

10 YEARS

OF  
STEMettes®

♥ ★ # +

2022 / 23

Annual Impact Report

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# Letter from Director

*“This is the first post, of hopefully many, which chronicles the journey to a world where girls are just as interested in becoming princesses and popstars as they are in becoming coders and chemists.”*

- Stemettes “In the beginning blog post”, Dec 2012

Folks rarely know what they’ll be doing in a decade. Running an entire Stemettes organisation. Completing GCSEs in a selection of subjects. Embarking on a new STEAM-related career. Ten years of Stemettes calls for celebration, reflection and an evolution in focus. The youngest of Stemettes at early events have become teens, the teens have entered the workforce and our opportunities and activities have led to growth and connections for them. Our ever-evolving mix of long-term impactful cohort programmes, short-term intersectional events and on-demand inspirational content has served them well.

Our first event hosted 20 young people. 60,000 young people later, we as an organisation have grown from a small set of dedicated volunteers to a coalition of employees, freelancers, suppliers and young people who creatively collaborate to impact the next generation of innovators. Across 2022, 82% of attendees report improvement in confidence in their own STEM abilities and 77% feel better connected to peers and role models in the field. This year, 56% of alumni – Stemettes now aged 25 and older – have entered the STEAM field.

Society has also naturally changed in a decade. Attitudes to Diversity, Equity & Inclusion, working practices and social norms have evolved. In the last year alone, a backdrop of strikes, mass sector layoffs, the cost of living crisis and the threat of a recession have made our operating climate a challenge. I’ve been proud of TeamStemettes’ ability to create spaces with our young people that look beyond the now, preparing them for what could be and connecting them to the many options

they’ll have available to them within STEAM. This time last year we launched the ‘Stemettes Say What’ podcast – co-hosts featured on my Radio 4 Today programme edit in December 2022 – and have assembled an inaugural Stemettes Futures Junior Board to sit alongside our existing Stemettes Futures Youth Board and Trustee Board.

In the year to come, we’ll host our first ever Roundtables as part of our ten years celebrations. Gathering stakeholders, institutions, educators, Stemettes and those in power, we’ve been inspired by a letter written to the Department of Education by one of our Super Stemettes. In it, they call for better representation in the STEM National STEM Curriculum. Telling stories and showcasing role models will continue in our ten-year celebrations at Festivals across the country in Newcastle, Birmingham and London. Also, in a multimedia hero campaign we’ll share the faces of ten beneficiaries from across ten years.

Sharing stories and connecting young people with coders and chemists is the journey we’re still on. I’m thankful to our young people, Parents & Guardians, Teachers, Ambassadors, Volunteers and Partners for being a part of this journey. Here’s to the last ten years of impact, and another ten more!

*Anne-Marie Inefolon*  
♥♦♦+



# MISSION

## Engage, Inform and Connect

the next generation of women and non-binary people into Science, Technology, Engineering, Arts and Maths (STEAM) by showcasing a diversity of people working in STEAM.

# VISION

## All young women and non-binary people

can make informed decisions about careers in STEAM, so that they can be proportionally represented in the field.

# VALUES

## Respect

We are intentionally inclusive.

## Youth-centred

Our beneficiaries’ voices are central to everything we do.

## Future-focused

We engage, inform and connect our young people today so that they can become our future leaders in STEAM.

## Joy

We strive to create happiness, wellbeing, authenticity and a safe environment.

## Supportive

We recognise that it will take all of us, working together, to achieve our vision.

# 2022 at a Glance

## Measuring Impact

Amongst a host of impact measures, Stemettes considers improvement across five impact metrics: Perception, Awareness, Network, Confidence and Knowledge (PANCK).

Progress and Improvement across these metrics have been identified by Stemettes as necessary to increase engagement and therefore representation of young women and non-binary folks within the STEM fields.



**60K+**

young women and non-binary people have attended our events over the last decade.

**79%**

showed an improvement in how they saw STEM, after attending just one of our hackathons.

**55%**

of those who were uncertain about their future plans reported that they now feel inspired to study a STEM subject/pursue a STEM career.

### Perception

**77%**

now see the STEM field in a better light.

