



**WORLD ASSOCIATION
OF GIRL GUIDES
AND GIRL SCOUTS**



Global STEM* Consultation Report

*Science, Technology, Engineering, Mathematics



OVERVIEW

| | |
|--|----|
| Background of Consultation | 04 |
| Respondents and Methodology | 05 |
| How we engaged participants | 06 |
| Youth Participation and Co-Creation | 07 |
| Why should we consider STEM in Girl Guiding and Girl Scouting? | 08 |

OUR FINDINGS

| | |
|--|-------|
| Girls and STEM today | 10-12 |
| STEM in Girl Guiding and Girl Scouting | 13-18 |
| WAGGGS and STEM | 19 |
| What do Member Organisations want from WAGGGS? | 20-22 |

OUR JOURNEY AND AMBITION IN STEM

| | |
|---|----|
| WAGGGS' STEM journey so far (2022- 2024) | 24 |
| STEM Webinars: Explore, Inspire, Lead - Girls as Changemakers in STEM | 25 |
| STEM Volunteer Leadership Placement at Sangam World Centre, India | 26 |
| YES! Girls Can Do STEM | 27 |
| WAGGGS has big ambition for STEM | 28 |

CORE RECOMMENDATIONS OF THE CONSULTATION

| | |
|----------------------|-------|
| Core Recommendations | 30-31 |
|----------------------|-------|

ACKNOWLEDGEMENTS

| | |
|---|----|
| Note on limitations of the Consultation | 33 |
| Appreciation | 34 |
| Member Organisations involved in the Consultation | 35 |
| About WAGGGS | 36 |

OVERVIEW

Background of Consultation



In 2022, the World Association of Girl Guides and Girl Scouts (WAGGGS) asked our 152* Member Organisations (national Girl Guide/Girl Scout organisations in countries and territories around the world) to take part in a global consultation on the topic of STEM.

Objectives:

- To understand what STEM activities were already being undertaken across Girl Guiding and Girl Scouting at national level.
- To establish the needs and interests of our membership in STEM.
- To inform the role WAGGGS could play in supporting STEM activities at a global level.

**WAGGGS increased to 153 Member Organisations after the Consultation*

72%

of Member Organisations (from 109 countries and territories) participated in the Member Organisation Survey.

8,576

young people (7,579 females and 997 males) aged 10-30 from 56 countries and territories took part in the STEM consultation activities and fed back opinions and ideas.





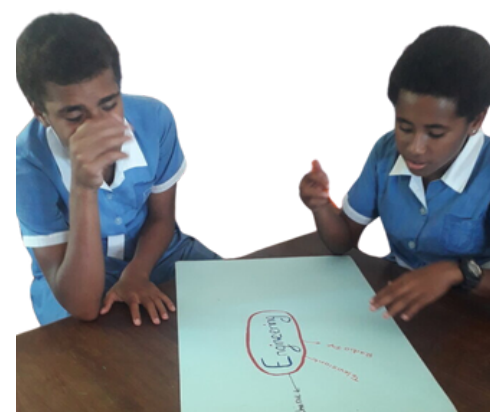
1. Member Organisation Survey

- An online survey completed by Member Organisations and Component Associations.
- Period: 13 May to 15 July 2022.

| Region | Total Member Organisations | Member Organisations Responded | Response rate |
|--------------------|----------------------------|--------------------------------|---------------|
| Africa | 34 | 29 | 85% |
| Arab | 16 | 9 | 56% |
| Asia Pacific | 26 | 25 | 96% |
| Europe | 41 | 24 | 59% |
| Western Hemisphere | 35 | 22 | 63% |
| Total | 152 | 109 | 72% |

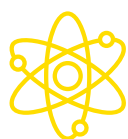
2. Youth Consultation

- Focus groups based on a STEM Consultation Activity Pack carried out in person or virtually by Girl Guide and Girl Scout groups.
- Results shared by group leaders to WAGGGS through an online feedback form.
- Period: 1 June to 11 September 2022.

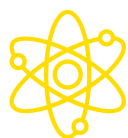


| Region | Number of Member Organisations participated | Number of groups participated | Total youths consulted | Total girls consulted | Total boys consulted |
|--------------------|---|-------------------------------|------------------------|-----------------------|----------------------|
| Africa | 19 | 60 | 3,050 | 2,731 | 319 |
| Arab | 4 | 13 | 189 | 164 | 25 |
| Asia Pacific | 18 | 183 | 4,968 | 4,370 | 598 |
| Europe | 4 | 6 | 99 | 83 | 16 |
| Western Hemisphere | 11 | 30 | 270 | 231 | 39 |
| Total | 56 | 292 | 8,576 | 7,579 | 997 |

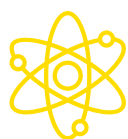
How we engaged participants



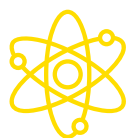
Uploading details of the STEM Consultation to Campfire, WAGGGS' digital platform which offers translation of text into 104 languages.



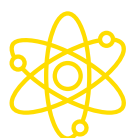
Providing resource materials and instructions to carry out the consultation in different environments, i.e., in-person delivery, virtual delivery and using static display material to collect data during events.



An introduction session at the virtual Asia Pacific Regional Conference. Plus introduction and coaching sessions with Member Organisations or groups who requested it.



Follow-up emails and reminders on social media to keep Member Organisations engaged and interested to sign up and take part.



Accepting responses in languages other than WAGGGS' four official languages on request from Member Organisations, to reduce workload of Girl Guide and Girl Scout leaders.

“
By joining the STEM consultation event, I found STEM interesting as I never knew that almost every job may require STEM skills.
”
Girl Guide from Malaysia
(16-17 years old)





The majority of respondents were young women, and young women were also involved in delivery of the consultation activities to even younger participants globally.



Four young women volunteers from around the world joined the data team and undertook qualitative and quantitative analysis of the consultation findings.



