

Are we programming gender bias into our future?

EY STEM App - Oceania Launch



The better the question. The better the answer.
The better the world works.



Building a better
working world



EY STEM App

Sparking interest, inspiring and empowering the next generation of girls in STEM

Learn more about the app...

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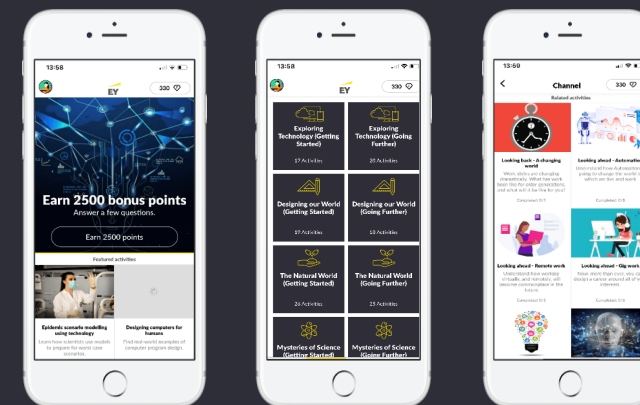
Introduction

The EY STEM App is an **innovative, gamified** mobile platform developed to spark **interest, inspire and empower** girls to pursue STEM (science, technology, engineering and mathematics) careers.

The app is **free to download and use**, targeted at girls aged **13-18 years old**, and aims to impact **out-of-school learning**. It features topics focused on **science**, such as climate change or space exploration; **technology**, such as artificial intelligence, 3D printing and blockchain; the **future of work** and skills that may be required for future, yet-to-be-defined jobs; and **inspirational stories** of women in STEM.

With an **incentivised learning model**, girls earn points as they complete learning activities such as reading an article, interviewing members of their community, completing an experiment or watching a video. As they build up points, girls can redeem various **rewards** such as e-gift cards and mentoring opportunities or they can choose to donate to a non-profit.

The EY STEM App has already been successfully piloted to over **7,000** girls in **New Delhi, Seattle and Atlanta**. It is now being launched to **100,000** girls around the world, in line with EY's commitment to impact **one billion lives** by 2030.



Our goal is to reach **100,000** girls by 2022

- ▶ Through education, spark **interest** and **inspire** girls to pursue STEM pathways
- ▶ Support girls with building **21st century skills** to facilitate the transition from **education to employment**
- ▶ Make a **measurable impact** towards the United Nations (UN) Sustainable Development Goals for 2030
- ▶ Share inspiring, **real-life experiences** from female EY leaders through interactive **mentoring opportunities**

User experience

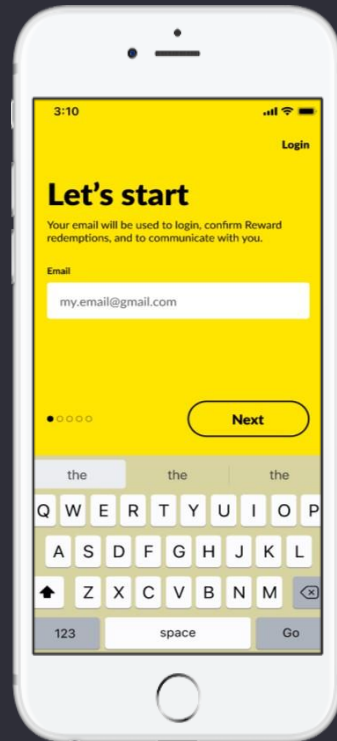
The intuitive app experience brings together **gamified STEM content** in a community-based **ecosystem**.

To get started, the app will be available to **download** on to personal devices from **app stores**.

Registration will require an email address and an assigned, unique **community code**. Once registered, the journey begins on the homepage '**Welcome Centre**' which includes guidance on the app's features.

