FINALIST INDUCTION

2025 Event Guide

Welcome GSTEP 2025,

It is with great pleasure and excitement that the GSTEP team extends its heartfelt congratulations to you on being selected for this highly competitive and prestigious program! This remarkable achievement is a testament to your exceptional skills, dedication, and passion to subjects related to Science, Technology, Engineering and Mathematics (STEM).

Your selection for this program reflects the recognition of your immense potential and the confidence that the GSTEP team has in your abilities. It is a well-deserved honour, and you should be incredibly proud of yourself for standing out among numerous applicants.

Becoming a part of the GSTEP programme has not only offered you a remarkable opportunity to further develop your skills and knowledge but also opened doors to new possibilities and limitless potential. The programme will undoubtedly provide you with invaluable experiences, and resources, allowing you to thrive and make significant contributions in your community and society at large.

As you embark on this exciting journey, remember to approach it with an open mind, curiosity, and a willingness to learn. Your selection for the GSTEP program is a stepping stone towards greater achievements, and we have no doubt that you will make the most of this opportunity to expand your horizons and excel.

Stay curious, enthusiastic, and determined as you immerse yourself in this program. Make lifelong connections with your fellow finalists, engage with the experts provided, and seize every chance to collaborate and exchange ideas. Embrace the challenges and remember that this experience will shape you into an even more exceptional way.

We welcome you to the programme and wish you the very best as you embark on this transformative journey. May it be filled with countless moments of learning, growth, inspiration, and achievements. Once again, congratulations on this remarkable accomplishment.

Constance Agyeman,

Founder, GSTEP

Overview of GSTEP

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.

Program Agenda

Time	Activity	Participants
6:30 - 7:45	**Arrival**	
	Arrival and Registration, submission of consent forms.	Adult Representatives, students, mentors & coaches
	Photographs Partners, Mentors, Coaches	All Teams
	Breakfast	All Teams
7:45 - 8:20	**Settling Down and show of past videos**	
8:20 - 9:10	**Introduction**	
	Opening Prayer	
	Welcome and Congratulations	
	Introduction of Semi-Finalist Teams (Celebration of progression to the finalist stage)	
	Message from GES	
	Agenda for the Day	
	Video from Botnar	
9:10 - 11:40	**Carousel/Mentor Induction/Teacher sessions**	
9:10 - 10:00	**Session 1: STEMpLOSION** An experiment with stem materials to run a drone simulation and build a structure	Group 1
	Session 2: Communication and Marketing	Group 2
	Session 3: Intellectual Property and Patency	Group 3
10:00 - 10:50	**Session 1: STEMpLOSION** An experiment with stem materials to run a drone simulation and build a structure	Group 2
	Session 2: Communication and Marketing	Group 3
	Session 3: Intellectual Property and Patency	Group 1

Program Agenda

10:50 - 11:40	**Session 1: STEMpLOSION** An experiment with stem materials to run a drone simulation and build a structure	Group 3
	Session 2: Communication and Marketing	Group 1
	Session 3: Intellectual Property and Patency	Group 2
	Other running sessions with Teachers and STEM Coordinators	
9:10 - 10:40	Teacher Session 1 (Teacher - Mentor/Coaches meet up)	Mentors, Coaches, Teachers, STEM Coordinators
10:40 - 11:40	Teacher Session 2 (Finalist Support)	Teachers, STEM Coordinators
	Session 4 (Teams with Mentors and Coaches)	
11:40 - 13:10	Team - Mentor/Coach meet-up	All groups combined
	Business Model & Team Canvas Development, MVP Development Framework	All groups combined
	YSG Check in	All YSG

Program Agenda

13:10 - 13:50	Lunch	
	Session 5 (Teams with Facilitators)	
13:10 - 14:40	Introduction to Finalist stage materials and final Prototype development	All teams
14:40 - 15:10	**Evaluations**	All groups combined and everyone present
15:10 - 15:30	Closing Remarks and Group Pictures	

STEMpLOSION: FUN ACTIVITIES

AIM: To demonstrate that STEM can be fun

OBJECTIVES
- To be encourage creativity and critical thinking
- To engage students in a hands-on STEM activities
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SYNERGY SAFARI: TEAM BUILDING

AIM: Build foundational teamwork skills in an interactive and enjoyable way, to encourage students to value teamwork.