Young women volunteers helped write up the full findings and recommendations.



We held two webinars to share the findings of the consultation. The team which planned and delivered the webinars consisted of young women under 30 years old recruited through a global open call. More girls and young women shared their feedback on STEM through the webinar feedback form.

Why should we consider STEM in Girl Guiding and Girl Scouting?



We challenge girls to make a difference

Girl Guides and Girl Scouts worldwide promise to make a difference to their community and wider world. We enable girls to become responsible global citizens. STEM skills enable humanity to solve real world problems, from climate change to poverty.

We prepare girls for the future

STEM skills increasingly required to enable participation in the modern workforce. STEM skills are skills for life, which enable girls to fulfil their potential in whatever they choose to do.

We work for an equal world

Women and girls are underrepresented in STEM education and careers. WAGGGS empowers girls to speak out on issues they are passionate about, and supports them to advocate for gender equality. We believe girls and young women should have equal access and equal encouragement to pursue STEM at all levels.

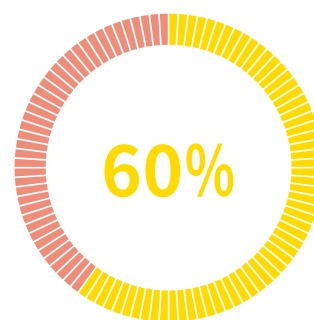


“ I am currently a senior high school student taking STEM in the Philippines and I learned that STEM does not just revolve in becoming a doctor or an engineer, in fact, there are 178 STEM related careers that are identified from the Consultation. ”

Girl Scout from the Philippines
(16-17 years old)

“ I thought that STEM was just about Maths, but now I know so much more about problem solving and independence. ”

Girl Guide from South Africa
(10-12 years old)



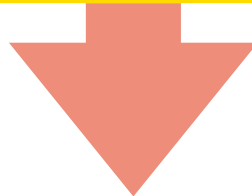
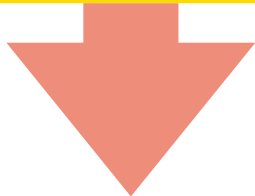
60% of Member Organisations said more males than females opt to continue studying STEM subjects at both high school level and tertiary level in their countries and territories.

OUR FINDINGS



Education Systems

86% of girls and young women decide in their teens if they want to continue or further their studies in STEM-related subjects.



47%
decide when they are
12-15 years old

39%
decide when they are
16-17 years old

Interventions to encourage girls to explore further education and careers in STEM need to happen at an early stage so girls can make informed decisions.

Engagement is unequal:

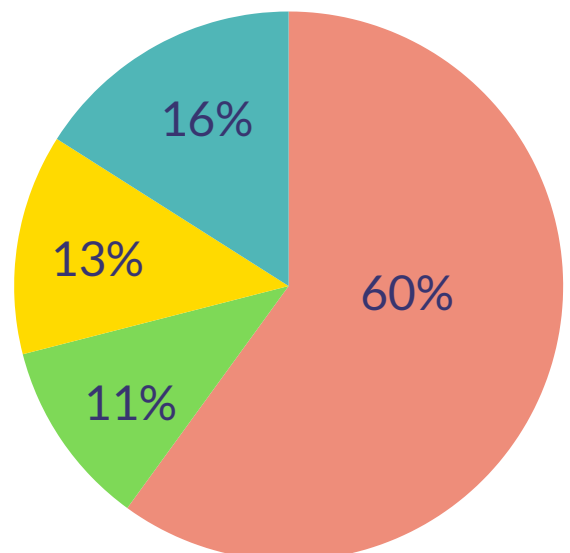
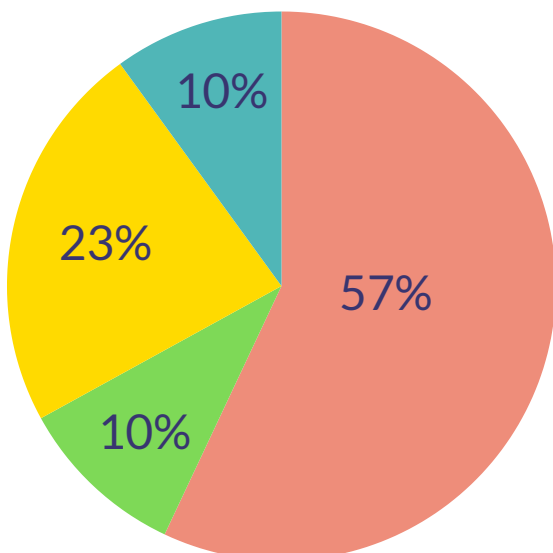
57% felt that more males than females opt for STEM subjects at secondary/high school level (23% thought equal) and 60% felt this at university level (13% thought equal).

Choosing STEM specialisation in high school education

Choosing STEM specialisation in tertiary education

- More males than females
- More females than males
- Roughly equal number of females and males
- Do not know

- More males than females
- More females than males
- Roughly equal number of females and males
- Do not know





Why are girls less likely to opt for STEM?

Key opinions from our Member Organisations:

- Absence of mentors and role models.
- Lack of opportunities and resources aimed at girls and young women.
- Cultural practices and gender bias lead to girls and young women:
 - lacking confidence to take on 'harder' subjects and careers that they feel are natural paths for boys not girls.
 - lacking confidence to enter male-dominated learning and work spaces.
 - not being encouraged by adults (schools, families, youth leaders) to enter into STEM.
 - experiencing peer pressure and even sexual violence if they do take on STEM subjects.
 - being deprioritised over male siblings when resources are tight, therefore missing opportunities to study STEM subjects which can be more expensive.

Five biggest factors holding girls back:

Both youth participants and Member Organisations identified these five factors

Lack of adult encouragement

Girls feel STEM subjects are difficult

Lack of confidence

Lack of resources

Community stereotypes

I appreciate hearing women sharing their experience on STEM, and how the Girl Guide and Girl Scout movement help them in achieving their journey.

