

Girls in STEM

Working inclusively with young people in STEM A quick start guide





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This publication was commissioned by the British Council in Brazil as part of the Girls in STEM project, an initiative developed by the British Council to empower teachers and educators to challenge stereotypes and inspire girls to engage with STEM subjects, encouraging them to pursue careers in STEM fields. Throughout the two editions of Girls in STEM we engaged with 42 projects from 43 institutions across the five regions in Brazil, reaching over 11,630 girls.

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Introduction

The Science, Technology, Engineering and Maths (STEM) subjects can be a source of wonder and joy as well as open doors for future learning, jobs and opportunities. However, many young people across the world are underserved in this area through societal biases, structural inequity and deprivation, which places artificial limits on what is possible for them in STEM. According to UNESCO¹, across the world, only 1 in 3 graduates in a STEM-related field are women. The situation is even worse in computing, engineering or physics-related STEM jobs. For example, in Brazil of those working in Artificial Intelligence (AI), an area of huge potential for economic growth, just 14% of the workforce are women.

To challenge this, groups of people across the world are working hard to address social injustice through local and national STEM projects and many are having a positive impact on the young

^{1 &#}x27;More women and girls in science equals better science', UN chief declares | UN News (2023) <u>https://news.un.org/en/story/2023/02/1133367</u>



people they work with. We developed this quick start guide from the foundations of projects with young people across Brazil, engaged in the Girls in STEM programme, and the UK, and it was commissioned and coordinated by the British Council in collaboration with the STEM Education Hub at King's College London in the United Kingdom.

This guide is intended for anyone looking to launch a project that aims to improve diversity and inclusion in STEM through their work with young people from any background. It can be applied in a wide range of settings, such as museums, social clubs and community groups, schools or colleges and higher or further education. Its purpose is to suggest ideas on inclusive practice, as well as to encourage reflection in the context of a project that may be starting or already be underway. We will guide you - the reader - to consider the very specific needs of the people and communities involved, the resources you have available as well as your own skills, motivations and objectives.

This guide will not address all the inequalities that exist in STEM. However, we hope it will support you to move the young people beyond simple participation with your STEM activities; that they begin to believe that STEM is something that is possible for them in their future.

Terminology



Young people

We have used the term "young people" throughout this booklet. This can refer to children, teenagers and school children of all genders.



Project & Activities

We have used the word "project" to refer to the overall intervention and "activities" to individual components within a project. A project could be a short 6-week programme of activities related to STEM or it may be a long-term study over a year or more made up of a range of different activities.



Inclusion recognises and respects

We are all different and we all have the equal right to participate in opportunities and have access to resources. This is regardless of identity, physical or intellectual ability, background or any other characteristic where we might otherwise be excluded. Inclusion actively opposes discrimination and prejudice.

1. Explore and reflect

In this first section, we encourage you to think about your project and the background of the young people you are working with. Why are you doing what you are doing and what problem are you trying to solve? Reflect on what can motivate them to participate in your STEM project and the barriers they may face. We will ask several questions throughout this booklet - try to answer the questions as you go, taking time to research and reflect on your own thoughts and opinions.

Exploring the background of the young people you are working with is crucial to understanding their individual motivations. You can then use this knowledge to tailor the project and activities to align with their interests and needs. Some young people may want to improve their knowledge and skills while others may be interested in practical experience or a project that has real-world applications.

It is also important to reflect on your own practice and become more self-aware of your own biases and assumptions. It is only by doing this that we can identify and address any systemic barriers to equity in STEM that may be unintentionally perpetuated by our own biases. For example, you may unintentionally assume that certain groups of young people are less capable or less interested in STEM which can lead to a lack of opportunities for these groups.



Who are the young people I want to work with and why do I want to work with them?

The groups of young people who are underrepresented in STEM can vary between countries and regions. For example in many countries (including Brazil, the UK and the USA) these include women, people with disabilities and from low-income backgrounds. In different countries people from certain ethnic backgrounds may also be underrepresented. Experiences of these groups can vary within and between countries and the needs and barriers may differ. Efforts to increase diversity and inclusion should be tailored to the specific needs and experience of each community.

Example from a project in Brazil

There is a gender imbalance in STEM careers in Brazil. One factor contributing to this is a lack of access to digital technology in schools. We wanted to build on earlier projects to develop a series of workshops that improve digital skills. The project was steered by the girls' own interests, in order to raise awareness of career opportunities in STEM².