### Awareness

**82%**

better understand STEM career options.

### Network

**77%**

now feel better connected to peers & role models in STEM.

### Confidence

**82%**

now feel more confident in their STEM abilities.

### Knowledge

**84%**

learnt something new from the intervention.

Fig 1. PANCK Improvement across all of our 2022 programmes

**27**

number of Agile & Python Certifications awarded through our Academy programmes in 2022.

**2,431**

school students reached through our STEM Goals programmes, Stemillions initiatives, Tap & Tinker sessions & school events.

**56%**

of Stemettes alumni (now aged 26 & over) have gone onto studies &/or careers in the STEAM field.

## Location Breakdown

**6.3%**

Outside UK

\*Not on Map

- Canada
- Ethiopia
- France
- Georgia
- Greece
- India
- Indonesia
- Isle of Man
- Jamaica
- Kenya
- Mauritius
- Morocco
- Nigeria
- Philippines
- Romania
- South Africa

**Northern Ireland 1.5%**

**North West 2%**

**West Midlands 2%**

**Wales 1.6%**

**South West 0.6%**

**South East 53.6%**

**Greater London 16.7%**

**Scotland 1.5%**

**North East 2.5%**

**Yorkshire & The Humber 2.7%**

**East Midlands 5.7%**

**East of England 3.3%**



## Socio-economic Breakdown

**64%**

attend or have attended a State-funded school.

**21%**

eligible for Free School Meals.

**65%**

with parents who do not work in STEM.

**23%**

with parents who did not attend University.

**65%**

attendees were aged between 15 and 21 years old.

**56%**

of UK based attendees are from historically marginalised ethnic backgrounds.

**99%**

use She/Her pronouns; 1% also used They/Them pronouns.

**12%**

had or preferred not to share whether they had a disability.

## JAN

About Us launched in different cities around the UK, including the first Stemettes session in Welsh.

## MAR

Co-hosted a webinar with the National Education Union (NEU) on breaking down stereotypes in the classroom.

## OCT

First season of our 'Stemettes Say What?' podcast began, co-hosted by Head Stemette Dr Anne-Marie Imafidon MBE for young people entering the world of STEM careers.

**STEMettes**  
**SAY WHAT?**



## JUN

We began a (successful) pilot of the 4 Day Work Week, which will become official policy in 2023.

## NOV

First meeting of the Stemette Futures Junior Board, aged 6-12 years old, who review our offerings.

# A BIG THANK YOU

to all of our partners, donors, role models, speakers and attendees for contributing to our Stemettes Story in 2022.



- 59 Productions
- ADM
- Amazon Prime Video
- Anglo American
- Avantor Foundation
- BAE Systems
- Barclays Group Technology Infrastructure Services
- Bank of America
- Capital Group
- Civil Aviation Authority
- DeepMind
- Department for Transport
- East Coast Skills
- G-Research
- H&M Group
- ION Group
- Jim Wright
- Just Eat Takeaway
- Leap
- Leidos
- Lenovo
- Limejump
- Lookout
- MBGP
- MI5, MI6 & GCHQ
- Millennium Point
- Moonpig
- Nestlé UK
- NEU
- Ørsted East Coast Skills
- Owl Labs
- Pinsent Masons LLP
- The Poetry Society
- QA
- Roche
- SAP
- Schroders
- Siemens Energy
- South Tyneside Council
- Futuremakers by Standard Chartered
- TD Securities
- Thales
- Unboxed 2022
- XTX Markets

# A History of Stemettes



## 2013

- Launched on 13th Feb, 2013
- Kicked off Chapter 1 with a Bank of America panel, FreeFormers mini hackathon and a series of STEM In A Day (SIAD) sessions

## 2014

- 1,497 young people served
- Delivered Panel and Speed networking events in Cambridge, Hoddesdon, London & Manchester
- Launched our flagship STS Mentoring programme

## 2016

- 20,000 tuned into our Stemettes Documentary
- Held Big Bang programmes in Birmingham, Newham, Sutton, Uxbridge and Westminster
- Our 1st year of Monster Confidence programmes served 471 young people

