



Future
Classroom
Lab



Scientix® STEM Alliance, Future Classroom Lab, and Cummins webinar:

Inspiring STEM Careers: A Teacher's Toolkit to Empower Student Ambition

08/10/2025

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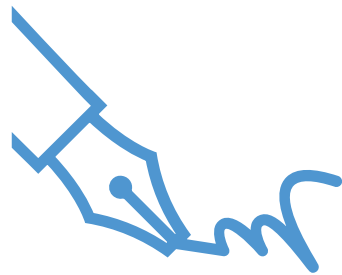
Housekeeping

- ❑ Webinar is live streamed and recorded
- ❑ Cameras and mics are disabled
- ❑ For all questions use the chatbox
- ❑ Links will be shared in the chat



PLEASE CONFIRM YOUR ATTENDANCE

SIGN THE ATTENDANCE LIST TO
RECEIVE A CERTIFICATE OF
PARTICIPATION



Inspiring STEM Careers: A
Teacher's Toolkit to Empower
Student Ambition - Signature List



SKILLS OF THE FUTURE

- Creativity
- Emotional intelligence (EQ)
- Analytical (critical) thinking
- Active learning with a growth mindset
- Judgment and decision making
- Interpersonal communication skills
- Leadership skills
- Diversity and cultural intelligence
- Technology skills
- Embracing change

CAREERS OF THE FUTURE

Jobs that did not exist 20 years ago:

- App developer
- Driverless car engineer
- Blockchain Analyst
- Data Scientist
- Cloud Computing Specialist
- Renewable Energy Technician
- Cybersecurity Specialist
- AI Ethicist

WHY IS IT IMPORTANT TO WORK AT A SCHOOL LEVEL?

Interest in
STEM
**develops at
a very
young age**

At secondary level, STEM subjects
remain **very abstract and
traditional** in their teaching

Working with **teachers and
counsellors**

Teachers' **STEM
literacy** and
**ability to raise
awareness**

Connection to
real-life
application

Closing the gap
between school
world and world
of companies

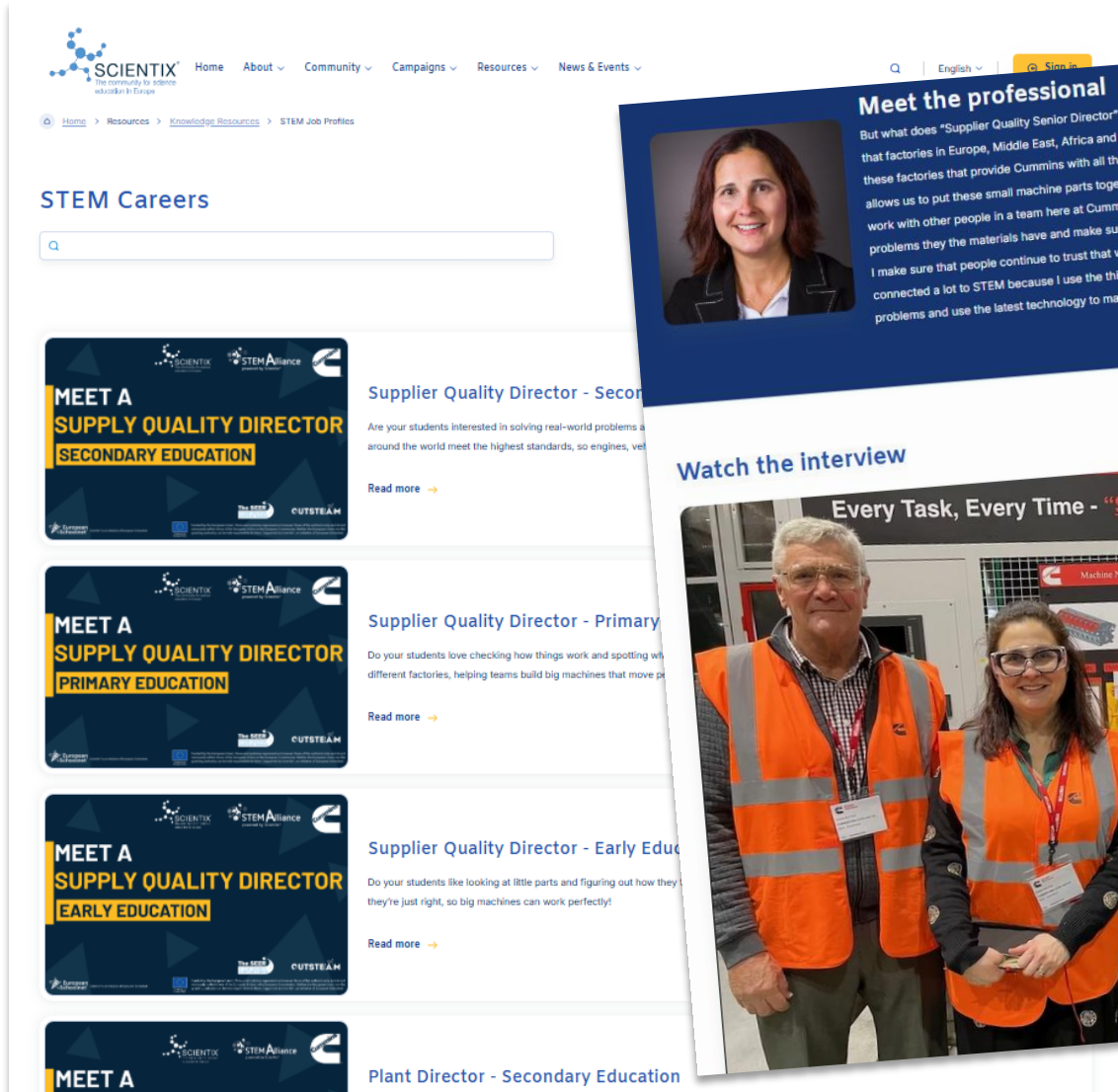
Content of
today will be
outdated
tomorrow

