# STEM Learning
# **STEM Ambassador Data Analysis Report**



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# Background to the Analysis

- **Background:**

  – The STEM Ambassador (SA) programme launched in 2002 and provides volunteering opportunities for individuals with a background in STEM subjects, co-ordinated by a network of 19 local STEM Ambassador Hubs across the UK.

  – The programme's digital platform captures a range of information from STEM Ambassadors and activity organisers; and has captured a large amount of outcomes data which has not yet been fully interrogated.

  – Qa received data from STEM Learning, covering the previous 12 months (Aug 2019-July 2020); and carried out analysis in order to to establish any patterns.

- **The aims of the research were to:**

  – Identify the popularity of different types of activities & which groups choose different activities

  – Explore differences between different STEM Ambassador Hubs

  – Understand intended outcomes by activities for users and Ambassadors

  – Ascertain activities which may require improvement (lower ratings)

  – Determine any gaps in type of activities by different region/STEM Ambassador Hubs

- Careers related activities and interactive events seem to be particularly popular. Events such as 'Interactive STEM sessions' (9%) and 'Employability Skills Sessions' (11%) featuring in the top 5 most popular activities.

- 'Advice for senior leaders' and 'Hosting a visit to a STEM workplace' were considerably lower (1-2% of the overall sample organised such events).

| Activity Popularity - Overall Sample | Percentage |
|---|---|
| Hands on practical | 15% |
| Support an exhibition or event | 15% |
| Employability skills session e.g. mock interviews/CV writing | 11% |
| STEM careers talk and/or advice session | 11% |
| Interactive STEM session e.g. speed networking or Q&A session | 9% |
| STEM presentation e.g. assembly or learning | 7% |
| Mentoring or support e.g. for STEM projects | 6% |
| Judging a STEM competition/challenge | 4% |
| STEM Clubs | 4% |
| Professional development of educators | 3% |
| Hosting a visit to a STEM workplace | 2% |
| Information and advice for senior leaders e.g. head teachers, governors | 1% |
| Other | 11% |
| **Base (26,637)** | |

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# Proportion of activities by SA Hub

| STEM Hub | Employability skills session | Grand Challenges | Hands on practical | Hosting a visit to a STEM workplace | Information and advice for SLT | Interactive STEM session | Judging a STEM competition | Mentoring /Support | CPD of educators | Space | STEM careers talk/advice session | STEM Clubs | STEM presentation | Support an exhibition /event | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STEM Ambassador Hub Central South England | 3% | - | 1% | 7% | 5% | 6% | 1% | 2% | 3% | 5% | 4% | 3% | 4% | 5% | 3% |
| STEM Ambassador Hub East England | 2% | - | 1% | 12% | 5% | 1% | 8% | 2% | 2% | - | 4% | 1% | 3% | 3% | 3% |
| STEM Ambassador Hub East Midlands | 4% | 5% | 2% | 2% | 3% | 4% | 2% | 1% | 1% | - | 4% | 1% | 2% | 2% | 1% |
| STEM Ambassador Hub East Scotland | 1% | - | 1% | <1% | 1% | 14% | 6% | 2% | 4% | - | 3% | <1% | 1% | 2% | 3% |
| STEM Ambassador Hub Lancashire and Cumbria | 6% | - | 3% | 1% | 1% | 3% | 19% | 4% | 1% | - | 1% | <1% | 1% | 2% | 7% |
| STEM Ambassador Hub London | 11% | 5% | 2% | 6% | 8% | 9% | 8% | 6% | 30% | 6% | 11% | 2% | 7% | 5% | 9% |
| STEM Ambassador Hub Merseyside and Cheshire | 2% | - | 1% | 4% | - | <1% | 4% | 5% | 4% | - | 2% | <1% | 1% | 2% | 1% |
| STEM Ambassador Hub North East England | 3% | - | 2% | 2% | 3% | 7% | 3% | 1% | 3% | 2% | 3% | 4% | 2% | 6% | 2% |
| STEM Ambassador Hub North Midlands, South Yorkshire and East Yorkshire | 11% | - | 5% | <1% | 1% | 3% | 3% | 3% | 2% | - | 3% | 1% | 2% | 4% | 5% |
| STEM Ambassador Hub North Scotland | 1% | 5% | 3% | - | - | 1% | 2% | 2% | <1% | - | 1% | 1% | <1% | 1% | 1% |
| STEM Ambassador Hub Northern Ireland | 6% | - | 9% | 7% | 1% | <1% | 1% | 1% | <1% | - | 6% | - | 2% | 1% | <1% |
| STEM Ambassador Hub South East England | 6% | 5% | 6% | 7% | 6% | 9% | 4% | 15% | 5% | 9% | 6% | 3% | 5% | 8% | 24% |
| STEM Ambassador Hub South West Peninsula | 2% | - | 3% | <1% | 2% | <1% | 1% | 2% | 1% | - | 2% | 1% | 2% | 6% | 1% |
| STEM Ambassador Hub Staffordshire and Shropshire | 1% | - | <1% | 1% | - | 1% | 2% | 1% | - | - | 1% | <1% | 1% | 1% | 1% |
| STEM Ambassador Hub Trans Pennine | 7% | - | 4% | 5% | 21% | 10% | 4% | 4% | 19% | 5% | 16% | 4% | 7% | 9% | 4% |
| STEM Ambassador Hub Wales | 4% | - | 5% | 1% | 3% | 5% | 1% | 1% | 5% | 1% | 3% | 1% | 6% | 4% | 1% |
| STEM Ambassador Hub West England | 6% | - | 3% | 3% | 2% | 2% | 7% | 4% | 4% | 1% | 4% | 5% | 4% | 4% | 13% |
| STEM Ambassador Hub West Midlands | 5% | - | 7% | 2% | 2% | 4% | 1% | 3% | 2% | - | 3% | 13% | 3% | 4% | 3% |
| STEM Ambassador Hub West Scotland | 3% | - | 4% | 4% | 6% | 4% | 8% | 5% | 5% | 1% | 4% | <1% | 2% | 2% | 4% |