## 2015

- 13,921 young people served
- Partnered with Accenture, Centrica and Software to deliver our STEM In A Day (SIAD) programmes
- Ran Outbox Incubator - the first tech incubator for teenage girls

## 2017

- 4,082 young people attended our programmes; 29% from our Girls In STEM events in London, Edinburgh, Manchester & Newcastle
- Partnered with Google Deepmind, and Oracle to deliver a series of special STEM events

## 2018

- Stemettes celebrated our 5th birthday and served 4,187 young people
- Delivered a number of AI themed events, including AIGirlRhythm and 'How AI Works' with Bank of America
- STEM In A Day (SIAD) programmes with ASOS, Good Energy and JustEat

## 2020

- 7,634 young women and non-binary individuals served through our interventions
- 817 new sign-ups to our Stemettes Society
- 458 young people came with their families to attend our Outbox & Explore programmes
- 2,760 served through our Stemettes in Aviation programme with the Dep. for Transport

## 2019

- Partnered with BT to deliver a Panel & Speed Networking event
- Held Monster Confidence programmes in London, Peterborough & Teesside
- Women in FinTech Panel Event
- STEM Goals with ASOS, BAE Systems, G-Research, Quantum Black & TD Securities

## 2021

- Partnered with Moonpig & Siemens Energy for STEM-themed hackathons
- 2,151 served through our panels with Deutsche Bank and the Linnean Society
- 3,161 young people joined our Explore half-term programmes on IG Live

## 2022

- 60,077 young women and non-binary people served through our programmes within the last 10 years
- Launched our 'Stemettes Say What' podcast in October

98%

of our 2022 Panel & Speed Networking attendees reported an improvement in their Awareness and Understanding of STEM opportunities.

88%

of our 2022 hackathon attendees reported an improvement in their confidence.

8.6/10

average experience rating across all of our 2022 Mentorship programmes.

58%

mentees engaged with other STEM opportunities as a result of the STS mentorship programme - 42% with the help of a mentor.

76%

participants already wanted to go into a STEM related field before joining one of our 2022 programmes, while 24% were uncertain about their future plans.

55%

of those who were uncertain about their future plans reported that they now feel inspired to study a STEM subject/pursue a STEM career.

300

graduates of our Student to Stemettes mentorship programmes - Stemettes have run 17 mentoring cohorts.

6/10

of the mentees on our STS and Associates programmes received a successful response when they applied for a STEM opportunity outside of Stemettes.

2,412

sign-ups to our Stemettes Society since July, 2019.

1,262

hours of mentoring received by mentees in our 2022 Student to Stemettes (STS) and Associates programmes.

# 10 Years of Celebrating Women in STEM

Including Stemettes Alumni – the newest women in STEM & STEAM



## Hannah, Senior Frontend Engineer at Iwoca

Hannah participated in our 2013 'Stemettes Summer Hack' at the Barbican Centre and our 2017 'Stemettes BeepBoopforChange Robotics Hack' which we held in celebration of International Women's Day.

She was then selected to become part of our Student to Stemette programme, and was matched with a mentor in the field she wished to pursue. Since completing our mentorship programme, Hannah has completed a

Computer Science degree at the University of Surrey, been awarded the 'Sky Women in Technology' scholarship and gained further experience building and designing web components for organisations such as: the DWS Group, Defty, Traffic Digital and Hopin. Now, skilled in JavaScript, UI/UX, Web Development and 3D Modelling, Hannah has a senior role, working as a Front End Engineer at Fintech company, Iwoca, and continues to create visually immersive user experiences with design and code.

## Bayan, Capacity Planning Engineer at OQGN

Bayan, a recent Imperial College London, Master of Engineering graduate, participated in our 'Cardiff, Monster Confidence' event in 2016 at the age of 19 as she wanted to explore her options in the STEM world of careers while gaining valuable interview and CV writing skills.

Since then, she has interned as a Process Engineer with AstraZeneca, received the 'BP Women in Science and Engineering Award', established herself as a Full-Time Project Engineer at British Sugar, before changing industry, working as a Capacity Planning Engineer at OQGN, Oman's exclusive natural gas transporter.



Sadia

attended our Stemettes Summer Hack at the Barbican in 2015. Now, with a background in usability research, web design, and interface design, she works as an Interaction Designer at Quanrel.