Example from a project in England

At the age of 16, young people choose a small number of subjects (usually three or four) to study in depth. Only 20 per cent of students who choose to study physics are girls and this has been the case for many years. We wanted to work with girls to encourage more of them to choose to study physics after the age of 16. Consider how young people will be selected to take part in your project. Beware of asking for volunteers as this may inadvertently exclude those who under-estimate their abilities in STEM or those who think STEM is not for them. Keep a record of the young people you work with to monitor who is and is not taking part.

It's easy to come up with ideas for projects and activities but more difficult to know what will and won't work with different groups. It is useful to carry out some background research on your context and on previous projects.



What do I need to know? Where can I find data?

WHAT RESOURCES, DATA OR INFORMATION WILL BE USEFUL TO ENABLE YOU TO:

- understand your audience?
- to measure the progress of your project?
- · convince colleagues or wider community to get involved?
- persuade funders or your employer to resource your project?

^{2 &#}x27;More women and girls in science equals better science', UN chief declares | UN News (2023) <u>https://www.catalisador.org.</u> <u>br/trilha-tech/meninas-em-foco/</u>

INFORMATION CAN OFTEN BE FOUND FROM:

- Within your own organisation, you may have records about: the diversity and/or attainment of young people across different classes, departments or projects.
- Government offices for national statistics about education, employment and diversity.
- Non-government organisations, professional bodies and charities that work in STEM or with specific audiences. For example, the United Nations is a good source of global data.
- · Exam boards (that award national qualifications).
- Academic research papers (although check that they are current and applicable to your context).

Scrutinise the data to find out who gets access to certain subjects or project opportunities. Are issues identified unique to your context or part of a broader regional or national picture?



What has (or has not) worked elsewhere?

Look for examples of projects and activities that have been tried elsewhere and look closely at the data to ensure they really have been successful. Longer-term projects where you co-create with the young people are better than one-off activities. Some interventions that seem like a good idea may actually put young people off STEM if they are not planned well. For example, a trip to a workplace may highlight how the STEM they are learning relates to the real world and potential jobs. However, it could put them off if they see a workforce that does not reflect their culture or community in any way.



What barriers to STEM participation exist for the young people in my project?

Understanding the barriers that young people face can help your project be more accessible and inclusive. For example, some young people may face language or financial barriers or lack of access to transportation. By understanding these you can make accommodations to ensure all participants have an equal opportunity to participate.



The following barriers were identified as preventing girls in the community accessing STEM activities / learning opportunities:

- Many young people have jobs whilst attending school leading to a high dropout rate.
- Young people have little access to extracurricular activities.
- Young people do not have much knowledge of opportunities outside their local community.
- Cultural stereotypes (what is a 'suitable' subject for a girl to study).
- Misconceptions about ability (low levels of confidence and resilience), which encompasses both the girls' individual perception of their own performance and the perception of the community which they are part of).
- Sexist behaviour.

Example answer from a project in England

The following barriers have been identified as preventing young people from choosing to take physics after the age of 16:

- Cultural stereotypes (what is a 'suitable' subject for a girl to study).
- The type of school a young person attends (e.g., girls attending mixed sex, state schools are less likely to choose physics after the age of 16).
- Misconceptions about ability (low levels of confidence and resilience). Again, not only the girls' own perception on of ther performance, but that of the community in which they live.
- · Sexist behaviour.



What resources do I have to support this work? Who are my allies? What change would you like to see after six months and one year?

Before you start, think about what change you would like to see. It is important to specify this in the planning stage of the project so you can collect baseline data and measure progress at relevant points throughout. Look at your definition of successful change and break it down into actions that need to happen to achieve this - these are your objectives. Objectives can also help to keep your work focused. Use them to ensure that the activities you choose are helping you achieve your objectives. You may need to revisit these during the project.





Before moving on to the next section, try this reflection exercise about who you would ask for professional advice.

On some paper draw a table with six columns. In the first column write the heading 'Name'. Write your own name or initials directly below it. Then underneath write the initials of four to six people that you trust in a professional capacity, for example, people who you would trust to talk about your work at a meeting if you could not attend.

Draw columns and add titles of: age, gender, ethnicity, education level, religion or belief. Fill in the first row with your own characteristics as shown in the table below.

NAME	AGE	GENDER	ETHNICITY	EDUCATION	RELIGION
JJ	47	Female	White	Postgraduate degree	None
BP					
EW					
NC					
NN					

Add in the information based on what you know about the other people listed in your table. You could add in other columns such as marital status, sexual orientation, workplace or the distance that they live from you. If you don't know you can leave it blank – and if you have a lot of blanks add some other categories you do know.

