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# Teacher Guide

## 2025 Application Stage



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## Welcome

Welcome to the Ghana Science & Tech Explorer Prize (GSTEP) Challenge!  
In this Challenge, we encourage Junior High School (JHS) students to develop new and exciting ways to tackle pressing societal issues, using Science and Technology.

This guide provides teachers, who are supporting student teams, with all the information needed to enter the GSTEP Challenge.

You can also download this guide on our website, as well as other supporting materials, including the Application Form, Eligibility Criteria, Judging Criteria, Lesson Plans and Frequently Asked Questions (FAQs): [www.gstep.org.gh/resources/](http://www.gstep.org.gh/resources/).

If you have any further questions, please email [challenge@gstep.org.gh](mailto:challenge@gstep.org.gh) or contact **0595703311**.

## Aims

The GSTEP Challenge is a unique opportunity for young people to learn more about entrepreneurship, innovation and Science, Technology, Engineering and Mathematics (STEM). It presents a new and exciting way for young people to engage with Science and Technology through practical learning, developing skills such as problem-solving, presentation skills, communication, teamwork and entrepreneurship skills.

The GSTEP Challenge provides all of the resources to take part, including lesson plans to support the application process, and additional training and mentorship for semi-finalists and finalist teams.

## The Challenge Statement

Create a product or solution that uses Science or Technology to make the world around you a better place

## The Themes



### Live healthier:

Providing people with what they need to lead happy and healthy lives, including physical health and mental wellbeing. This covers topics that relate to improving health, such as nutrition, hydration and exercise.



### Live greener:

Protecting the environment and saving the planet's resources. This covers topics that relate to the planet, such as climate change, conservation and waste management.



### Live together:

Tackling social issues and helping people to live better together. This covers topics that relate to society, such as discrimination, communication, transport and crime.

## Stages of the Challenge



### **Application stage (14th October - 11th November 2024):**

Teams are invited to make an application to the GSTEP Challenge. Teams should comprise 4 - 6 students and each team must be paired with a teacher or adult representative.

Lesson plans, and other materials, are available to support teams to develop their ideas and complete their applications. More details are provided in *page 3* of this guide.

You will need to submit the applications on behalf of your teams through the online application form. More details are provided in *page 8* of this guide.



### **Assessment stage (November - December 2024):**

A team of expert assessors will decide and select 105 semi-finalist teams from the Greater Accra, Ashanti and Eastern regions to move on to the next stage of the challenge



### **Semi-finalist stage (January - February 2025):**

These semi-finalists teams will be supported to develop their ideas through the provision of expert mentors, technical coaches, training materials and resources. They will be supported to develop a minimum viable product. The products will be evaluated by a team of expert judges and 45 teams from Greater Accra, Ashanti and Eastern regions will be selected to move on to the Finalist stage.



### **Finalist stage (March - May 2025):**

The finalists teams will be supported to develop their ideas further through the provision of bespoke materials and resources, seed funding, industry engagements through industry visits and continuous personalised engagements with their assigned mentors and coaches. They will be required to complete their business plans and final prototypes.



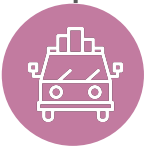
### **Pitching and Judging stage (June 2025):**

The finalist teams will have the opportunity to pitch their ideas, business plans and demonstrate their working prototypes in front of a team of expert judges.



### **Exhibition & Awards Ceremony (July 2025):**

All finalist teams will showcase their prototypes to the general public at an exhibition. A prestigious awards ceremony will be held to celebrate finalists, recognize outstanding teams and announce winners of the Challenge.



### **Homecoming (September 2025)**

Schools of all category winners receive STEM materials to improve the learning experience and outcomes in the schools.

## Support for Teachers



### **Introduction to the GSTEP Challenge:**

This document gives an overview of the GSTEP Challenge. This is a useful resource for both teachers and students to understand the aims of the GSTEP Challenge and how it will work.

You can find this on the GSTEP Challenge website:

[www.gstep.org.gh/resources/](http://www.gstep.org.gh/resources/).



### **Lesson plans:**

There are 6 lesson plans, which can be used to support your class or group to come up with ideas for their application. Each lesson plan has guidance notes, recommended supporting materials and an optional worksheet. You do not need to follow all of these lesson plans to make an application, but we recommend that you do.

You can find these on the GSTEP Challenge website:

[www.gstep.org.gh/resources/](http://www.gstep.org.gh/resources/).



### **Application resources:**

There are lots of supporting materials available to help you to submit your application. These include: the Assessment Form, Lesson Plans, the Eligibility Criteria, the Judging Criteria and a list of Frequently Asked Questions (FAQs),

You can find all of these on the GSTEP Challenge website:

[www.gstep.org.gh/resources/](http://www.gstep.org.gh/resources/).



### **Get in touch:**

The GSTEP team are on-hand to support and answer your questions. Please email [challenge@gstep.org.gh](mailto:challenge@gstep.org.gh) or contact 0595703311.