Girl Guide from Tanzania
(18-30 years old)

Girls have fewer role models to inspire their interest in these fields, seeing limited examples of female scientists and engineers in books, media and popular culture. There are even fewer Black women role models in math and science.

Girls and Young Women Consultation on STEM 2022
(Feedback from the Philippines)



Girls and STEM Careers

178

jobs related to STEM were identified in the Girls and Young Women Consultation on STEM.

48%

of these jobs were listed as jobs they thought were mostly “male” jobs.

37%

of these jobs were listed as jobs they thought have equal participation of male and female.

Jobs most mentioned by youth participants

ENGINEER

CHEMIST

SCIENTIST



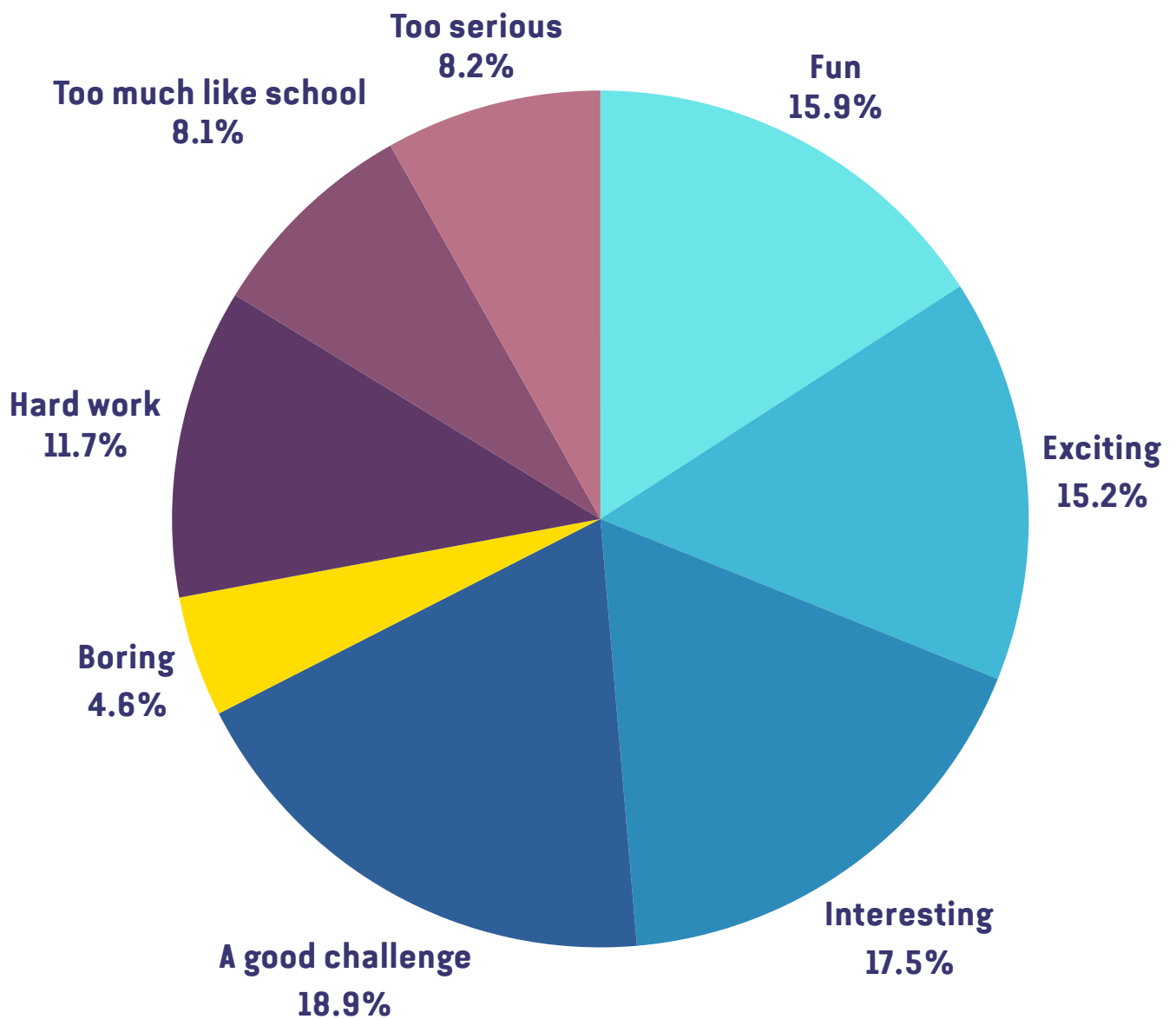
- Jobs girls saw as equal or female-led were more likely to be lower grade or involve ‘softer’ STEM skills. For example, overall, engineering was listed as equal, but civil engineering and robotics is seen as male. In Asia Pacific, Western Hemisphere and Europe regions, design and care-giving roles are seen by girls as female dominated.
- It is notable that girls’ answers often show an understanding of the cultural biases in their society, but they remain held back by them.



How do youths feel about the idea of STEM activities in Girl Guiding and Girl Scouting?

26,479

responses were collected from the participants of the Youth Consultation on STEM

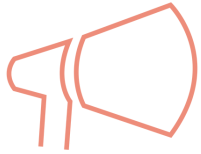


67% of the responses are positive

33% of the responses are negative (hard work is a particularly strong response)



How do leaders feel about STEM in Girl Guiding and Girl Scouting?



Many adult unit/troop leaders (volunteers) do not feel comfortable delivering STEM

Only 7%

of Member Organisations stated that most of their volunteers would be comfortable delivering STEM in Girl Guide and Girl Scout activities.

Top five concerns of leaders according to Member Organisations:

1 - Did not have a good experience studying STEM subjects in the past.

2 - Lack of knowledge and skills.

3 - Lack of equipment and infrastructure.