Register

in under 2 minutes

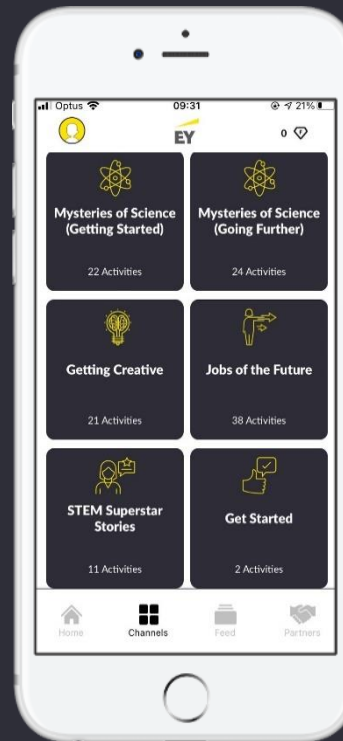


Registration

Register using a community code or use limited features as an anonymous user

Discover

content from renowned organisations

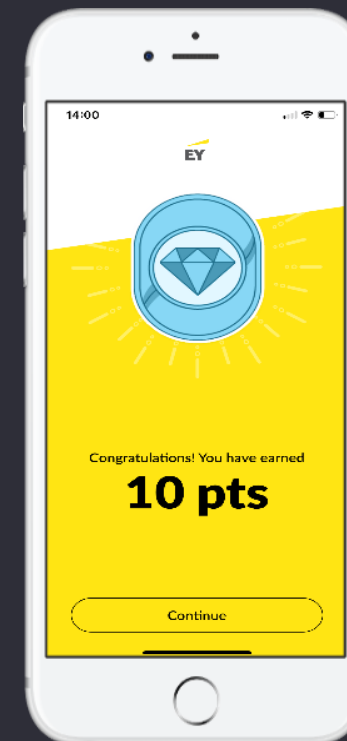


Activities

Complete gamified learning such as curated science experiments, either individually or in teams

Earn points

for each learning activity

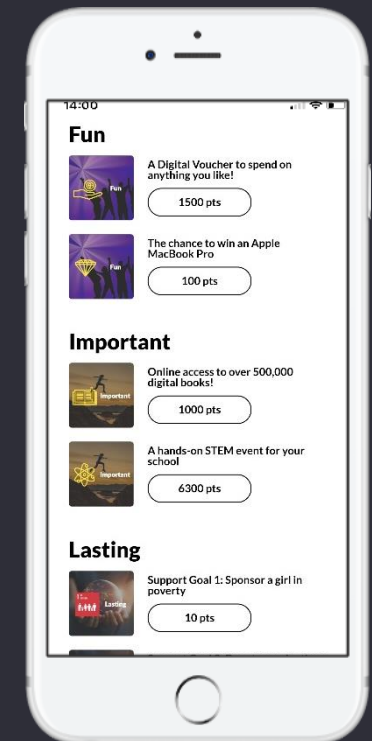


Points wallet

Earn points with each learning activity and see your ranking on a leaderboard filtered by community, country and global

Win rewards

including e-gift cards, mentoring and more



Reward store

Points can be redeemed for a range of rewards or they can be donated to support a listed non-profit

Content

The app has **over 450 activities** across 15 content channels. Within each activity, girls will be asked to complete several steps such as reading an article, interviewing members of their community, completing an experiment or watching a video.

Girls will engage with content that has been sourced from **renowned institutions** such as University of Pennsylvania (UPenn), NASA, UC Berkeley, Stanford University, Seattle Architecture Foundation, Growing Leaders, United Nations Development Programme, United Nations Educational, Scientific and Cultural Organisation (UNESCO) and the World Economic Forum.

The content is designed to map to **OECD P21st Century skills framework** and **United Nations Sustainable Development Goals**, covering all 17 goals related to People, Planet, Prosperity and Peace and Partnerships. The chosen content themes intentionally allow girls to engage in **real-time actions**, individually or as communities, to make a **greater social impact**.

Over 15 content channels that focus on STEM, social and emotional learning, future of work and helping our world.

Help the World

Design thinking and the UN Sustainable Development Goals

Understanding Myself

Social and emotional learning, individual purpose and passion

Exploring Technology

Emerging technology such as artificial intelligence and blockchain

Designing our World

Designing cities, soft robots, and making clean water

The Natural World

Endangered species, climate change, vertical farming

Mysteries of Science

Unconventional turbines, fossil fuels, the Big Bang and DNA

Getting Creative

Design thinking, creative, design and art-based activities

STEM Superstar Stories

Inspiring videos of women in STEM

Jobs of the Future

21st Century Skills for jobs of the future, and yet-to-be defined

Rewards

With an **incentivised learning model**, girls **earn points** for every step of an activity they complete. As they accumulate points, they build up their 'rewards wallet'. Using their points, girls can redeem 3 categories of rewards - **Fun, Important and Lasting**.

Girls will be able to redeem as many rewards as their points allow and, where applicable, virtual mentoring opportunities will be coordinated through supporting organisations/schools.