Very few
teachers **spend
time in industry**
(lack of
contextualisation)

Very few
teachers follow
**professional
development**
activities

**Guidance
counsellors /
career advisors**
are not properly
equipped

STEM REPOSITORY OF JOB PROFILES



SCIENTIX[®] Home About Community Campaigns Resources News & Events

Home > Resources > Knowledge Resources > STEM Job Profiles

STEM Careers

MEET A SUPPLY QUALITY DIRECTOR SECONDARY EDUCATION

Supplier Quality Director - Secondary Education

Are your students interested in solving real-world problems all around the world meet the highest standards, so engines, vehicles and machinery can work perfectly?

Read more →

MEET A SUPPLY QUALITY DIRECTOR PRIMARY EDUCATION

Supplier Quality Director - Primary Education

Do your students love checking how things work and spotting why different factories, helping teams build big machines that move parts and materials?

Read more →

MEET A SUPPLY QUALITY DIRECTOR EARLY EDUCATION

Supplier Quality Director - Early Education


Do your students like looking at little parts and figuring out how they work? They're just right, so big machines can work perfectly!

Read more →

MEET A


Plant Director - Secondary Education

Meet the professional



But what does "Supplier Quality Senior Director" mean? It means that here at Cummins I have to make sure that all the small machine parts and materials that factories in Europe, Middle East, Africa and Asia Pacific give to Cummins are very good and work well, exactly how Cummins wants them to. We call these factories that provide Cummins with all these machine parts "Suppliers". By checking the small machine parts and other materials we receive, we allow us to put these small machine parts together to create bigger machines, engines and power systems. But how do I do that? Well, to begin with I work with other people in a team here at Cummins. This team checks how factories that give Cummins all these machine parts create them, solve any problems they the materials have and make sure that the parts that are delivered to Cummins factories all around the world. My role is important because I make sure that people continue to trust that we work well here in Cummins and that the machines we create are safe and work well. This role is connected a lot to STEM because I use the things I know about engineering to check the things we create, the things I know about science to solve problems and use the latest technology to make sure that the things we create are good.