Base (26,637)

# STEM Ambassadors and organisers want different outcomes

| Intended Outcome | Organiser |
|---|---|
| Interactivity and engagement | 100% |
| Overall enjoyment | 100% |
| Preparation and organisation | 100% |
| Success in achieving intended outcomes | 100% |
| Engagement, interest, enjoyment in STEM subjects | 69% |
| Awareness and aspirations for STEM-related study and careers | 56% |
| Ability to link (curriculum) learning with STEM careers and real-life contexts | 54% |
| Work with employers and Higher Education institutions to provide STEM encounters with young people | 52% |
| Build our confidence and enthusiasm for STEM | 52% |
| Building links across local community, including other schools and colleges | 52% |
| Support and enhance our passion for what we do | 50% |
| Building STEM identity e.g. by challenging stereotypes about STEM careers | 42% |
| Learning what the workplace is like and developing employability skills | 38% |
| Attainment and progress in STEM subjects | 37% |
| Increase our knowledge of STEM subjects | 30% |
| Informed parents/carers about study options and job opportunities in STEM | 28% |
| Support other providers of youth activities and STEM enrichment (e.g. science museums, Scouts) | 24% |
| **Base (excluding those that gave no intended outcomes)** | **26,483** |

| Intended Outcome | STEM Ambassador |
|---|---|
| Sense of achievement, reward and satisfaction | 87% |
| Inspire and inform young people about STEM | 79% |
| Support local community | 64% |
| Communication skills | 49% |
| Challenge stereotypes about STEM careers | 44% |
| Support my organisation to develop links with schools/community | 40% |
| Increase my organisation's profile/recognition | 33% |
| Organisational/leadership skills | 32% |
| **Base (excluding those that gave no intended outcomes)** | **19,556** |

- Key intended outcomes for STEM Ambassadors included a sense of achievement (87%), inspiring young people (79%) and supporting their community (64%).

- For Organisers in school settings however, intended outcomes focussed more on career and educational goals such as raising the profile of STEM careers (56%) and improving engagement with STEM subjects (69%).