A digital voucher that can be redeemed across a range of major technology, clothing, footwear, food and entertainment retailers



Virtual mentoring opportunities on a range of topics including future of work, women in leadership, and day in the life of a consultant



Donate points to provide educational support for young Australians from disadvantaged backgrounds



Donate points to support young people and parents with getting access to mental health support



Donate points to protect Australia's unique animals, plants and their habitats



Donate points to support Kiwi kids affected by poverty, with food, clothing and health products



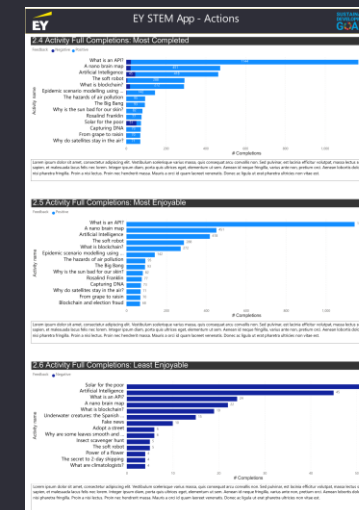
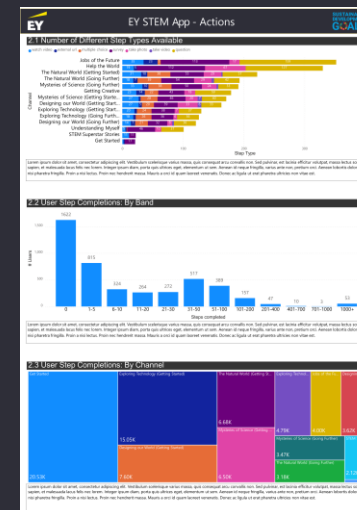
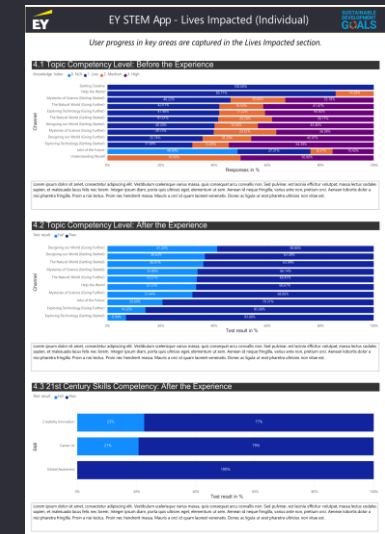
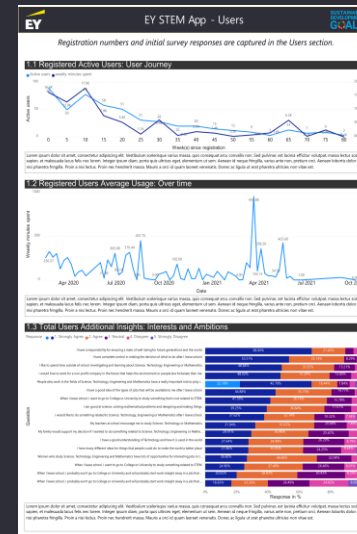
Insights

The EY STEM App has a powerful data and analytics capability that provides aggregated, anonymised and community-based insights on usage, actions, rewards, interest, competence and value.

Deeper, meaningful insights...

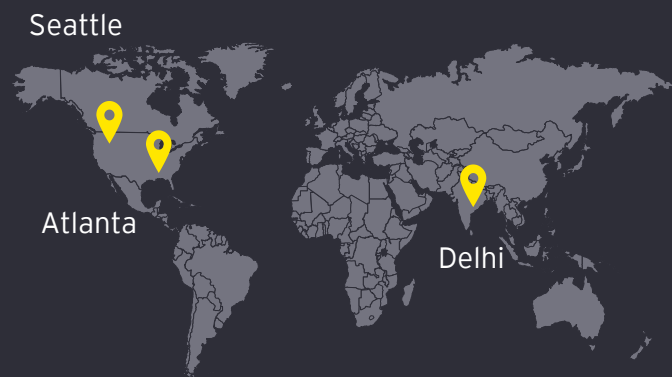
Supporting organisations and schools will regularly receive dashboards to monitor and measure progress over time. Insight categories will vary from usage analytics to competency levels (including before and after engaging in learning experiences). Some examples of insights include:

- ▶ Competency in topics aligned to content channels e.g. mysteries of science, the natural world, designing our world, technology, and jobs of the future.
- ▶ Improvement in 21st century skills e.g. career literacy, creativity and innovation, critical thinking and problem solving
- ▶ Contribution to United Nations Sustainable Development Global Goals (knowledge improvement, steps completed, time spent)
- ▶ Future-of-work related knowledge and skill improvement
- ▶ Usage (active users, time spent)
- ▶ STEM interest measured over time



Pilot summary

The EY STEM app was launched to over 7,000 girls in Delhi, Seattle and Atlanta for a 10-month pilot, in October 2019.