OBJECTIVES
- **Define teamwork** and explain its importance in achieving shared goals.
- **Identify key teamwork concepts** such as communication, collaboration, problem-solving, and conflict resolution.
- **Recognize the qualities of a good team member** and understand how these contribute to group success.
- **Apply teamwork skills** in group activities, demonstrating effective communication, collaboration, and adaptability.
- **Reflect on their experiences** during the session and articulate how teamwork skills can be used in everyday situations, such as school projects.

PERFECT PITCH: PRESENTATION AND PUBLIC SPEAKING

AIM: Master the act of public speaking and presentation skill

OBJECTIVES
- Enhance communication skill
- Develop and boost their confidence in public speaking
- Enhance presentation skills

TEACHER/MENTOR/COACH SESSION

AIM: To equip teachers, technical coaches, and business mentors with the knowledge, tools, and resources necessary to effectively guide and support student teams throughout the GSTEP 2025 challenge.

OBJECTIVES
- Build strong relationships among teachers, technical coaches, and business mentors.
- Provide a short overview of the GSTEP program, its goals, and expectations.
- Familiarize participants with the Technical Coaching Framework and supporting documents.
- Introduce the Business Mentorship Framework and associated resources.
- Equip participants with the knowledge and skills to effectively guide student teams through the project development process.

TEACHER/MENTOR/COACH MEETUP

AIM: To equip student teams with the knowledge and tools necessary to successfully navigate the GSTEP 2025 challenge

OBJECTIVES
- Introduce students to the GSTEP program and its goals.
- Familiarize students with the project development process and key milestones.
- Introduce the concept of the Minimum Viable Prototype (MVP).
- Provide an overview of the Team Canvas and Business Model Canvas and its application in project development.
- Promote teamwork and encourage student engagement.

TEACHER SESSION 2: TEACHER GUIDE BREAKDOWN

AIM: Introduce teachers to the Semi finalist support stage of the GSTEP programme & expectations from them**.**

OBJECTIVES
- Support teachers to understand the challenge prize process and requirements
- Provide teachers with guidance on communication channels
- Explain the resources and support available to teams during the programme

INTRODUCTION TO ALL4ONE KITS

AIM: Introduce teams to One4All Kit

OBJECTIVES
- To give the teams an idea of what to expect in the kit and how to utilize it.
- Also to introduce our procedures for engagement.

GSTEP Consortium

DreamOval Foundation is a nonprofit that focuses on improving quality of education through science, technology, mathematics and engineering. The DreamOval team is the lead implementer of the GSTEP programme. The Foundation engages schools through Ghana Education Service (GES), coordinates all stakeholders for the GSTEP programme and supervises the activities of the Youth Steering Group.

Partnership Bureau is a Ghanaian non-profit that works to reimagine how communities, grassroots, local and national organisations across the Global South can draw on collective power and address the imbalances within the international development sector through innovation, intervention and impact.
Partnership Bureau manages the public and private partnerships in the implementation of the challenge.

Shulem Lake Limited is an IT and software development company committed to driving digital transformation and STEM education across Ghana. They offer hands-on training in robotics, drone construction, ERP software, and more.
Shulem Lake will support this year's challenge by providing STEM kits, resources, and STEM training to participating teams.

Practical Education Network (PEN) is a non-profit organisation specialising in practical STEM education through a hands-on learning approach. With expertise in curriculum development and training, they are at the forefront of educational technology, incorporating innovative tools and approaches to make STEM learning more engaging and effective.
PEN will provide coaching and mentoring support to the participants of this year's challenge.

GSTEP 2025 TIMELINE

Application stage (14th October - 18th 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.

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.
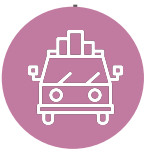
Pitching and Judging stage (June 2025):

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.

Thank You

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Ghana Science
& Tech Explorer Prize

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DREAMOVAL FOUNDATION

Ministry of Education
REPUBLIC OF GHANA

Ghana Education
Service (GES)

PARTNERSHIP
BUREAU

SHULEM LAKE

Practical
Education
Network