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# STEM Ambassadors intended outcomes

| Intended Outcome - STEM Ambassador | Employability skills session (2457) | Hands on practical (2595) | Hosting a visit to a STEM workplace (383) | Information and advice for SLT (164) | Interactive STEM session (1971) | Judging a STEM competition (821) | Mentoring/Support (1014) | CPD of educators (609) | STEM careers talk/Advice session (2405) | STEM Clubs (382) | STEM presenta-tion (1018) | Support an exhibition /Event (2975) | Other (2579) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Challenge stereotypes about STEM careers | 43% | 43% | 41% | 35% | 58% | 42% | 51% | 45% | 53% | 25% | 49% | 43% | 33% |
| Communication skills | 56% | 54% | 39% | 51% | 54% | 45% | 39% | 53% | 52% | 37% | 54% | 50% | 37% |
| Increase my organisation's profile/recognition | 29% | 39% | 45% | 36% | 41% | 25% | 39% | 32% | 32% | 20% | 29% | 39% | 25% |
| Inspire and inform young people about STEM | 78% | 75% | 67% | 54% | 86% | 75% | 85% | 64% | 91% | 52% | 91% | 80% | 76% |
| Organisational/ leadership skills | 34% | 40% | 34% | 28% | 31% | 35% | 29% | 40% | 32% | 22% | 29% | 34% | 22% |
| Sense of achievement, reward and satisfaction | 84% | 90% | 95% | 80% | 88% | 93% | 93% | 81% | 89% | 84% | 86% | 89% | 86% |
| Support local community | 66% | 68% | 59% | 60% | 67% | 73% | 70% | 62% | 57% | 62% | 65% | 67% | 63% |
| Support my organisation to develop links with schools/community | 39% | 47% | 56% | 51% | 45% | 35% | 30% | 40% | 33% | 31% | 30% | 39% | 51% |

**Base - In brackets (excluding those that gave no intended outcomes)**

- Once again, STEM Ambassadors were wanting to feel a 'sense of achievement and satisfaction' when volunteering.

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# Across activities organisers were particularly looking to improve engagement with STEM subjects

| Intended Outcome - Organiser | Employability skills session (2984) | Hands on practical (4076) | Hosting a visit to a STEM workplace (602) | Information and advice for SLT (236) | Interactive STEM session (2340) | Judging a STEM competition (969) | Mentoring/ Support (1604) | CPD of educators (676) | STEM careers talk/advice session (3034) | STEM Clubs (944) | STEM presentation (1900) | Support an exhibition/Event (4079) | Other (2932) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Awareness and aspirations for STEM-related study and careers | 56% | 41% | 47% | 50% | 65% | 40% | 54% | 42% | 78% | 26% | 53% | 67% | 55% |
| Engagement, interest, enjoyment in STEM subjects | 55% | 71% | 50% | 47% | 72% | 87% | 64% | 64% | 68% | 48% | 73% | 78% | 72% |
| Increase our knowledge of STEM subjects | 36% | 36% | 26% | 34% | 33% | 27% | 26% | 27% | 31% | 11% | 36% | 27% | 23% |
| Interactivity and engagement | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Learning what the workplace is like and developing employability skills | 63% | 28% | 55% | 41% | 48% | 31% | 34% | 20% | 49% | 10% | 28% | 43% | 26% |
| Overall enjoyment | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Preparation and organisation | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Success in achieving intended outcomes | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Support and enhance our passion for what we do | 49% | 48% | 42% | 34% | 47% | 49% | 53% | 50% | 43% | 32% | 45% | 60% | 58% |
| Work with employers and Higher Education institutions to provide STEM encounters with young people | 66% | 41% | 53% | 48% | 65% | 46% | 42% | 52% | 52% | 18% | 44% | 61% | 60% |
| Ability to link (curriculum) learning with STEM careers and real-life contexts | 68% | 52% | 56% | 65% | 61% | 59% | 55% | 56% | 71% | 24% | 55% | 40% | 47% |
| Attainment and progress in STEM subjects | 38% | 42% | 29% | 25% | 27% | 47% | 46% | 22% | 34% | 17% | 31% | 44% | 38% |
| Build our confidence and enthusiasm for STEM | 50% | 57% | 34% | 38% | 56% | 62% | 55% | 60% | 52% | 29% | 49% | 43% | 69% |
| Building links across local community, including other schools and colleges | 58% | 47% | 49% | 60% | 58% | 72% | 56% | 76% | 49% | 36% | 40% | 60% | 44% |
| Informed parents/carers about study options and job opportunities in STEM | 31% | 27% | 25% | 24% | 16% | 18% | 22% | 11% | 37% | 16% | 26% | 46% | 20% |
| Building STEM identity e.g. by challenging stereotypes about STEM careers | 44% | 34% | 30% | 32% | 51% | 35% | 44% | 45% | 48% | 16% | 37% | 53% | 42% |
| Support other providers of youth activities and STEM enrichment (e.g. science museums, Scouts) | 28% | 27% | 11% | 33% | 12% | 14% | 31% | 14% | 20% | 13% | 16% | 39% | 27% |