NAME	AGE	GENDER	ETHNICITY	EDUCATION	RELIGION
JJ	47	Female	White	Postgraduate degree	none
BP	30's	Female	White	Postgraduate degree	none
EW	40's	Female	White	Undergraduate degree	Don't know
NC	40's	Female	White	Undergraduate degree	Christian
NN	50's	Male	White	Postgraduate degree	Christian

Look at your results. Do you notice anything? In the example given here – JJ trusts people who are overwhelmingly similar to herself. Her closest professional contacts are very much like her. This means her discussions could lack a broad diversity of thought and experience.

We like and trust people like us – this is not conscious but has implications for our personal practice. We are likely to have biases that mean we treat individuals differently depending on which 'groups' we think they belong to (or perceive them to belong to). It can mean access to opportunities is not equitable for all. For example, giving someone an opportunity because they remind you of yourself when you were younger, or making workrelated decisions at a social event that not all staff are invited to. Biases can have a profound impact on professional and personal interactions and even determine life chances. The next section invites you to examine your own interactions in more detail.



2. Personal practice

Many factors influence participation in STEM, including how good a person believes they are in the STEM subject, the content of the curriculum, support from family and teachers, financial resources available to them and their family, and the stereotypes that currently exist in the subject. Some factors are within our control to change and others less so. This section shares some practical ideas you could use so that your practice is as inclusive as possible, whatever your context.

NOTE:

It is important to ensure that any changes we make to our practice do not require greater work or effort from the young people we are working with. Young people should not have to change themselves in order to overcome systemic barriers that society has placed on them. For example, a young person shouldn't have to take part in extra classes to develop their confidence, whereas a wider change should be made at an organisation or societal level to ensure everyone's input is valued.



Monitor your interactions with young people in a group to identify any personal bias.

- How often do you ask participants questions?
- · How often and who volunteers to answer questions?
- Is it the same young people every time? Are some being excluded?

Ask someone else to watch you and keep a tally of your interactions.

2. ENABLE EVERYONE in your project to participate

 Ask participants about their access needs at the start and check it regularly. For example, are the toilet facilities suitable for everyone? Can everyone access the building easily? Does everyone have access to digital devices if needed? Consider seating arrangements to allow the best position for participants to engage fully or to see or hear clearly.

- Use individual white boards or paper where everyone shares their responses at the same time.
- Use a random online name generator or small sticks in a pot to invite contributions.
- Allow time for pair or group discussions.
- Assign roles for practical and group activities, for example: Data collector, Quality Control, Scribe. Rotate the roles for each activity, so that all learn new skills.



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- Share a timeline of the project to involve and inform participants.
- Consider short, achievable activities, so individuals experience success.
- Regularly share specific successes and feedback with the young people in your project.
- Be flexible with timings, allow them to complete one activity before moving on to the next.

4. USE INCLUSIVE LANGUAGE and challenge discriminatory and/or stereotyped language

- Use inclusive language wherever possible, for example referring to a group by their name rather than by gender. For example, calling them 'Purple group' rather than 'Girls'.
- Think about the language used to describe people in your area of STEM; are assumptions made about people who work in your area of STEM? If you are not sure, you could ask the young people what words they would use or do an online image search.



- Encourage participants to see the value in their own experiences at home, school, in their community or in the news.
- Where possible and relevant, enable them to become the 'experts' on a STEM topic or activity.
- Work and collaborate with the young people to centre them within the decision-making processes of their project.



- Include role models that are relatable to the people you are working with, including those with a different education or career pathway and socioeconomic background.
- Invite parents/carers, other members of staff and former students to be involved.
- Review the examples of individuals that are used in any texts, presentations and images that you use with the young people – are they diverse?

Developing your own inclusive practice is important. However, be mindful that all project team members must also be made aware of inclusive practice and safeguarding practices³ in your organisation, and will need to be briefed before working with young people.



7. REGULARLY REFER to the skills they are developing and linked relevant jobs

- Emphasise the skills they are learning in activities and how they are useful for a range of jobs in and out of STEM.
- Refer to a range of jobs for all levels of academic ability.
- Talk about local STEM industries, or people they may know who work in STEM.
- Share your own educational journey and experience in STEM.