COVID-19 Interventions

- ▶ **Regular virtual interactions** with girls from Elite Private, Affordable Private and Delhi Government schools
- ▶ **Virtual mentorship series** with over 250 girls and role models about their journeys from classroom to workplace and careers in innovation and technology
- ▶ **Platform access extended** by 5 months

India Outreach

Delhi

- ▶ Launched to over 6,000 girls from 35 private schools (elite private, private and aided) and 10 nominated Delhi Government schools from diverse backgrounds
- ▶ We activated an ecosystem of girls, teachers and caregivers through interactive on-boarding sessions
- ▶ Over 480 fun (STEM merchandise) and 41 important (mentorship/work-shadowing) rewards were redeemed
- ▶ Over 1,000 chose to donate their points to a non-profit
- ▶ We regularly reviewed insights dashboards with schools
- ▶ App access was extended to children of EY India employees during COVID-19 lockdowns

USA Outreach

Seattle

- ▶ An experiential learning launch event took place at the JA Auburn centre with over 70 girls from 4 schools
- ▶ We launched in partnership with Junior Achievement

Atlanta

- ▶ We launched to over 950 girls from 16 schools and not-for-profit organisations
- ▶ A launch event was held with 500 girls from 3 public schools
- ▶ Over 100 fun (STEM merchandise) and 6 important (mentorship/work-shadowing) rewards were redeemed
- ▶ Over 100 girls chose to donate their points to a non-profit
- ▶ App access was extended to children of EY Atlanta and Seattle employees during COVID-19 lockdowns

Pilot impact

Engagement

Over **7000** middle and high school girls in **50** schools and not-for-profit organisations across **3** cities in India and the USA

Over **91,000** learning steps completed in the platform for **STEM** and the **future of work**

98.5% reported they enjoyed the EY STEM App experience and activities

Rewards

2 million Fun and Important reward points were redeemed

596 rewards were won by **550** girls

Work experience with a **female EY leader** was the most popular Important reward

Girls donated over **370,000** lasting rewards points to non-profits

Girls who Code and **AI for Good** were the causes that girls cared most about

Impact

Over **975,000** minutes of 'real-life' actions by girls in support of the United Nations Sustainable Development Global Goals

We saw **measured improvement** in:

STEM interest
STEM commitment
STEM value
STEM competence

Systems thinking
Leadership
Communication
Self confidence
Team-work
Critical thinking

Pilot learnings

Several learnings from the pilot have been implemented to improve the app and programme experience:

Content

Inclusive of diverse learning styles

- ▶ Language of existing and future content has been updated to better accommodate the target user group. Over 40,000 changes were made to the existing activities
- ▶ All videos have subtitles to accommodate diverse learning styles

Tailoring to interests

- ▶ Over 60,000 data-points associated with activities were analysed. The least engaging activities were removed from the app

Localising content

- ▶ Each country can upload locally sourced content as gamified learning activities

Rewards

Redemption

- ▶ The rewards catalogue has been refreshed with several new additions under each category
- ▶ Inclusion of rewards will be tailored based on country-specific requirements and laws

Fulfilment

- ▶ Aligned to EY's commitment to climate action, shipping of STEM merchandise has been replaced with digital e-gift cards

Insights

Richer insights

- ▶ Developed new metrics which map to the OECD P21 skills framework, 17 UN Global Goals and EY's corporate social responsibility program
- ▶ Developed PowerBI dashboard for richer, deeper insights into progress and impact tracking

What we need from you

EY teams will not have direct contact with the girls therefore interested parties must be able to assign a **point of contact** to facilitate the following:

Support Pillars

Advocacy and consent

- ▶ **Advocate** for the app within your organisations/school, with girls and their parents/caregivers.
- ▶ Facilitate parent/caregiver **consent** which can be provided from within the app.

User group management

- ▶ **Identify** girls for participation.
- ▶ Distribute **unique community access code** to unlock the app rewards feature.

Support logistics

- ▶ Distributing mentoring opportunity **event information**.

Express your interest

We are seeking interest from schools or non-profit organisations that work directly with female students aged 13 - 18, to facilitate girls' participation. There is no cost to either schools/organisations or those downloading the app.

To express your interest, fill out a short form by clicking [here](#) (8 questions).

Please note: Filling out this expression of interest does not guarantee participation - restrictions may apply for audit clients. If you have questions or need further information beyond this, please reach out to oceaniaystemapp@au.ey.com

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