Base - In brackets (excluding those that gave no intended outcomes)

# Activities could boost their impact by helping participants develop STEM enrichment and raise the profile of STEM careers

| STEM Ambassador Ratings - Overall | Mean Score |
|---|---|
| Support local community (3,149) | 4.46 |
| Sense of achievement, reward and satisfaction (4,416) | 4.42 |
| Inspire and inform young people about STEM (3,829) | 4.39 |
| Communication skills (2,386) | 4.37 |
| Challenge stereotypes about STEM careers (2,072) | 4.24 |
| Organisational/leadership skills (1,371) | 4.08 |
| Support my organisation to develop links with schools/community (1,946) | 4.08 |
| Increase my organisation's profile/recognition (1,557) | 4.04 |
| **Base: in brackets** | |

- Overall, activities are very positively received.

- Responses suggest however that for STEM Ambassadors, further focus on leadership and raising their profile would be a bonus.

- For Organisers in a school setting, a focus on raising the profile of STEM careers is a key area for further development.

| Organiser Ratings - Overall | Mean Score |
|---|---|
| Success in achieving intended outcomes (8,561) | 4.91 |
| Interactivity and engagement (8,561) | 4.90 |
| Overall enjoyment (8,561) | 4.90 |
| Preparation and organisation (8,561) | 4.90 |
| Build our confidence and enthusiasm for STEM (4,958) | 4.90 |
| Support and enhance our passion for what we do (5,030) | 4.88 |
| Building STEM identity e.g. by challenging stereotypes about STEM careers (3,834) | 4.85 |
| Awareness and aspirations for STEM-related study and careers (5,197) | 4.84 |
| Engagement, interest, enjoyment in STEM subjects (6,646) | 4.84 |
| Attainment and progress in STEM subjects (3,570) | 4.84 |
| Work with employers and Higher Education institutions to provide STEM encounters with young people (4,996) | 4.82 |
| Building links across local community, including other schools and colleges (4,852) | 4.80 |
| Increase our knowledge of STEM subjects (1,975) | 4.76 |
| Learning what the workplace is like and developing employability skills (3,203) | 4.76 |
| Ability to link (curriculum) learning with STEM careers and real-life contexts (4,661) | 4.76 |
| Support other providers of youth activities and STEM enrichment (e.g. science museums, Scouts) (2,321) | 4.15 |
| Informed parents/carers about study options and job opportunities in STEM (2,201) | 3.97 |
| **Base: in brackets** | |

| STEM Ambassador Ratings - By Activity | Employability skills session | Grand Challenges | Hands on practical | Hosting a visit to a STEM workplace | Information and advice for SLT | Interactive STEM session | Judging a STEM competition | Mentoring /Support | CPD of educators | Space | STEM careers talk/advice session | STEM Clubs | STEM presentation | Support an exhibition/ event | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Challenge stereotypes about STEM careers | 4.09 | - | 4.26 | 4.16 | 3.44 | 4.23 | 4.12 | 4.10 | 4.15 | 4.25 | 4.45 | 4.32 | 4.42 | 4.20 | 4.31 |
| Communication skills | 4.40 | - | 4.44 | 4.00 | 4.13 | 4.20 | 4.46 | 4.23 | 4.37 | 5.00 | 4.48 | 4.46 | 4.51 | 4.36 | 4.32 |
| Increase my organisation's profile/recognition | 4.13 | - | 4.09 | 4.47 | 4.10 | 3.65 | 3.86 | 4.18 | 4.00 | 5.00 | 4.28 | 4.13 | 4.05 | 4.16 | 3.80 |
| Inspire and inform young people about STEM | 4.21 | - | 4.52 | 4.33 | 3.70 | 4.33 | 4.51 | 4.34 | 4.06 | 4.88 | 4.49 | 4.71 | 4.53 | 4.46 | 4.31 |
| Organisational/leadership skills | 4.22 | - | 4.27 | 3.72 | 4.10 | 3.81 | 4.02 | 3.75 | 3.86 | 5.00 | 4.19 | 4.13 | 4.42 | 4.02 | 4.08 |
| Sense of achievement, reward and satisfaction | 4.46 | - | 4.53 | 4.61 | 3.70 | 4.30 | 4.53 | 4.35 | 4.26 | 4.88 | 4.50 | 4.63 | 4.49 | 4.45 | 4.18 |
| Support local community | 4.52 | - | 4.59 | 4.28 | 4.17 | 4.43 | 4.59 | 4.36 | 4.26 | 5.00 | 4.49 | 4.67 | 4.48 | 4.58 | 4.09 |
| Support my organisation to develop links with schools/community | 4.27 | - | 4.18 | 4.42 | 4.38 | 3.72 | 4.17 | 4.57 | 4.31 | 5.00 | 4.67 | 4.00 | 4.11 | 4.11 | 3.82 |

