

# **GIRLS IN STEM: CAREERS, SKILLS + ROLE MODELS**

Discover 21st Century STEM careers, meet global role models + skill up! IMMERSIVE WORKSHOP SERIES 2019













A rapidly changing world driven by big data, digital, exponential technologies, coding, artificial intelligence, internet of things and the rise of STEM (Science, Technology, Engineering, Maths, Medicine) is radically changing the way we communicate, consume, live and work.

A recent study by *PwC* reveals that in order for Australia's population to realise our potential for innovation and create the new industries and jobs that will secure our future economy, we need an appropriately skilled workforce and more STEM-trained employees.

Research indicates that 75% of the fastest growing occupations now require STEM skills, 70% of Australian employers identify STEM employees as the most innovative, and cross-sectorally there is a growing need for the broad 21st Century skills that STEM fosters including critical thinking, problem solving, analytic capabilities, curiosity and imagination - all identified as mandatory 'survival skills' in the workplace of the future.

Education will therefore continue to play a critical role in giving today's school students the access they need to STEM industries and job knowledge, STEM role models, and information about STEM career pathways, so they can better shape their choices about subject and post-secondary study opportunities.

## But when it comes to STEM and girls, the news is not good.

The reality is that currently, females are drastically underrepresented in STEM fields, industries and jobs across the planet.

Consider the biggest global tech firms. As Maclellan (2017:1) notes, only 30% of Google tech workers are women; at Facebook, it's 15%; and Twitter is a mere 10%. And despite the fact that the digital tech sector is expected to require 700,000 tech workers in Australia alone (FYA, 2017), only 16% of Australians qualified in STEM are female (Chief Scientist 2016). And according to a recent Australian Government National Innovation and Science Agenda Report, 1 in 4 IT graduates and less than 1 in 10 engineering graduates are women. On top of that, women occupy only 1 in 5 researcher positions in Australian universities, and only one quarter of the STEM workforce overall. Clearly, the STEMder gap is real.

At girledworld we are committed to achieving equity, parity, diversity and gender equality in startups, STEM and new industry sectors. We need to show girls what they can be, and build the pipeline of the next generation of STEM leaders, technology sector founders, science problem-solvers and innovators by introducing girls aged 13-18 to STEM role models, building understandings of the exciting potential of STEM careers, and busting the myths about STEM being 'just for boys'.

We also need to educate girls about the cultural, social, institutional and personal barriers and unconscious biases that discourage girls and women from studying and pursuing careers in STEM so they are aware of their own self-limiting beliefs and behaviours.

This workshop will feature explanations of STEM domains, explore and unpack STEM jobs of the future and elevate outstanding virtual STEM female role models. These role models will share and showcase their actionable advice with girls on how to build and grow their STEM skillsets, mindsets and toolkits to help them shape their thinking about STEM as a potential future career pathway.

Built on deep industry knowledge, university research and content filmed inside global technology companies, this workshop features virtual STEM mentors from *Atlassian, Microsoft, Code Like A Girl, Airbnb, Twitter, MYOB, Code Like A Girl* and *Square* and will showcase exciting contemporary careers across data science, software engineering, fintech, startups, innovation environments and new and emerging industries. Students will also explore exciting 'virtual work experience' *World of Work* content, and go 'inside' STEM workplaces to develop contextual understandings of real-world STEM jobs and skills.

The workshop will also explore how girls encounter representations about who and what they should be on TV, in movies, on global and local news feeds, and on social media platforms — and how these stereotyped representations are influential in shaping (and limiting) associated STEM self identity, goals, subject choices and career aspirations.

In a highly interactive session, students will undertake a range of activities, live polls and discussions, so students can develop deep understandings about how the lack of positive and diverse STEM role models for girls can significantly impact decisions to enrol in STEM subjects and later pursue STEM-related careers.

It's our goal that students walk away from this workshop inspired, educated and excited by relatable real-world STEM mentors from current companies and industries, and that these 'mentor' moments will resonate and allow students to take on knowledge and advice and apply it to their own perceptions/subjects/studies/career goal setting.

At girledworld, we want to create a future where it isn't unusual for a woman to win a Nobel Prize for Physics, build a technology company or undertake a computer science degree — in fact, we want it to be the new normal.