³ For example see https://www.britishcouncil.org/about-us/how-we-work/policies/safeguarding



Personal reflection: challenging social structures

Think about a workshop, lesson or activity that you have used (or would like to use) with a group of young people.

What inclusive practices do you use, or could you use, to ensure participation and engagement of everyone in the group? What changes would you expect to see in attitudes or behaviours as a result of this inclusive practice?

3. Jobs and context

Most young people across the world have high aspirations for professional and managerial jobs⁴. Many also think that STEM subjects are interesting and important. However, there are countless young people who still do not see working in STEM as something that is for them⁵. This is important when thinking about project activities. We might not necessarily need to increase their interest in STEM but instead show how relevant the skills developed are for a wide range of future jobs (both in and out of STEM). It is particularly important to demonstrate the relevance of the jobs to their lives and it can also help to draw on their own experience and knowledge of STEM jobs within their local community.

4 Reference ASPIRES Report: Young people's science and career aspirations age 10-14 (Dec 2013) https://www.kcl.ac.uk/ecs/research/aspires/aspires-final-reportdecember-2013.pdf

5 Hencke, J., Eck, M., Sass, J., Hastedt, D., & Mejia-Rodriguez, A. (2022, April). Missing out on half of the world's potential: Fewer female than male top achievers in mathematics and science want a career in these fields. IEA Compass: Briefs in Education No. 17. Amsterdam, The Netherlands: IEA Additionally, the portrayal of people who work in STEM can influence how much a young person thinks that a particular subject or job is suitable for them. Often, people who work in science, engineering or technology are portrayed in a very narrow and oversimplified way – a stereotype. For example, in England the stereotype of those working in computing is often that of an antisocial, clever man⁶. This can lead to young people thinking these subjects and jobs are not for them, especially if their self-identity does not align with their perceived view of those in working in STEM.



How are scientists portrayed in the media or within your local community?

Asking young people to draw a picture of what someone in STEM looks like can give an idea of the stereotypes that may exist in your context.

⁶ Billy Wong (2016) 'I'm good, but not that good': digitally-skilled young people's identity in computing, Computer Science Education, 26:4, 299-317, DOI: 10.1080/08993408.2017.1292604



Drawings of 'A scientist' from young people aged 6 to 15 in England. "Jessica Hamer and Jenny Search"

It is important to remember that stereotypical views are not caused by the young people themselves but the social and cultural structures they live in. For example:

Are some groups of young people more likely to be encouraged to study STEM than others? Are high grades or family connections needed to continue studying STEM?

We can support young people by:



Find ways of explicitly challenging any stereotypes that exist in your area of STEM through your own language, use of diverse images, role models and activities.

2. Making activities relevant

Find out about the interests and future aspirations of each young person and make links to local contexts that are relevant to their lives. Engage them with current STEM topics in the news in order to develop their scientific literacy and critical thinking skills (so they can make decisions based on evidence and knowledge, not only on opinion or hearsay).

3. Regularly referring to the skills they are developing

Emphasise the skills they are learning in activities and how they are useful for a range of jobs both in and out of STEM.



4. Making links to other subjects and jobs



What types of jobs / occupations / people in the local community can you make links to within your project?



Who could you talk about? (Include a wide variety of people and locations)

Research major industries and businesses in the area but also seek out small local businesses that use STEM skills at a range of levels. Use this information to link your activities to local contexts familiar to participants where possible. This enables young people to see the relevance of STEM and related opportunities in their communities. Talk about local STEM industries, or people they may know who work in STEM, perhaps even your own educational journey and experience in STEM. It is important to share examples of people working in jobs at all levels of academic ability and at a range of different points in their career journey.



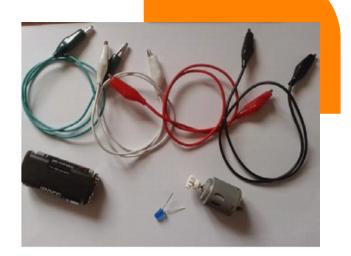
How could you link an activity to real life, local contexts that are relevant to the young people you are working with?

Ensure you value input from all young people and be mindful to use questions suitable for your context. In some situations some of these questions may highlight inequalities amongst your audience and cause embarrassment, for example not having a mobile phone or electricity in the home.

Can you make a circuit using this equipment?