Elyssia

took part in our 2016 Cardiff Monster Confidence event. She graduated with a BSc in Biology from Swansea University, and now works as a Consultant Ecologist at Land Use Consultants.



Jochelle

participated at our 2016 Belfast MonsterConfidence event. She is now a Mechanical and Manufacturing Engineering graduate, currently working as a renewable energy and hydrogen PhD researcher in Dublin City University.



Winsome

took part in our 2016 'Food, Coding, Weekend' with Bank of America. She studied Computer Science at Queen Mary University and works as a web engineer at Spotify and often volunteers at our events.



Ella

attended our 2017 Sheffield Monster Confidence event. She now has a BSc in Molecular Biology from the University of Sheffield, an MRes (Distinction) focused in Biosciences from UCL and is a PhD student in Clinical Neurosciences at The University of Cambridge.



Amanda

attended our 2019 Meet the Stemettes @ BT Panel & Speed Networking event. After completing a level 4 apprenticeship in software development, she began working as an apprentice Software Developer at Suffolk Fire & Rescue. Now, Amanda works full time as a Digital and Technology Solutions Degree Apprentice for BT, and continues to pay it forward by volunteering with Stemettes.

# Enhancing the Power of the Next Generation

Involving young people in decision-making processes across the organisation via our Youth Board, Junior Board and Super Stemettes cohorts

Providing mentorship & non-financial career sponsorship to young people with experienced professionals and group experiences

Giving access to on-demand resources in our Stemettes Zine which has almost 70 issues of advice, inspiration and information

Connecting young people to each other for peer support in our closed & moderated Stemette Society which received 405 applications last year

Ensuring representation of young people in dialogues with government and other decision-making bodies by sharing invites and stages

Funding young entrepreneurs in our summer Outbox Entrepreneurship programme powered by Futuremakers by Standard Chartered

Celebrating wins and learning in the lows with our community of young people in the Stemette Society, Stemillions School Clubs and Stemettes Academies

Exploring expression and creativity through STEM & STEAM at our events with various partners, on various free-to-use tools and in downloadable Takeaway packs

School visits across the country with partners



“

*Having a Stemettes mentor has been of huge benefit to me as it's helped me to build confidence and have a better understanding of what I want moving forward. Talking to someone more experienced about the ideas, worries and stresses I've had about my future plans has helped me to put things into perspective and narrow down my thoughts. I've also learnt valuable skills.”*

– Stemettes Mentee

“

*Hearing the speakers inspired me in many ways because they were women who had such significant roles. I also learnt that you can do a STEM degree and still end up doing a job that does not necessarily require heavy STEM work. It is important to be a role model to especially younger women, so I hope I can achieve this.”*

– Attendee, Age 17, Stemettes Leadership Academy, with MI5, MI6 and GCHQ



# Introducing our Youth Board

Established August 2021

“The Stemettes Futures Youth Board is a way for Stemettes as an organisation to put youth voice at the centre of our work. By recruiting a diverse range of our beneficiaries and bringing them into operations, teams, program design and trustee meetings, we keep our ears to the ground and are held accountable by the young people we are trying to serve. It is a privilege to work with our young people and help them tap into their potential; their testimonies speak for themselves.”

– Floriane Fidegnon-Edoh, Youth Board Chair



## Manahil, Regional Consultant West Midlands

**Growing up in a predominantly south Asian area, I see young girls who must be encouraged into STEM to know that they CAN do it.**

STEM is a fundamental part of society. Whilst studying engineering at AUEA, I am one of 4 girls in my class and I think that by encouraging young girls, they can realise that STEM isn't "just for boys" however it's for everyone and anyone, a career isn't defined by your gender.

The main thing I would like to achieve with the Stemettes Futures Youth Board is to inspire young people and teens. This could mean representing Stemettes in school assemblies across the West Midlands showing pupils that they CAN do it, and that STEM is for anyone. Women, men and non-binary. This could lead to many doors such as inspiring girls/non-binary children/teens and giving them the encouragement that they need to decide their future rather than letting cultural/social stereotypes stop them from achieving their dream.