- Overall ratings by STEM Ambassadors were fairly high, though perhaps to a lesser extent than ratings by Organisers.
- 'Information and advice for SLT' and 'Interactive STEM sessions' had lower ratings than other activities.

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# Activities largely very positively rated – potential need to focus on opportunities to support organisers to engage with parents about STEM careers

| Organiser Ratings - By Activity | Employability skills session | Hands on practical | Hosting a visit to a STEM workplace | Information and advice for SLT | Interactive STEM session | Judging a STEM competition | Mentoring/Support | CPD of educators | STEM careers talk/advice session | STEM Clubs | STEM presentation | Support an exhibition/event | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Awareness and aspirations for STEM-related study and careers | 4.78 | 4.75 | 4.98 | 5.00 | 4.74 | 4.82 | 4.86 | 4.83 | 4.88 | 4.84 | 4.39 | 4.91 | 4.92 |
| Engagement, interest, enjoyment in STEM subjects | 4.84 | 4.80 | 5.00 | 4.97 | 4.78 | 4.76 | 4.85 | 5.00 | 4.67 | 4.93 | 4.54 | 4.91 | 4.95 |
| Increase our knowledge of STEM subjects | 4.78 | 4.69 | 4.46 | 5.00 | 4.87 | 4.52 | 4.53 | 5.00 | 4.82 | 5.00 | 4.54 | 4.73 | 4.79 |
| Interactivity and engagement | 4.94 | 4.83 | 4.99 | 4.84 | 4.88 | 4.96 | 4.89 | 5.00 | 4.89 | 4.95 | 4.64 | 4.90 | 4.94 |
| Learning what the workplace is like and developing employability skills | 4.91 | 4.68 | 4.45 | 4.58 | 4.69 | 4.96 | 4.64 | 4.79 | 4.63 | 4.90 | 4.43 | 4.84 | 4.95 |
| Overall enjoyment | 4.94 | 4.83 | 4.99 | 4.76 | 4.92 | 4.95 | 4.90 | 4.99 | 4.90 | 4.94 | 4.63 | 4.93 | 4.94 |
| Preparation and organisation | 4.00 | 4.84 | 4.95 | 4.84 | 4.89 | 4.89 | 4.90 | 5.00 | 4.89 | 4.94 | 4.66 | 4.91 | 4.94 |
| Success in achieving intended outcomes | 4.94 | 4.81 | 5.00 | 4.99 | 4.92 | 4.91 | 4.91 | 4.99 | 4.90 | 4.96 | 4.64 | 4.93 | 4.94 |
| Support and enhance our passion for what we do | 4.90 | 4.81 | 4.97 | 4.91 | 4.87 | 4.65 | 4.95 | 5.00 | 4.79 | 4.96 | 4.54 | 4.91 | 4.96 |
| Work with employers and Higher Education institutions to provide STEM encounters with young people | 4.69 | 4.67 | 4.98 | 4.60 | 4.87 | 4.60 | 4.70 | 4.69 | 4.79 | 4.09 | 4.57 | 4.85 | 4.96 |
| Ability to link (curriculum) learning with STEM careers and real-life contexts | 4.76 | 4.68 | 5.00 | 4.57 | 4.72 | 4.56 | 4.81 | 4.99 | 4.74 | 4.87 | 4.41 | 4.80 | 4.87 |
| Attainment and progress in STEM subjects | 4.88 | 4.76 | 4.94 | 4.97 | 4.89 | 4.83 | 4.88 | 4.90 | 4.49 | 4.76 | 4.41 | 4.86 | 4.99 |
| Build our confidence and enthusiasm for STEM | 4.92 | 4.78 | 4.98 | 4.94 | 4.92 | 4.74 | 4.91 | 5.00 | 4.89 | 4.98 | 4.59 | 4.94 | 4.97 |
| Building links across local community, including other schools and colleges | 4.87 | 4.65 | 4.91 | 4.97 | 4.83 | 4.63 | 4.96 | 5.00 | 4.60 | 4.87 | 4.15 | 4.82 | 4.92 |
| Informed parents/carers about study options and job opportunities in STEM | 4.69 | 4.73 | 5.00 | 5.00 | 4.53 | 3.85 | 4.95 | 4.97 | 4.23 | 4.66 | 3.79 | 3.25 | 4.81 |
| Building STEM identity e.g. by challenging stereotypes about STEM careers | 4.81 | 4.80 | 5.00 | 4.95 | 4.80 | 4.98 | 4.87 | 4.76 | 4.76 | 4.96 | 4.49 | 4.90 | 4.94 |
| Support other providers of youth activities and STEM enrichment (e.g. science museums, Scouts) | 4.91 | 4.67 | 5.00 | 5.00 | 4.61 | 4.84 | 4.99 | 4.57 | 4.95 | 4.95 | 4.32 | 3.10 | 4.92 |