4 - Lack of reference materials.

5 - Lack of confidence.

This closely mirrors young people's reasons for lack of confidence to get involved in STEM - they feel **UNDERPREPARED** and **UNDER-SUPPORTED**

Capacity and confidence-building needed

From this feedback it is clear that we don't have enough leaders right now at grassroots level who would feel comfortable and ready to pick up a STEM curriculum and run it with girls.



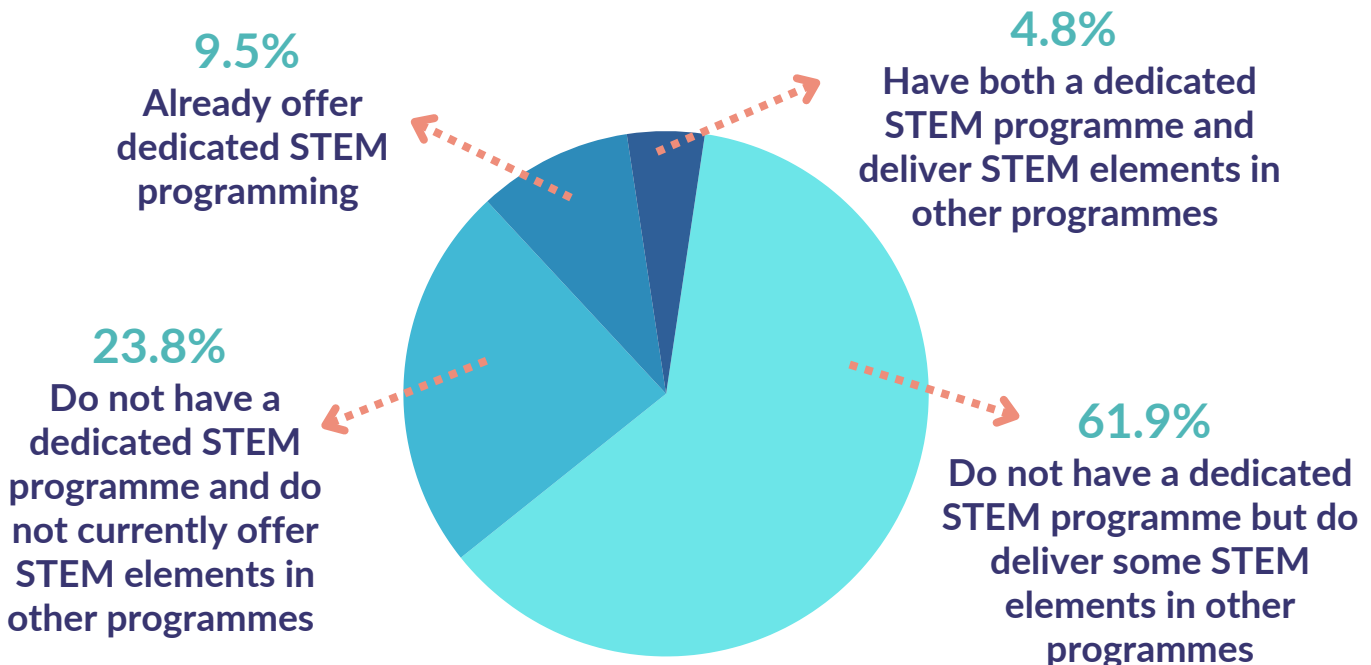
When we reach the part on reproductive health in biology class, the (school) teacher will skip the lesson and ask us to study ourselves at home.

Girl Guide from India
(18-30 years old)





What STEM-based opportunities do our Member Organisations already offer?



Integration of STEM into other programmes

This is often a popular way to cover STEM topics and the consultation collected a wide variety of examples of how this is already being done.

Member Organisations encourage and run events and organise special visits from experts.

There are STEM links in their current programmes, badges and outdoor activities; They include STEM in leader and girl webinars.

STEM elements are considered in awareness and advocacy campaigns.





Member Organisations recognise the importance of STEM skills in girls' development

For example, the mindsets and skills to observe, record and test ideas and strategic and logical thinking can help a girl become a leader in any path she chooses.

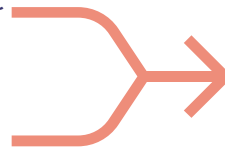
The majority of girls enjoy the STEM activities they have access to:

Where STEM is included in activities

68% of Member Organisations feel girls are engaged or very engaged in these activities.

15% of Member Organisations feel girls are not interested.

17% of Member Organisations stated neutral (neither engaged nor interested)



Taken together at **32%** this is significant and important to bear in mind.

How have Member Organisations successfully integrated STEM?

Where Member Organisations had girls who were very engaged in their STEM-related programmes, some key things that have made their work successful are:

- Integrating the STEM elements into a wider programme.
- Including in an interest badge.
- Running short-term special programmes.

“STEM elements” is a broad term – taken by some as including advocacy activities on gender equality in STEM, as well as STEM topics themselves.

The above suggests that continuing to integrate STEM into wider topics and activities, increasing the STEM elements available, and calling out the STEM features of these activities will increase confidence in approaching the topics.





What do youths enjoy?

The youth consultation recorded a lot of positive feedback on the STEM activities girls have already taken part in. For example, non-traditional, fun experiments like making slime or mist are popular.

More has been done on Science, Technology and Engineering than on Mathematics.

What do leaders enjoy and find challenging?

Leaders were also asked to respond with their opinions and comments on delivering STEM activities.

Positive comments:

- Interested in teaching new things and gaining new skills and confidence.
- Convinced of the value of STEM elements to their programmes.
- Interested and keen to engage girls to share their challenges and experiences.
- Recognise that STEM activities contribute to girls' leadership development.
- Keen to use STEM to broaden girls' horizons and ability to take a role in making the world a better place.