## **WORKSHOP DETAILS**

Years: Secondary School (Year 7- Year 12)

Workshop Duration: 60 / 75 / 90 minutes (Flexible pending school cohort + student needs)

**Group Size:** Minimum 30 to Maximum 100 students in single session **Pricing:** \$15 per student (or bulk % discount available for groups)

## **Location requirements:**

- Access to a projector, screen and sound required (darkened room if necessary for projection)
- Stable WIFI for interactive polls
- Roaming microphones if available
- Classrooms for smaller groups and 'Challenge' activity breakouts
- A gym, hall or large open learning space preferred for larger groups
- Student supervision by teachers is required throughout the session
- All program-specific student learning materials required are supplied by girledworld

#### PROGRAM OVERVIEW & KEY LEARNING OUTCOMES FOR STUDENTS:

In the **Girls in STEM** program students will gain:

- An overview of the STEM workforce, new industries and job opportunities
- Increased participation in STEM education with practical understandings and applied knowledge of STEM disciplines, careers and study pathways
- Access to global virtual STEM mentors and role models from fast-paced companies including Microsoft, Atlassian, Airbnb, Square, Twitter and MYOB
- Clear understandings of why STEM matters, how it is shaping the workforce, and guidance on choice-making in STEM subjects, courses and future career options
- Industry context and real-world case studies (including virtual work experience 'Day In The Life' video content from STEM, startup and innovation companies)
- An opportunity to critically reflect on personal strengths, skills and experience that can be translated to STEM workplace settings
- Understandings of future workforce capabilities and 21st century skills and their importance in a digital-driven, technology-enabled marketplace

NB: This course complements our **Future Facing** and **Work Ready** programs.

#### **CURRICULUM ALIGNMENT**

This workshop can be customised to suit the needs and requirements of each school. Our workshops and programs are aligned to the Victorian Curriculum, complementing the following curriculum areas and capabilities:

- Professional Development
- Designed Solutions
- Digital Technologies

- Personal & Social Capability
- Critical & Creative Thinking
- Enterprising & Inquiry Skills

#### ABOUT GIRLEDWORLD WORKSHOPS + PROGRAMS

Our 2019 'Future of Work' educational workshops, led by girledworld co-founders and expert facilitators, allow students to be inspired, expand their knowledge and upskill in 21st Century capabilities in real world environments. By rethinking traditional education pathways and connecting students with the outside world in meaningful, industry-led, problem-solving contexts, girledworld gives today's students the tools they need to thrive tomorrow.

## WHO WORKS WITH YOUR STUDENTS?

Our co-founders and university qualified facilitators are highly experienced, and have worked in partnership with educational institutions, large corporations, startups (STEM and technology sector) and NFP community organisations. Our work ranges from design and delivery of large scale innovation education events to bespoke client consultancies helping businesses transform and upskill their people with agile new ways of working in order to stay competitive in a rapidly shifting globalised marketplace.

#### WHY HIGH SCHOOL GIRLS?

With deep industry knowledge, university backed research and partnerships with key educators, government and business sectors, we know the criticality of equipping today's students with the soft and hard 21st Century skills, core capabilities and success profiles that will be high value in a rapidly evolving marketplace. Rather than waiting for students to hit the workforce, we upskill, empower and boost skills, capability and opportunities now so they're equipped, informed and ahead of the curve.

## **OUR WORKSHOP STYLE**

We run a range of skill-based educational workshops focussed on individual student empowerment. Our workshops are delivered by qualified and experienced facilitators who ensure student trust and safety at all times. We cultivate diversity, encourage independent thinking and self expression, and create an environment where creative and bold new ways of thinking are celebrated with high fives!

#### STUDENT-LED APPROACH

At girledworld we recognise that individual student engagement and learning styles are critical to the transfer, unearthing and growing of knowledge. So we provide accessible, relatable, real-world contextual frameworks and inspire students to take the lead in their own learning pathways. Our workshops provide open interaction, role playing activities, teamwork and gamified tools.

### **CUSTOM + CO-DESIGNED WORKSHOPS**

Today's curriculum is crowded, leaving both teachers and students busy keeping up. Our workshops, programs and incursions can be co-designed or customised to best suit your individual student, cohort, school or organisation needs. For specific requests we can deliver multi-week/month/annual programs to extend and develop students over time and build on previous workshops.

## **WANT MORE INFORMATION & HOW TO BOOK?**

We love partnering with schools to create life-changing education interventions. If you'd like to book, would like more information about how we can work together or if you'd simply like to talk about whether we're the "right fit" for your school please get in touch.

**Call** Edwina on 0400 004 135 OR Madeleine on 0437 582 566

**Email** hello@girledworld.com