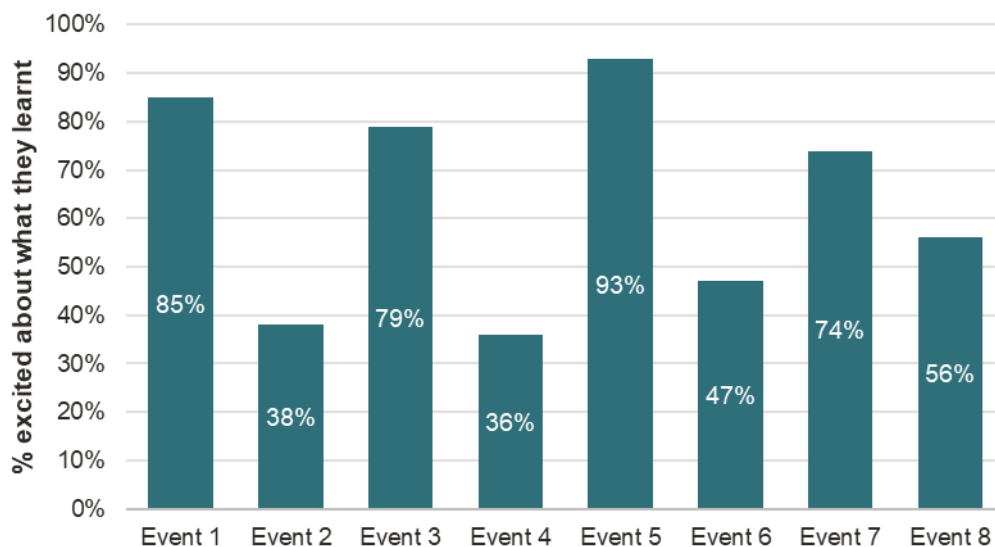
3.6.3 Outcome information

Monitoring information on outcomes which was collected via participant feedback forms is available for all eight of the presentations and activities described above.

On average, across all eight presentations, satisfaction was high, as more than 72% of participants reported that they would recommend the programme to others. There was some variation in satisfaction across events.

Participants were also asked about their excitement regarding what they had learnt as a result of taking part in the activities. On average, pupils' self-reported excitement was high but responses to this question also varied across the events (see Figure 12). This variation does not seem to be related to event type or audience size as some school-based events scored highly while others did not, and the same is true for specific campus visits.

Figure 12 STEM Outreach Events: proportion of pupils excited about what they learnt



Source: *STEM Outreach Events: University of Leeds*

Note: Events 1–3 were workshops in schools. Event 4 was a workshop in a community centre. Events 5–8 were visits to University of Leeds Campus.

Around 40% of participants across all events reported that they were now more motivated to explore aviation opportunities. This suggests that the outreach events stimulated some participants to consider working in the aviation industry in the future, though not the majority. On average, the on-campus events led to a higher proportion of participants reporting that they were motivated to explore aviation opportunities (48%) than the off-campus events (35%). This suggests that there may be additional value in placing participants in a real aviation environment.

3.6.4 Monitoring data: summary

- **Participation:** The University of Leeds delivered eight separate activities, and 271 young people attended these sessions. Slightly more than half of these attendees were male (53.7%).
- **Participant satisfaction:** Pupil satisfaction was high as 72% of participants would recommend the programme to others.
- **Participant perception:** On average, pupils' self-reported excitement about what they had learnt was high (61% were excited about what they had learnt). Responses to this question varied across the events.
- **Participant motivation:** 40% of participants across all events reported that they were now more motivated to explore aviation opportunities.

3.7 Realist evaluation synthesis

In this section, insights from the project-by-project impact evaluation findings are drawn together using a theory-based realist evaluation methodology. This synthesis identifies insights about the context of the interventions, for whom the projects made a difference and how. This section is structured according to the impact evaluation questions that were presented in Section 1, drawing on the evidence across the five measures of interest: engagement, participant satisfaction, participant awareness, participant perception of the aviation industry and participant motivation to further explore aviation.

Overall, across the five projects, **£375,600** of RFTS funding has been awarded. The activities conducted by project teams have all aligned with their delivery plans, though some are yet to deliver all of their activities (which was planned at the time of application).