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# STEM Ambassador ratings vary across the UK

| STEM Ambassador Ratings | Central South England | East England | East Mids | East Scotland | Lancashire and Cumbria | London | Merseyside and Cheshire | NE England | North Mids, South & East Yorks | North Scotland | Northern Ireland | SE England | SW Peninsula | Staffs & Shropshire | Trans Pennine | Wales | West England | West Mids | West Scotland |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Challenge stereotypes about STEM careers | 4.08 | 3.88 | 4.37 | 4.05 | 4.22 | 4.30 | 4.42 | 4.41 | 4.32 | 3.88 | 4.28 | 4.14 | 4.27 | 4.48 | 4.34 | 3.91 | 4.32 | 4.25 | 4.33 |
| Communication skills | 4.35 | 4.05 | 4.45 | 4.28 | 4.43 | 4.36 | 4.34 | 4.48 | 4.43 | 4.24 | 4.41 | 4.15 | 4.32 | 4.62 | 4.50 | 4.25 | 4.45 | 4.50 | 4.43 |
| Increase my organisation's profile/recognition | 3.78 | 3.34 | 4.05 | 3.59 | 4.27 | 3.88 | 4.59 | 4.36 | 4.10 | 3.27 | 4.33 | 3.73 | 4.14 | 4.25 | 4.31 | 3.92 | 4.17 | 4.45 | 4.00 |
| Inspire and inform young people about STEM | 4.39 | 4.01 | 4.51 | 4.33 | 4.44 | 4.38 | 4.44 | 4.49 | 4.38 | 4.34 | 4.54 | 4.27 | 4.53 | 4.55 | 4.44 | 4.22 | 4.47 | 4.36 | 4.49 |
| Organisational/leadership skills | 3.97 | 3.66 | 4.15 | 3.84 | 4.08 | 4.01 | 4.20 | 4.28 | 4.13 | 3.89 | 4.25 | 3.91 | 4.06 | 4.21 | 4.23 | 4.03 | 4.07 | 4.13 | 4.21 |
| Sense of achievement, reward and satisfaction | 4.39 | 4.21 | 4.55 | 4.20 | 4.45 | 4.31 | 4.48 | 4.60 | 4.40 | 4.35 | 4.46 | 4.29 | 4.53 | 4.54 | 4.51 | 4.36 | 4.39 | 4.48 | 4.44 |
| Support local community | 4.52 | 4.20 | 4.56 | 4.41 | 4.45 | 4.36 | 4.32 | 4.56 | 4.46 | 4.59 | 4.61 | 4.26 | 4.58 | 4.60 | 4.58 | 4.33 | 4.54 | 4.61 | 4.51 |
| Support my organisation to develop links with schools/community | 3.94 | 3.60 | 4.17 | 3.75 | 4.32 | 3.91 | 4.35 | 4.19 | 4.12 | 3.57 | 4.33 | 3.80 | 4.30 | 4.53 | 4.28 | 4.09 | 4.17 | 4.35 | 4.37 |

*STEM Hub*

- Ratings by STEM Ambassadors from Scotland and South and East England were lower than other regions, particularly in relation to impacts on raising organisational profiles and supporting the development of links with their community.