We asked a group of project leaders in Brazil how they could improve the simple activity '**Can you make a circuit using this equipment?**' by drawing on their participants' experiences and incorporating links to the local area. Their responses are:

- Who do you know who uses their knowledge of electrical circuits in their job?
- We have an issue with light pollution in our community, how could we improve this?
- What can we do when the battery in our mobile phone dies?
- How does electricity get to your home / Do you have electricity in your home?
- Link to the use of electricity in their everyday appliances and effective ways to save money.
- Link to local methods of electricity generation (e.g. hydro, geo thermal, biomass).
- Identify local businesses/organisations that use a lot of electricity and those that use none.



Can you make a circuit using this equipment? "Jenny Search"



How can you find out about your group's interests, background knowledge and communities?

Think about developing a questionnaire or activities that allow you to find out this information and then use it throughout your project.

How can you empower the young people to steer the direction of the project rather than telling them what to do?





4. Engaging the wider community

Even with an engaging and well-planned project, the young people you work with will spend most of their time with others outside of the STEM project. This may be family, friends, at community groups or other teachers. These external influencers can support your activities but could also potentially undo any positive changes you are trying to make through their interactions with the young people. Therefore, a whole community approach is essential when trying to implement change. Everyone, not only the young people, needs to know the positive benefits of your STEM project.



What do others in my organisation or community think about my subject area and/or my project?

Think about how to approach conversations with others in your organisation or community whose views and opinions on STEM are different to those needed for your project to be a success. For example, if your project is in a university or school, you may have colleagues who are concerned that your activities will draw young people away from their own subject area. Or if your project is working with one group of underrepresented young people but not another, some people may ask why. Listening, giving reassurance, explanation and justification may help to get them on side.



What do the parents and carers think about STEM? What influences these thoughts?

Parents and carers can have a range of beliefs around STEM and its value to society, their child and themselves. This can be based on many factors, such as the influence of the media, their own experience, or not, of STEM education, the views of their own family, community or religion, the influence of local STEM industries in their community as well as their own identity and how it relates to the stereotypes of people that study and work in STEM. These and other factors determine what value STEM education and jobs holds for them and their child's future and can act as an unconscious barrier.



How can I support families to develop positive attitudes towards STEM and my project?

For many young people, their family has considerable influence on their attitude towards STEM and whether or not they choose to continue further with the subject or choose a job in STEM. Developing positive relationships and communications with families that emphasise the benefits of participation in your project can often support attendance and positive STEM messaging to the young person.

There are many ways you can engage families with your project either directly through effective communications or via the young people you work with. To be most impactful, give families the opportunity to share their thoughts and ensure you listen. This will enable you to learn and adapt your activities and also to build trust between you and the families.



Who do I know that can influence the wider community? What do they care about? How can I win them over?

In a school or college this might be school leaders or governors, or a person responsible for links with parents or employers. In a museum or a charitable organisation this might be the director of the organisation, the head of outreach or marketing or a key community leader.



How can I keep the wider community updated about project activities?

Communicating project activities through newsletters, websites, posters, events and social media can help everyone feel informed and involved. Find out what channels of communication work best for the people you are trying to reach and create opportunities for the wider community to ask questions or get involved in activities.

You may have to use multiple channels of communication to ensure all members of the community are included. Enabling the young people to have responsibility of these communication tasks can help them develop project co-ordination and management skills that are becoming increasingly important in the workplace.

TIPS FOR COMMUNICATING ABOUT YOUR PROJECT ON SOCIAL MEDIA:

1	Select the right social media channels for the audience you want to connect with.
2	Think of ways in which your audience can engage with your content such as through quizzes or polls.
3	Include images and videos – this tends to be more likely to get peoples' attention.
4	Ensure the language and tone you use is accessible and right for your audience – you could ask for feedback from your target audience on this.
5	Use this as an opportunity to challenge stereotypes - including academic stereotypes.
6	Tag relevant people and organisations that you want to connect with.

Example from a project in Brazil

Families were regularly invited to events, fairs and lectures throughout the project providing the opportunity to understand what their young people are doing and the space to ask questions. Social media was used to share and discuss project activities with local community groups, industries and families. Records were kept of parent participation so that less-engaged families could be identified, and further support offered to understand and overcome barriers to engagement.

Example from a project

Parents and carers were asked at the start of the project what they thought about STEM. Communications to parents were targeted by name, for example 'We would really like Sam to attend the STEM Club because she has shown a real interest in finding out more about climate change. This will provide Sam with the opportunity to learn more about climate change and to ask questions about jobs that are linked to this important topic'. Additionally, young people in the project were sent home with simple STEM activities in order to stimulate conversation around STEM at home.