Negative comments:

- Find STEM tough, complicated, and hard to deliver, concerned it will be too difficult for them (especially those in rural areas).
- Feel they need help and support to deliver STEM activities.
- Concerned some girls are not interested as it is too much like school.
- It takes time to find a project everyone wants to engage with and then organise the activity.



Role models do exist, but more are needed

52% of Member Organisations respondents feel they have volunteers in their network who can support with STEM expertise and knowledge.

Significant interest in global offer

65% of Member Organisations respondents are willing to discuss STEM further with WAGGGS and support the development of a global offer.

What do Member Organisations want from a WAGGGS STEM programme?

The top three areas identified by Member Organisations were:

Guidance on how to deliver STEM in a non-formal education space

A STEM curriculum or activity pack

Capacity building for adult volunteer leaders





Member Organisations feel they could improve their national STEM offer with support from WAGGGS in a number of areas:

42% would like a global STEM programme offer from WAGGGS.

30% would like support on how to integrate STEM skills and mindsets into current programmes and badges.

18% would like support to develop a new national STEM programme in their Member Organisation.

What benefits are there to include STEM in Girl Guide and Girl Scout programming?

Key benefits Member Organisations see in STEM programming:



For girls

- Skills boost - top three skills: curiosity, open-mindedness and creative problem solving.
- Modern and relevant, keeps girls engaged.
- Confidence and motivation to pursue STEM, opening up new opportunities for the future.
- Improves quality of Girl Guiding and Girl Scouting delivery and experience.

For Member Organisations

- Change public perception of Girl Guiding and Girl Scouting.
- Attract new members.
- Retain members.

What do Member Organisations want from WAGGGS?



The suggestions from Member Organisations on how WAGGGS can support girls to develop an interest in STEM and gain STEM mindsets and skills come under five key headings:

1. Boost girls' interest and motivation

To motivate girls towards STEM and increase their confidence to pursue STEM education and careers.



Key ideas:

- Fun, interactive, non-formal activities.
- Link STEM activities to action in the community.
- Provide role models through talks, partnerships with experts and STEM-related organisations.

2. Increase girls' opportunities to knowingly interact with STEM

Much of Member Organisations' current STEM-related activities develop skills and mindsets, but are not always calling out the STEM content – girls are not necessarily realising they are already “doing” STEM. It is important to call it out to build confidence and make girls feel comfortable in the STEM world.

Key ideas:

- Encourage Member Organisations to ‘call out’ the STEM they already have in their programmes.
- Keep girls at the centre – what are they interested in, keep it girl-led.
- Concentrate on safe spaces where it’s ok try new ideas that might not work.
- Support and encourage girls to break bias or stigma and advocate for more STEM opportunities for girls in their local and national communities.
- Raise girls’ awareness of STEM and its relevance and interest to them e.g. through:
 - Workshops, events, webinars
 - Taster programmes
 - Involving girls in testing new programme activities
 - Role models and career awareness



What do Member Organisations want from WAGGGS?

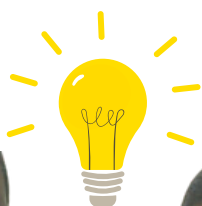


3. Giving a non-formal experience of STEM

Member Organisations are interested in implementing STEM-specific programmes that use non-formal education to bring girls to STEM in a different way from school.

DIFFERENT FROM SCHOOL!

Some ideas to consider in implementation of STEM programmes:



- Consider the needs of each age group and life stage, starting young and not shying away from older girls.
- Understanding what schools are doing and where the gaps that are not supporting girls.
- Concentrate on hands-on fun practical activities and games.
- How can STEM knowledge and mindsets help with “classic” Girl Guiding/Girl Scouting activities like survival and outdoors, expedition planning.
- “For girls, by girls” activities, creating a collaborative and co-creative space.
- Provide space for girls to innovate and be creative.
- Challenge girls to get out of their comfort zone.
- Support and encourage girls to advocate for equal opportunities in STEM.
- Peer-to-peer learning.
- Include visible women role models in STEM, support national and local level links with women in STEM.

Organisational initiatives

- Develop leader training to improve understanding and ability and confidence to support girls.
- Partner with an organisation specialist in implementing STEM programmes.
- Provide ways for Member Organisations to share their STEM ideas between each other.
- Create activities with current members who are working in STEM careers or studying STEM.





What do Member Organisations want from WAGGGS?

4. Ideas from Youths

- Awareness raising and advocacy on STEM and gender equality – support for girls' own campaigns as well as national/global campaigns.
- Role model experiences e.g. talks, meetings, visits to STEM workplaces.
- Increase visibility of Girl Guiding and Girl Scouting as a place to defy gender norms and learn STEM skills.
- **Break down barriers!** Most responses to the girls' survey concentrated on how to remove barriers to STEM for girls. Their ideas on how to break down barriers include:
 - Empowering girls to identify and raise awareness of barriers they see that exist in their communities – particularly in education systems.
 - Providing more role models.
 - Give the issue visibility in the media.
 - Advocacy on equal pay and financial support for girls enabling them to pursue STEM.
 - Programmes that encourage and support girls to stay in school.