Engagement

In terms of the **scale of outreach** activity, across the five projects, the project teams have together reached more than 30,000 individual young people. The magnitude of engagement has varied by project in line with the different engagement mechanisms used. Some projects have reached thousands of young people (via several large-scale online events such as Education and Employers showcase events) and other projects have focused to date on more in-depth engagement with individual classes of students (such as the University of Leeds school-based presentations and in-person activities). Several projects are due to conduct further engagement in the months ahead, which will further boost the scale of outreach.

The volume of outreach (measured in terms of audience size) tended to be largest for events that were delivered virtually (e.g. online conferences or virtual career presentations). This type of outreach activity can engage the largest audiences as there are no physical space limitations and online platforms can be accessible for many young people. Also, the same virtual content can, in some cases, be viewed multiple times by the same audiences, or afterwards if the conference is recorded and later shared, thereby offering the audience flexibility. This suggests that this is an effective means of reaching out to some target audiences of young people.

The projects have engaged a **diverse set of young people**. Project teams selected target audiences to reach individuals who would not otherwise be likely to have been aware of opportunities in the aviation sector. This is in line with the core objectives of RFTS. The projects universally focused on school-aged young people. The majority of engagement was focused on secondary school-aged children. However, Education and Employers engaged with primary school children and some of the LEBC outreach and Big Ideas resource downloads included children from Key Stage 2 or below. If the aim going forward is to engage both primary and secondary school-aged children, greater emphasis could be placed on projects with a specific aim to engage younger children using tailored forms of engagement, primarily face to face.

Across the five projects, young people from every region of the country were included in specific events. Aligned with their objectives, projects which adopted a national focus (e.g. Air League and Education and Employers) included participants from a range of different areas whereas projects with a specific geographical target area (e.g. University of Leeds, LEBC and Big Ideas) focused on more in-depth engagement within a defined locality. However, it was not the case that multiple separate projects focused on the same geographical area. Therefore, collectively, the projects achieved diversity in terms of geographical coverage.

Several projects (e.g. Big Ideas and LEBC) included some participants with SEND and some events (e.g. Air League) were focused on young people living or studying in areas with above average rates of deprivation.

Some project audiences were also diverse in terms of ethnicity (e.g. almost 40% of the attendees of Air League's air experience days were Asian or Asian British) whereas others were less diverse (for example 80% of attendees across all STEM Outreach Events were white). This could, in part, have been driven by local area demographics.

Across almost all engagement, the gender balance was almost equal between male and female. However, there was some variation. For example, respondents to the attendee survey following the LEBC careers fair were 57% female (though there is a risk of bias in who responded to the survey) and 52% of Big Ideas attendees were male.³²

Satisfaction

Qualitative and quantitative feedback collected both directly from young participants and from their teachers confirmed that **satisfaction** with events was high on average (e.g. 91% of participants reported that they had learnt what they wanted to as a result of taking part in LEBC's Exploration Lab and 86% of young people who took part in Air League's career enrichment courses enjoyed their experience). A high proportion of young people in some projects would be happy to recommend events to others (e.g. 72% of participants in the University of Leeds project) and teachers noted that students enjoyed taking part in certain events and were engaged throughout.

High levels of reported satisfaction were consistent across all the engagement formats used by the five projects.

Awareness

Some projects had particularly high impacts on their participants' **awareness** regardless of whether the outreach was delivered virtually or online (92% of attendees of the LEBC Careers Fair reported that they were aware of the types of jobs and opportunities in aviation; the

³² In addition, some of the 2024 projects which did receive funding but were not chosen as one of the five projects included in this report did focus specifically on female audiences.

equivalent figure for young people who attended Big Idea's workshops was 82% and amongst those who attended Air League's e-learning careers courses the equivalent figure was 100%).

Qualitative feedback suggested that young people were impressed by the range of careers available in aviation after taking part in the events. For example, teachers noted that students' awareness of the diversity of roles in the sector was boosted after taking part in the Air League career conference. This is fully consistent with the RFTS objective to champion the opportunities in aviation. Quantitative feedback from participants also showed high levels of excitement about what they had learnt on average across multiple projects and specific events (e.g. over half of students reported that they were excited about what they had learnt after five of the eight University of Leeds outreach events).

Perception

RFTS projects also contributed to a change in **perceptions of the aviation industry** amongst participants. Participants reported that they realised for the first time that people working in aviation are themselves diverse. For example, students reported increased awareness regarding the diversity of the backgrounds of those working in aviation after taking part in the Education and Employers programme of events.