What barriers prevent families from supporting their child in your project? Are there practical or financial barriers? How useful do they think your subject is for their child's future, including their future job? What strategies could you use to inform parents/carers about the opportunities that STEM skills and knowledge could provide their children?





5. Monitoring and evaluating progress

Monitoring and evaluating your project and activities is important in order to find out if you have been successful and to inform the planning of future projects. You have already thought about what success you would like for your project and the reasons why you wanted to work with your group. In order to check the progress of your project, we need to think about them in more detail and collect some baseline data if possible.

Look at your definition of success and break it down into actions that need to happen to achieve this - these are your objectives. Objectives can also help to keep your work focused.





Is what you are doing helping you achieve your objectives? You may need to revisit these during the project

Make sure your objectives are specific, measurable and realistic. You should also put a time frame on them. An objective 'The girls taking part in the project will aspire to a career in STEM' is not very specific and will be very hard to measure. It is also unrealistic to expect everyone taking part will enter a career in STEM. A better objective could be 'By the end of the project we will see a 20 per cent increase in the number of girls who agree they could pursue a career in STEM in the future' This could be measured by a survey at the beginning and end of the project, you have a specific goal (20 per cent increase) which you can measure using a survey and have a time frame too (the duration of the project).

You may want to include some learning outcomes related to STEM content that you can measure too.

Examples:

PROJECT	OBJECTIVE	HOW WILL I MEASURE SUCCESS	WHEN WILL I MEASURE	LEARNING OUTCOMES	HOW WILL I MEASURE
Example 1					
Developing a regional partnership with 90 teachers in the region.	To develop the regional partnership by engaging with at least 50 teachers during 3 meetings during the next 12 months.	Record meetings – three to have taken place over 12 months. An attendee list will be taken at each meeting. Minutes from the meeting show collaboration and sharing of ideas between partners.	During each meeting and at the end of 12 months.		
Example 2					
	At least 200 students (with a minimum of 100 girls) at the Municipal elementary school will take part in the Robot Girls activity.	Attendance register taken.	At each Session.	Participants understand how to programme a robot at the end of the project.	Participants are given a programming challenge in the last session.



- Simple data can be collected by staff at each session a register of attendance lets you know how many young people attended. Include other characteristics that you need to measure such as gender but be sure to follow any GDPR requirements. Keep a record of what activities have taken place.
- A simple survey can be used to collect some information about background knowledge or attitudes of participants. Ideally you want to compare them before and after your project. Stickers or smiley faces can be used with young children or those who cannot read.
- Staff can make observations during activities to find out who is actively taking part in the activities, what they are doing and who is talking to who. Create a template so observers can consistently fill in the information needed.
- Participants can be asked to create mind maps about what they know about a topic before and after an activity or project. This can also help to identify misconceptions.

Where are you now in terms of progress towards a successful project?

What have you learned? What changes would you make if you were to do the project again?



Sometimes we face criticism from other people about our projects. This could be from within or outside your own organisation, from people you know or from strangers. It can be useful to pre-empt some of these questions and discuss with others how you could answer them.



Dissemination

There are many groups with similar aims and aspirations around improving inclusion in STEM. We shouldn't be wasting time reinventing the wheel for every project. Build a network and think about how you can share your findings (successful and not) with other organisations in your region and further afield. Can you use other organisations to help amplify your successful activities?



Many projects are funded for a short time just a year or two. Think about how you can prolong the work you are doing after the first funding has ended. Will the findings allow you to apply for more funding? If not, can you train up other people (including colleagues, teacher or the young people) to continue some of the activities?



Finally...

Hopefully you feel ready to get started with your project! Remember that you are likely to make some mistakes – embrace them as opportunities to learn and share with others. It can be helpful to build a network with other organisations (perhaps locally or further afield via social media) doing similar projects, so you can share and learn from each other's successes and failures.

It is challenging to tackle inequalities in STEM and there is rarely a quick fix. You are breaking new ground and some of the activities you try might not work, and that is ok. It is important to be continuously listening, observing and learning and finding solutions to drive your project forwards. Some of the young people you work with may go on to become STEM professionals in the future. Some of the young people may not go on to study STEM or continue into STEM jobs, but hopefully they will have a more positive attitude and understanding of how STEM skills are used in their everyday lives and crucially open the door to the wonder and opportunity that STEM can bring. They can see STEM as something that is possible for someone like them.

Good Luck!