5. Ideas from Member Organisations

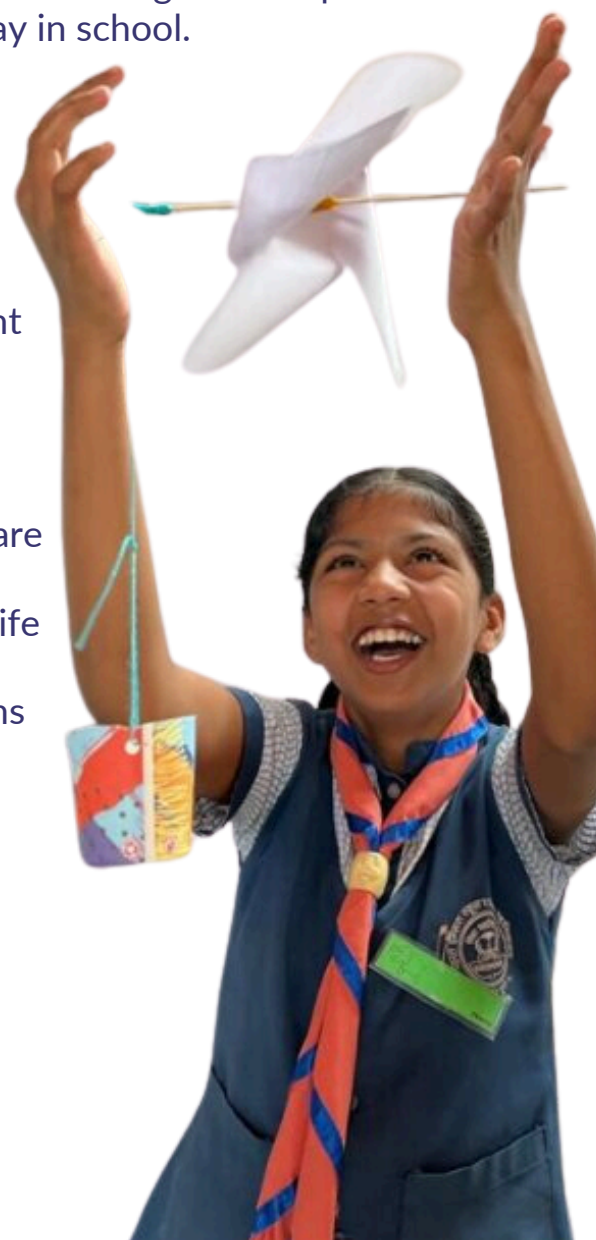
Member Organisations steer away from more in-depth, more traditional 'school-like' activities, towards links to everyday life, skills and mindsets that make STEM relevant to everyone.

Top four activity types chosen were:

- Fun, problem solving teamwork tasks.
- Exploring how STEM knowledge, skills and mindsets are useful in everyday life.
- Simple experiments to show why and how everyday life things happen.
- When developing any activities Member Organisations are clear it is vital to consider different contexts and accessibility of spaces and materials needed for some STEM activities eg experiments.

“ Some girls are not trusted enough in their societies to pursue STEM subjects because of the stereotypes. I think that should change and every young woman should have the freedom to follow their passion.

Girl Guide from Sri Lanka
(16-17 years old)



OUR JOURNEY AND AMBITION IN STEM



2022



Global Consultation on STEM is launched, with participation from 109 countries/territories, engaging over 8,000 young people.

2023



First Global STEM Webinar Series developed and delivered in partnership with Johnson & Johnson. Over 3,000 participants attended and over 10,000 views on YouTube.

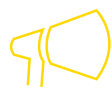


First STEM project at WAGGGS' World Centre in India (Sangam). Three young women from Australia, Madagascar and Mexico spent three months on a STEM Volunteer Leadership Placement working with STEM experts and non-formal educational specialists to co-create WAGGGS first STEM Discovery Day activities. This is then directly delivered by Sangam staff to visiting groups of Girl Guides and local schools (aged 8-12).

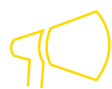
2024



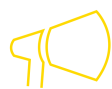
WAGGGS rolls out the STEM Discovery Day project across all five World Centres globally aiming to reach over 3,000 young people.



Launch of the STEM Girl Core Initiative by the YESS Girls Movement.



Launch of the "Girls for Green Energy", a programme using Minecraft Education to learn about renewable energy in Hong Kong, Singapore and Taiwan. The video game-based learning is complemented with an offline reflection tool.



Launch of STEM programmes in Malaysia, Nepal, Singapore, Sri Lanka and Taiwan for girls to explore and engage in STEM with the goal to achieve equal representation of girls and women in education, careers and policy making in STEM.

STEM Webinars: Explore, Inspire, Lead - Girls as Changemakers in STEM



The two global webinars held on 11 February and 12 March 2023 marked the first partnership between WAGGGS and Johnson & Johnson. The webinars offered some fun activities, demonstration of STEM experiments from Johnson & Johnson's WiSTEM2D materials, videos from girls who participated in the STEM Consultation, sharing of preliminary results of the STEM Consultation and a girl-led panel discussion on STEM with speakers from within the Girl Guiding and Girl Scouting Movement and volunteers from Johnson & Johnson. The webinars were delivered with live interpretation in Arabic, English, French and Spanish, with additional interpretation to American Sign Language and East African Sign Language. Post-event evaluation highlights include:

94%

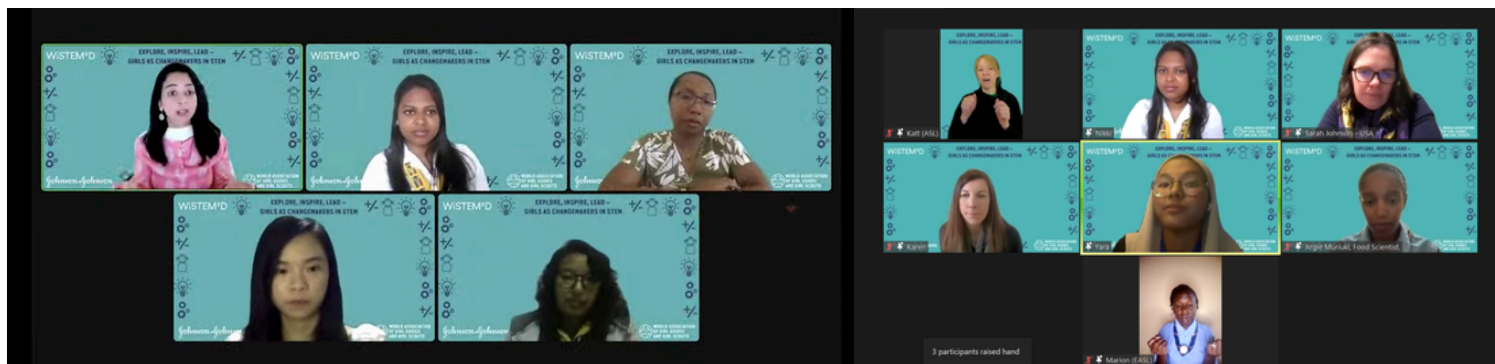
of respondents said they will encourage young people around them, especially girls and young women to pursue further studies or a career in STEM.