## Elisabetta, Regional Consultant Scotland

**I'm very passionate about making girls and young women aware that there is no wrong path into STEM and that it is never too late to explore opportunities in these fields.**

I was good at Maths and Sciences at school, but I was unfortunately not confident enough to pursue a more scientific subject at University. Meeting inspiring people who worked in Technology and Engineering roles while at University was fundamental in making me more confident in my skills and in making me understand that I could find my place in the tech world if I was just passionate about it and willing to learn. Being part of the Stemettes Futures Youth Board gives me the chance to contribute my ideas regarding how more young women like me (or girls in school) could be inspired to pursue a career in tech or other STEM fields, even if they are not confident enough to see themselves in those types of roles yet. It would be such a good opportunity for me to be involved in conversations about these issues and hear different perspectives about them from the other board members.

My journey into STEM was perhaps not conventional, as I studied Economics at University and only while being at University became interested in technology. Having become part of the board of the University of Glasgow FinTech Society for two years, I got the chance to meet people who were working in tech



and explore the wide variety of opportunities available in this field. What I love about working in a technology role is its problem-solving aspect, as well as how putting creativity into solving complex problems is absolutely crucial (something that I believe is not talked about enough).

In particular, I think technology offers such a wide variety of opportunities and there is a misconception about the kind of person who works in this field (luckily this is improving). I would also love to be involved in strategic decisions for Stemettes, as I believe my experiences, being myself a non-STEM student now working in a tech role, have helped me understand some of the barriers faced by young people who want to have a career in this field.

# Challenging Stereotypes

## One Stemettes activity at a time

Stemettes programmes and initiatives counter the **“brilliance stereotype”** by being open without pre-selection based on attainment or grades. We highlight and showcase a variety of female role models across all activities to counter the misconception that STEM fields are **inherently masculine**.

Having received over 100,000 applications for our programmes, and engaged with over 60,000 young women and non-binary individuals since our launch in 2013, we know that the **“lack of interest”** stereotype is incorrect. Demand and ambition abound, women are just as committed to pursuing careers within these fields, as men.

A **“lack of technical skills”** stereotype is disproved in our Certification academies where women role models teach and support our young people to gain industry-level Cyber, Agile & Python certifications. The same goes for the **“lack of leadership skills”** stereotype – we also run Leadership academies with sessions led by



women role models as well as having regular input & influence from our Youth Board and Junior Board.

The stereotype that women in STEM are **“less dedicated”** to their careers is constantly dispelled by our mentors, panel contributors and in speed networking sessions. We also counter the idea that **“STEM is not creative”** in our focus on STEAM careers and content across our activities.

*The club has helped to stretch our gifted children and convince some more reluctant learners that STEM is very much for them and is something they would continue to aspire to in the future.*

*We have also appreciated the diversity shown by the club's choice of role models. The children loved learning about the different jobs and it really opened the eyes of our SEN and Pupil Premium girls that they can achieve these jobs. - Teacher*



# Overcoming Major Barriers to STEM & STEAM

A decade of Stemettes' work to open the field

## Lack of Role Models

Women often have fewer female role models in STEM fields, which can make it harder for them to envision themselves in these careers. Especially, young women from low-income backgrounds, who may have even fewer relatable female role models in STEM fields, and may find it even harder to envision themselves in these careers. During our hacks and panels, our young people have the opportunity to meet STEM role models from a wide variety of organisations and learn more about why and how they chose STEM careers.

## Lack of Peer Support

Women in STEM fields may also lack the support they need to succeed, such as mentoring and networking opportunities. Our Stemettes Society provides 13-25 year old young women and non-binary individuals with an opportunity to connect with like-minded young women and non-binary individuals in a safe & moderated online space. They can discuss things they've seen in the Zine, experienced at school or have learnt from STEM events like the ones run by the Stemettes. This is a global network to help them learn and get into the STEM & STEAM industry – chat with their peers and get advice direct from TeamStemette.