# Across STEM Hubs the impact on informing parents on STEM careers and supporting community groups was generally felt to be the weakest (except in Northern Ireland)

| Organiser Ratings | Central South England | East England | East Mids | East Scotland | Lancashire and Cumbria | London | Merseyside and Cheshire | NE England | North Mids, South & East Yorks | North Scotland | Northern Ireland | SE England | SW Peninsula | Staffs & Shropshire | Trans Pennine | Wales | West England | West Mids | West Scotland |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Awareness and aspirations for STEM-related study and careers | 4.84 | 4.93 | 4.88 | 4.97 | 4.74 | 4.88 | 4.92 | 4.57 | 4.79 | 4.65 | 5.00 | 4.99 | 4.83 | 4.64 | 4.75 | 4.63 | 4.84 | 4.70 | 4.75 |
| Engagement, interest, enjoyment in STEM subjects | 4.84 | 4.87 | 4.94 | 4.98 | 4.59 | 4.78 | 4.94 | 4.72 | 4.62 | 4.86 | 4.64 | 4.99 | 4.86 | 4.82 | 4.84 | 4.84 | 4.92 | 4.81 | 4.82 |
| Increase our knowledge of STEM subjects | 4.58 | 4.95 | 4.76 | 5.00 | 4.67 | 4.78 | 4.89 | 4.82 | 4.35 | 4.86 | 4.75 | 4.98 | 4.93 | 4.44 | 4.75 | 4.71 | 4.75 | 4.18 | 4.65 |
| Interactivity and engagement | 4.90 | 4.96 | 4.92 | 4.98 | 4.85 | 4.87 | 4.96 | 4.91 | 4.76 | 4.94 | 4.82 | 4.99 | 4.93 | 4.80 | 4.85 | 4.91 | 4.95 | 4.86 | 4.90 |
| Learning what the workplace is like and developing employability skills | 4.83 | 4.89 | 4.99 | 4.96 | 4.65 | 4.81 | 4.98 | 4.89 | 4.45 | 3.78 | 5.00 | 4.99 | 4.86 | 4.68 | 4.07 | 4.48 | 4.38 | 4.70 | 4.72 |
| Overall enjoyment | 4.96 | 4.97 | 4.92 | 4.97 | 4.87 | 4.86 | 5.00 | 4.96 | 4.79 | 4.94 | 4.82 | 4.99 | 4.92 | 4.84 | 4.84 | 4.91 | 4.96 | 4.83 | 4.89 |
| Preparation and organisation | 4.89 | 4.97 | 4.93 | 4.98 | 4.86 | 4.86 | 4.99 | 4.93 | 4.76 | 4.94 | 4.82 | 5.00 | 4.89 | 4.73 | 4.85 | 4.97 | 4.96 | 4.84 | 4.90 |
| Success in achieving intended outcomes | 4.96 | 4.96 | 4.92 | 4.97 | 4.85 | 4.86 | 4.97 | 4.95 | 4.79 | 4.94 | 4.82 | 5.00 | 4.93 | 4.83 | 4.89 | 4.93 | 4.96 | 4.85 | 4.90 |
| Support and enhance our passion for what we do | 4.90 | 4.91 | 4.96 | 4.98 | 4.74 | 4.79 | 4.96 | 4.89 | 4.57 | 4.98 | 4.75 | 4.99 | 4.91 | 4.68 | 4.80 | 4.85 | 4.91 | 4.75 | 4.84 |
| Work with employers and Higher Education institutions to provide STEM encounters with young people | 4.97 | 4.89 | 4.95 | 4.98 | 4.67 | 4.82 | 4.97 | 4.47 | 4.75 | 4.59 | 4.75 | 4.97 | 4.89 | 4.71 | 4.49 | 4.97 | 4.80 | 4.75 | 4.64 |
| Ability to link (curriculum) learning with STEM careers and real-life contexts | 4.79 | 4.87 | 4.79 | 4.95 | 4.45 | 4.78 | 4.95 | 4.56 | 4.64 | 4.77 | 5.00 | 4.99 | 4.84 | 4.66 | 4.57 | 4.87 | 4.80 | 4.56 | 4.67 |
| Attainment and progress in STEM subjects | 4.79 | 4.92 | 4.88 | 4.97 | 4.35 | 4.86 | 4.96 | 4.84 | 4.41 | 4.60 | 4.75 | 4.98 | 4.84 | 4.79 | 4.71 | 4.77 | 4.68 | 4.83 | 4.35 |
| Build our confidence and enthusiasm for STEM | 4.92 | 4.97 | 4.93 | 4.99 | 4.75 | 4.79 | 4.99 | 4.90 | 4.67 | 4.98 | 4.82 | 4.99 | 4.82 | 4.95 | 4.86 | 4.93 | 4.92 | 4.83 | 4.78 |
| Building links across local community, including other schools and colleges | 4.78 | 4.81 | 4.76 | 4.95 | 4.50 | 4.78 | 4.96 | 4.85 | 4.40 | 4.80 | 5.00 | 4.96 | 4.80 | 4.83 | 4.76 | 4.91 | 4.92 | 4.79 | 4.84 |
| Informed parents/carers about study options and job opportunities in STEM | 3.82 | 4.39 | 2.83 | 4.88 | 4.30 | 3.71 | 3.56 | 4.56 | 2.94 | 4.44 | 5.00 | 4.70 | 4.53 | 3.41 | 4.08 | 4.78 | 4.43 | 4.40 | 4.27 |
| Building STEM identity e.g. by challenging stereotypes about STEM careers | 4.83 | 4.86 | 4.92 | 4.99 | 4.84 | 4.84 | 4.85 | 4.39 | 4.58 | 4.92 | 5.00 | 4.99 | 4.81 | 4.79 | 4.75 | 4.92 | 4.93 | 4.85 | 4.68 |
| Support other providers of youth activities and STEM enrichment (e.g. science museums, Scouts) | 4.04 | 4.04 | 3.15 | 4.93 | 4.33 | 3.98 | 4.35 | 4.60 | 3.44 | 4.95 | 5.00 | 4.77 | 4.33 | 3.65 | 4.75 | 4.53 | 4.46 | 4.03 | 4.87 |