88%

of respondents said they are likely to pursue further studies in STEM.

85%

of respondents said they are likely to consider a STEM career in the future.



I was inspired by the story of putting knowledge from Girl Guides into the STEM industry.

(Singapore, 16-17 years old)

I didn't know there was a special day for girls in science, it inspired me a lot to motivate other girls, because I know I'm not the only one. I study engineering and I love motivating others.

(Ecuador, 18-30 years old)

I was inspired by all the speakers but mostly by the lady co-pilot. She is a Girl Guide just like me and she took all these inspiration and ventured into a STEM career and eventually made it as a pilot.

(Kenya, 18-30 years old)

I would like to bring more STEM programming to my Rainbows.

(Girl Guide Leader, United Kingdom)

I learned that not everything related to mathematics is mathematics, it can be engineering.

(Qatar, 13-15 years old)

STEM Volunteer Leadership Placement at Sangam World Centre, India



PLACEMENT

Three Girl Guides aged 18-30 from Australia, Madagascar and Mexico took part in a brand-new Young Women's STEM Volunteer Leadership Placement at Sangam from September to November 2023. The programme is supported by Johnson & Johnson.

LEARN AND CO-CREATE

They developed leadership skills whilst immersing themselves in STEM across a three-month placement with the support of greenlight for girls and Johnson & Johnson's WiSTEM2D. They used their learnings and experiences to create a STEM Discovery Day curriculum.

DELIVER

The young women delivered the STEM Discovery Day activities to visiting Girl Guides/Girl Scouts and to young people from Sangam's local community outreach partners.

DIGITALISE

The Discovery Day activities are transformed into digital resources to be hosted on WAGGGS' digital platform, Campfire, accessible to all Member Organisations.

TAKE ACTION

An additional component of the STEM Discovery Day project (both in person and with the digital resources) will be to include a key *Take Action* component. This will task all Girl Guides and Girl Scouts using the activities to take action on what they have learned by engaging with their "sphere of influence" or community. All Girl Guides and Girl Scouts have the potential to be changemakers and in the context of STEM help challenge gender mindsets and barriers for girls and young women to feel inspired and engaged by STEM education and careers!



37

STEM Discovery Day sessions held at Sangam (November 2023 to July 2024).

1,076

young people participated in the STEM Discovery Day sessions, exceeding the target of 900 participants!





The Youth Exchange South to South (YESS) Girls' Movement is WAGGGS' international exchange programme for young women (18-35 years) undertaken in collaboration with NOREC, a Norwegian Government Agency.

In February 2024, the YESS Girls' Movement launched a campaign on **"Yes! Girls Can Do STEM"**. STEM awareness and practical sessions were carried out by the YESS participants in the 12 Member Organisations hosting the YESS programme. A bank of STEM activities was also developed to support girls to experience fun STEM sessions in a less costly way to enable activities to be more accessible to girls.



Today, as a woman in STEM, I'm contributing to groundbreaking research shaping agricultural policies in my country. STEM empowers us to innovate and make real-world impacts. It's not just about formulas, equations, and experiments, it's about creating meaningful change. So, to all the young girls out there, I urge you to embrace STEM. Let it ignite your curiosity, fuel your ambition, and pave the way for a future where you, too, can make a lasting impact on our world.

Gilberthe Uwera Benimana
Rwanda Girl Guides Association
2016 YESS Participant to Kenya
Senior Research Analyst, International Food Policy Research Institute (IFPRI)



S Support more girls to get involved in STEM and take the lead in tackling the attitudinal barriers that prevent girls and young women progressing with STEM education and careers.

T Tackle and challenge the prevalent gender stereotypes, and make STEM relevant, accessible, and attractive to girls and young women across the global Girl Guiding/Girl Scouting Movement.

E Engage girls with STEM topics and subject matter in a fun and safe Non-Formal Education (NFE) environment.

M Mentor girls by offering STEM role models, industry experts, and storytellers to empower and build confidence that they can access STEM education and careers now and in the future.

Our vision for STEM programming

We want to create a girl-led global STEM programme that draws on the strengths of the Girl Guiding/Girl Scouting Movement (our expertise in leadership development and non-formal education), and a connected and supportive global community of girls and young women who can come together through STEM.

WAGGGS aims to launch a brand new global STEM programme - **Discovering STEM** based around three core pillars of engagement - **Explore, Inspire and Lead**.

EXPLORE STEM in a safe and fun environment and how it relates to girls and young women in their own world.

INSPIRE Girls and young women to take up STEM education and career pathways. Support them to not only change the gender bias within these spaces, but to also play active roles in political and economic decision-making spaces to ensure global policy addresses gender inequality in STEM related fields.

LEAD Both within the 10 million strong Girl Guiding and Girl Scouting Movement but also build their leadership practice as STEM champions to lead within their own communities and across the globe.

CORE RECOMMENDATIONS OF THE CONSULTATION



Through analysis of the information collected in the two consultations and with the support of the Data Analysis Team, WAGGGS proposes the following recommendations and future approaches under the programme Discover STEM for the Girl Guiding and Girl Scouting Movement.

Non-formal educational programme on STEM for girls and young women

- Develop a global programme or activity pack on STEM which can be adapted to needs and priorities of regions and Member Organisations.
- Create and collate a resource hub of STEM-based activities that can be adapted by Member Organisations and Girl Guide/Girl Scout groups in both STEM-focused programmes and other types of programmes.