Some projects also explored whether participants could imagine themselves working in aviation in the future after the engagement. For example, 92% of young people could imagine themselves working in the aviation industry in the future after attending the LEBC stand at a careers event which introduced young people to the wide range of aviation and aerospace career opportunities. Furthermore, all attendees of the initial events facilitated by Big Ideas agreed that they could imagine themselves working in aviation.

Finally, 75% of the young people engaged as part of the Education and Employers project (attendees of showcase events where volunteers from the aviation sector aimed to broaden young people's horizons and raise their aspirations) reported that they felt inspired by what they had learnt.

Given the timeframe for this evaluation, it is not possible to be sure whether changes in perceptions observed will persist in the future.

Motivation

The RFTS projects also helped to contribute to a **change in the motivation of participants** to further explore the aviation industry. Across some of the five projects, the proportion of young people who reported that they were motivated to learn more about aviation or take a next step was significant. For example, after the LEBC career fair (which introduced young people to the wide range of aviation and aerospace career opportunities), 95% of attendees reported that they were motivated to learn more about aviation as a hobby and, after the Big Ideas workshops (which included employability modules aimed to broaden the horizons of young people), 80% of attendees reported that they were motivated to learn more about aviation as a job.

Approximately 40% of young people who engaged with the University of Leeds RFTS project (across eight events delivered in schools, community centres and on campus, which included presentations and in-person activities as well as usage of specialised facilities) noted that they were now more motivated to explore aviation opportunities.

Given that this evaluation focuses on short-term outcomes, it is not possible to conclude definitively whether reported changes in motivation will be acted upon by participants in the future.

4 Implications for future policy design

This section sets out policy implications which arise from this evaluation.

4.1 Insights from the impact evaluation

Overall, the evidence suggests that the RFTS Challenge Fund is on track to achieve its objectives of implementing initiatives that inspire the next generation of aviation professionals, reaching individuals who would not otherwise be aware of opportunities and having a broad impact.

For a relatively low level of financial investment, the projects have:

- Reached a wide range of young people who would not otherwise have been likely to be aware of career options in aviation. This has been done by using a variety of engagement mechanisms and delivery models, including both large-scale events and targeted online and in-person outreach. The projects also, in some cases, have effectively targeted different audiences including young people from particular ethnic groups, SEND, lower-income households and girls/women. In some cases, a relatively high engagement level among target groups has been achieved; for example, one project achieved 40% representation from ethnic minorities and another engaged with 9% with SEND. There are some groups which remain hard to reach. Overall, younger children are less well represented.
- Overall, participant satisfaction has been relatively high across all projects. This has facilitated an increased awareness of aviation opportunities and has improved perception of the aviation industry. Therefore, projects have helped to champion the opportunities that exist in the sector.

4.2 Implications for policy design from process evaluation

Responses to the survey of successful and unsuccessful applicants suggest that DfT/CAA may wish to consider expanding promotion of the RFTS Challenge Fund through some additional networks, such as via university bid channels, social media platforms or wider networks relevant to the aviation sector. In addition, successful and unsuccessful applicants suggested that certain aspects of the application process could be clarified. These include the assessment criteria, the level of detail required for each question, the alignment of the current application with past performance and the importance between the quantity of outputs and the total costs. This could broaden the range of organisations which apply in future years.

DfT/CAA may also wish to consider any ways in which they could assist projects in overcoming barriers to collecting monitoring data and/or providing updates to the DfT and CAA. However, by and large, the monitoring data that has been provided to date has been of high quality.

4.3 Implications for policy design from the impact evaluation

The impact evaluation emphasises the importance of tailoring projects to meet different specific objectives and engage with different target audiences. For example, there is evidence that high quality online virtual engagement can be an effective aspect of an outreach package with some younger groups. However, this will not be suitable for younger children (e.g. those in primary school). Any future waves of the RFTS could consider more explicit targeting of younger participants (e.g. Key Stage 2) alongside continued outreach to young people from all ethnic groups, people with disabilities or SEND, neurodivergent audiences and areas across the country.

As one RFTS Challenge Fund project in this study suggested, co-production of the design, content and delivery of outreach programmes with representatives from intended audiences can provide valuable innovative ideas, tailoring options, and in itself can increase awareness and perceptions to further consider aviation opportunities among participants.

Although this impact evaluation is light touch and focuses on only five projects, it shows the learning that can be generated from proportionate monitoring data collection, surveys and analysis. This suggests that there is value in continuing to monitor the level of outreach and specific outcomes (such as awareness, perception and motivation) across different types of projects to build the evidence base on which activities are effective in reaching different types of audiences.

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