# Focus on increasing the profile of STEM & Helping participants develop community links

| Organiser Ratings | Percentage Giving Rating of 'Good' or Higher |
|---|---|
| Awareness and aspirations for STEM-related study and careers (5,197) | 99% |
| Engagement, interest, enjoyment in STEM subjects (6,646) | 99% |
| Interactivity and engagement (8,561) | 99% |
| Overall enjoyment (8,561) | 99% |
| Preparation and organisation (8,561) | 99% |
| Success in achieving intended outcomes (8,561) | 99% |
| Support and enhance our passion for what we do (5,030) | 99% |
| Attainment and progress in STEM subjects (3,570) | 99% |
| Build our confidence and enthusiasm for STEM (4,958) | 99% |
| Building STEM identity e.g. by challenging stereotypes about STEM careers (3,834) | 99% |
| Increase our knowledge of STEM subjects (1,975) | 98% |
| Learning what the workplace is like and developing employability skills (3,203) | 98% |
| Work with employers and Higher Education institutions to provide STEM encounters with young people (4,996) | 98% |
| Ability to link (curriculum) learning with STEM careers and real-life contexts (4,661) | 98% |
| Building links across local community, including other schools and colleges (4,852) | 98% |
| Support other providers of youth activities and STEM enrichment (e.g. science museums, Scouts) (2,321) | 76% |
| Informed parents/carers about study options and job opportunities in STEM (2,201) | 74% |
| Base (in brackets) | |

| STEM Ambassador Ratings | Percentage Giving Rating of 'Good' or Higher |
|---|---|
| Sense of achievement, reward and satisfaction (4,416) | 97% |
| Communication skills (2,386) | 96% |
| Inspire and inform young people about STEM (3,829) | 96% |
| Support local community (3,149) | 96% |
| Challenge stereotypes about STEM careers (2,072) | 94% |
| Organisational/leadership skills (1,371) | 92% |
| Support my organisation to develop links with schools/community (1,946) | 89% |
| Increase my organisation's profile/recognition (1,557) | 87% |
| Base (in brackets) | |

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