Capacity building for volunteer leaders

- Changing perceptions and breaking barriers on STEM.
- Training leaders on STEM programme design and delivery.
- Training leaders on ways to encourage, support and empower girls and young women to engage in STEM.
- Support Member Organisations and leaders to identify and leverage STEM elements which already exist in their current programmes to add value to the Girl Guiding/Girl Scouting experience for girls and young women.
- Identify and form a network of volunteers who can lead and support STEM programmes and campaigns at global, regional and local levels.



We believe it is important to support leaders and adult volunteers. They should possess knowledge and be inspired and empowered to lead the STEM programme. We feel it might be a barrier if they do not feel confident themselves.

Response from the Member Organisation Survey on STEM 2022



Advocacy and Community Led Action

- Campaigns to raise awareness globally and locally on increasing girls and women's participation in STEM education, careers and policy making at all levels.
 - Encouraging and inspiring girls and young women.
 - Getting support from all stakeholders in society to encourage girls and young women.
 - Influencing policy making at global and local levels to increase participation of girls and women in STEM.
- Identify and form a network of mentors and role models on STEM within and outside the Girl Guide/Girl Scout Movement who can be spokespersons and ambassadors to advocate on the topic and as support and motivation to girls and young women.

Partnerships, Collaboration and Co-creation

- Collaboration with industries and research institutions to provide support in forms of finance, resource materials, infrastructure and expertise in STEM programming and advocacy.



I am inspired that WAGGGS is really committed to making change in the world by educating girls, businesses, schools, and enterprises about the importance of women being involved in STEM.

Girl Guide leader
Australia



ACKNOWLEDGEMENTS

Note on limitations of the Consultation



1. The results of the consultation may not be fully representative of the whole Girl Guiding/Girl Scouting Movement.
 - The Member Organisation Survey on STEM has a 72% response rate globally. Yet, there were higher engagement in certain regions compared to others.
 - The STEM Consultation with Youths has a lower global response rate of 37%.
2. Responses may not be fully accurate due to differences in understanding of terms used, method of delivery and collection of feedback from each participating unit/troop, and language barriers in countries which do not use any of the WAGGGS four official languages (Arabic, English, French and Spanish).
3. Responses received may be a perception of the individual or group completing the survey and not referring to official data published by their countries. For example, respondents may not be knowledgeable about the most recent situation of gender inequity with regards to STEM careers in their countries.
4. Lower response in certain Regions may be due to the following reasons:
 - The timeframe of the consultation was around summer holidays in the northern hemisphere. Member Organisations may not have had a chance to promote this opportunity to their members. In some countries, Girl Guiding/Girl Scouting were on term break and engagement with members was not possible.
 - Some Regions were busy with Regional Conferences during most part of the consultation timeframe.
 - There was feedback from one Member Organisation that STEM is not relevant in Girl Guiding/Girl Scouting, therefore they decided not to take part.
 - STEM in Girl Guiding/Girl Scouting is relatively a new topic in some countries. There was feedback from Member Organisations and Girl Guide/Girl Scout leaders that they did not contribute because they lack knowledge in the topic, although the consultation did not require prior knowledge in STEM. In fact, the consultation aimed to study current understanding and integration of STEM into Girl Guiding/Girl Scouting in different countries.





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- Data Analysis team
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 - Assoc. Prof. Sri Devi Ravana (PhD), University of Malaya, Malaysia (Girl Guides Association Malaysia)
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THANK YOU!

Member Organisations involved in the Consultation



- Participated in both Member Organisation Survey and Youth Consultation
- Participated only in the Member Organisation Survey
- Participated only in the Youth Consultation

Africa Region

Bénin
Burkina Faso
Burundi
Chad
Congo
Congo (Democratic Republic)
Côte d'Ivoire
Eswatini (Swaziland)
Gambia
Ghana

Guinea
Kenya
Lesotho
Liberia
Madagascar
Malawi
Mauritius
Namibia
Niger
Nigeria

Rwanda
Senegal
Sierra Leone
South Africa
Tanzania
Togo
Uganda
Zambia
Zimbabwe

Arab Region

Bahrain
Kuwait
Lebanon
Libya
Oman
Palestine
Syria
Tunisia
United Arab Emirates
Yemen

Asia Pacific Region

Australia
Bangladesh
Brunei Darussalam
Cambodia
Cook Islands
Fiji
Hong Kong
India
Japan
Kiribati
Korea
Malaysia
Maldives

Mongolia
Myanmar
Nepal
New Zealand
Pakistan
Philippines
Singapore
Solomon Islands
Sri Lanka
Taiwan
Thailand
Tonga

Europe Region

Austria
Azerbaijan
Belarus
Cyprus
Denmark
Estonia
Finland
France
Georgia
Germany
Greece
Iceland
Ireland
Italy
Liechtenstein
Luxembourg
Monaco
Norway
Poland
Slovak Republic
Slovenia
Sweden
Turkiye
United Kingdom

Western Hemisphere Region

Argentina
Bahamas
Barbados
Belize
Brazil
Canada
Chile
Colombia
Costa Rica
Curaçao
Dominica
Dominican Republic
Grenada
Guatemala
Mexico
Nicaragua
Panama
Paraguay
Perú
St. Christopher and Nevis
St. Vincent and the Grenadines
Trinidad and Tobago
United States of America
Venezuela



The World Association of Girl Guides and Girl Scouts (WAGGGS) is the largest voluntary Movement dedicated to girls and young women in the world. Our diverse Movement represents 10 million girls and young women from 153 countries and territories.

For more than 100 years, Girl Guiding and Girl Scouting has transformed the lives of girls and young women worldwide, supporting and empowering them to achieve their fullest potential and become responsible citizens of the world.

Our strengths lie in innovative non-formal education programmes, leadership development, advocacy and community action, empowering girls and young women to develop the skills and confidence needed to make positive changes in their lives, in their communities and countries.

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