“

*I never knew that a computer science engineer can work at a bank because for me: bank = management and economics (everything related to money) So I got rid of that stereotype... and that not everything is related to Maths. I, sort of, got out of my bubble. Through this journey, my mentor helped me sort my ideas out. What I wanted to do in my future career, what I can study to reach my goals and remember to follow my dreams. She became more a friend than mentor.”*

“

*Having support of women in STEM and not feeling isolated as a woman in STEM has made my mental health and confidence better.”*

“

*I enjoyed hearing about the role models' jobs and challenges in life and how they got to where they are today.”*



## Access to Education

Less access to quality education can make it harder for certain young women and non-binary people to pursue STEM subjects. They may not have access to the same resources, such as textbooks and technology, that other students do, which can make it difficult for them to succeed in STEM fields. For this reason, all of our Stemettes programmes are free and the majority of our events are hybrid. Additionally, we loan out laptops, mics and equipment for all virtual events; cover travel for all of our longer-term physical events, contribute towards accommodation costs for attendees coming from outside of town, and provide free food and snacks at all of our physical events.

## Societal Expectations

There is a societal expectation that women should pursue careers in “safe” fields like healthcare, teaching, or social work, rather than STEM. Additionally, young women from low-income backgrounds may face more pressure to earn money quickly and be discouraged from pursuing careers in STEAM fields, which are typically considered to be a more time-consuming and less lucrative “privilege.” Stemettes work with parents and teachers to encourage and support students to take risks and persist, despite challenges.

“

*It was really good. We were online but we felt included in everything.”*  
– OctX with JustEat & Anglo (Attendee, Age 9)



“

*I always looked into the aviation career field, but a lot of options were shut down to me due to personal things, but this has encouraged me and I can't wait to do/try more!”* – Gatwick Summit (Student)

“

*I will support my children to consider STEM options for their future careers.”*  
– About Us Now Paisley (Parent)

“

*The children really enjoyed making robotic hands using straws and cardboard. A lot of the children went home and made them again with younger siblings.”*  
– Stemillions (Teacher)

# Ten Years and Beyond

One more decade to make a lasting difference

Following our 2022/5 Strategy, Stemettes will be hosting a larger number of events in the West Midlands and North East.

Both of these regions boast a diverse population and a growing number of innovative companies in areas such as advanced manufacturing, digital and life sciences, providing opportunities for our young people to work in cutting-edge industries. In the years to come we'll identify more regions and become more representative nationally.

In the ten months of 2023 that we'll celebrate our ten years, we'll head to the West Midlands, North East and London with a series of partner Showcases, Roundtables and Festivals.

The Roundtables will build on a letter written by some super Stemettes and their friend who would like to see better representation of women in STEM across the National STEM Curriculum. We'll gather young people, government, institutions and community groups to advocate for systemic change that will ensure progress in the social norm of technical women.

We'll celebrate our birthday with a march across Waterloo Bridge, aka the Ladies Bridge, to highlight the volume of untold stories of women in STEM.

## #StemettesBirthday

“ 1 in 3 young people say they haven't or don't remember being taught about a woman scientist in the past 2 school years.

70% of young people think it is important for schools to include information about women STEM role models in their lessons (boys are just as likely to agree with this statement as girls).

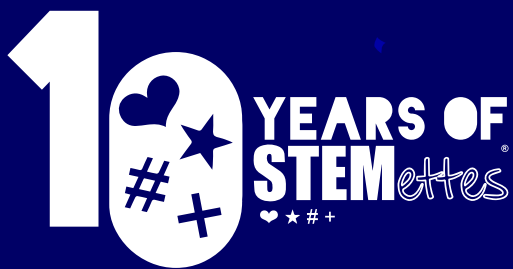
- A 2013 survey commissioned by Stemettes and the British Science Association of 14-19 year olds ”

“ It's given me so many new opportunities, not only to network with girls my age and with similar interests, but with people in the industry that I want to work in. It is nice to find people that I can look up to, and ask questions to.

- Rhea, 15 ”

# WE MADE IT HAPPEN





# DONATE SHARE VOLUNTEER.

Please email [team@stemettes.org](mailto:team@stemettes.org) if you have any questions  
and feel free to share the impact on social media tagging @Stemettes

## Directors

Lydia Monnington  
Abdullahi Mohammed  
Dr Anne-Marie Imafidon MBE

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