# Eligibility Criteria



To be eligible to apply to the Ghana Science and Tech Explorer Prize Challenge:(GSTEP)

- Teams must contain between **4** and **6** members.
- All team members must attend a **Junior High School (JHS)** at the time of applying to the GSTEP Challenge.
- All team members must attend the same school in either the **Greater Accra, Eastern** or **Ashanti** regions.
- Both **public** and **private** schools are eligible to apply.
- Teams must be represented by an **adult** (18+ years of age) who is associated with that Junior High School (JHS). The majority of these adults will be teachers. However, teams can be represented by another adult who is associated and selected by the school.

## Please note that

- Multiple teams from the same Junior High School (JHS) can enter (we highly encourage as many teams as possible to apply from each school).
- A teacher, or adult representative, can be associated with multiple teams (for example a teacher can represent multiple teams from his or her whole class)
- Team members cannot be a part of multiple teams.

You can also access the Eligibility Criteria on the GSTEP Challenge website:  
[www.gstep.org.gh/resources/](http://www.gstep.org.gh/resources/).

If you have any other questions, please email [challenge@gstep.org.gh](mailto:challenge@gstep.org.gh) or contact **0595703311**.



# Application Process



Applications must be made online. The secure platform can be accessed through the GSTEP Challenge website: [www.gstep.org.gh](http://www.gstep.org.gh).

The form has been made as simple as possible and consists of 4 sections:

- **Part 1:** Your details (who we contact about the application) - to be completed by the **TEACHER** (or adult representative)
- **Part 2:** Your idea (some details about the team) - to be filled out by the **TEAM**
- **Part 3:** Evaluation (some questions to help us to continue to improve the prize) - to be completed by both the **TEACHER** (or adult representative) and the **TEAM**
- **Part 4:** Demographic information (some questions about the team, to help us with diversity and inclusion) - to be completed by the **TEACHER** (or adult representative)

Teams must be represented by a teacher (or another adult representative) throughout the GSTEP Challenge.

These adult representatives must submit the application on behalf of the team. However, we really encourage the students to take ownership of their ideas and answers.

We recommend that teams work on the Editable Application Form, before the final submission. This is available on the GSTEP Challenge website: [www.gstep.org.gh/challenge/](http://www.gstep.org.gh/challenge/)

## Judging Process

All applications will be assessed against the Judging Criteria below. 105 semi-finalist teams from the Greater Accra, Ashanti and Eastern regions will be selected by a panel of expert assessors. 45 finalist teams will be selected at the end of the semi-finalists stage.

## Judging Criteria

Category	Description
<b>1. Impact</b>	Have the team clearly explained the problem they are trying to solve? Is this a problem that needs solving?
<b>2. Innovation</b>	Is the project an innovative idea that uses Science and Technology in a new way?
<b>3. Enterprising</b>	Have the team clearly explained the steps they would need to take to turn their idea into a reality? Is the idea feasible?
<b>4. Teamwork</b>	Have the team worked together effectively?
<b>5. Communication</b>	Do the team have a clear plan for marketing and promoting their idea to their target audience?
<b>6. Risk Factors</b>	Have the team thought about how they would make their idea safe for people and the environment?

The application stage submissions will be evaluated against 3 categories under the judging criteria which are: Impact, Innovation, Enterprising.

A summary of the Judging Criteria and a list of prompt questions for students can be found on our website: [www.gstep.org.gh/resources/](http://www.gstep.org.gh/resources/)

# Summary

## Application Stage

What do I need to do at this stage?	When do I need to submit?
<ul style="list-style-type: none"><li>• Support your team/s to submit their idea through the online application form (see <i>page 8</i> of this guide).</li><li>• Encourage as many of your students as possible to form teams and sign up to the GSTEP Challenge.</li><li>• We highly recommend you download the editable application form to work from and copy and paste the information over, closer to the time.</li><li>• In preparation for the application, you can go through the lesson plans (1-6) with your class. You do not have to use these but we recommend that you do.</li></ul>	<ul style="list-style-type: none"><li>• 11th November 2024 (at 11.59 pm GMT)</li></ul>

## Semi-finalist & Finalist Stage

What do I need to do at this stage?	When do I need to submit?
<ul style="list-style-type: none"><li>• 105 semi-finalists and 45 finalists teams (represented by a teacher or adult representative) will be selected by an expert panel of assessors and judges at the various stages and informed</li><li>• Semi-finalist and Finalist teams (including the adult representative) will be supported by expert mentors and coaches and provided materials and resources and training to help develop a minimum viable product at the semi-finalist stage and a business plan and final prototype at the finalists stage.</li><li>• Finalist teams will be invited to pitch to an expert panel of judges.</li></ul>	<ul style="list-style-type: none"><li>• Minimum viable product at the semi-finalist stage by 12th February, 2025</li><li>• Business Plan &amp; prototype by May 2025 (deadline TBC)</li></ul>

## Exhibition & Awards

### What do I need to do at this stage?

- All teams will present their prototypes at an exhibition. Winners of the challenge will be announced and finalist teams will be recognized at a prestigious awards ceremony.

### When do I need to submit?

- July 2025 (Date TBC)





[www.gstep.com](http://www.gstep.com)