Watch the interview



Every Task, Every Time - "Safe To Go?"

Op No. 10

Machine No. 1468

inner bores & top...



Q&A



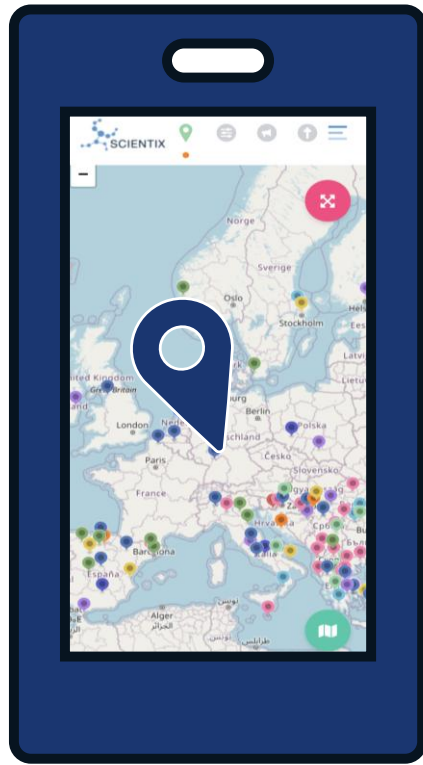


Running from
1 Feb – 30 Apr

SCIENTIX
STEM
DISCOVERY
CAMPAIGN

Know more:
<https://www.scientix.eu/campaigns/sdc>

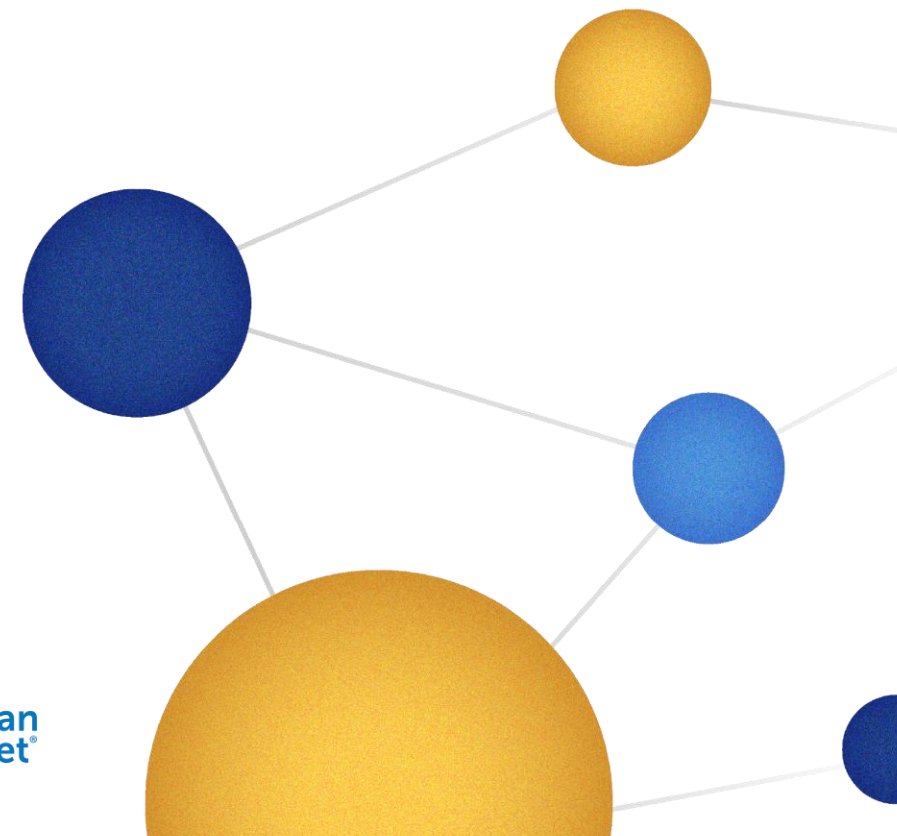
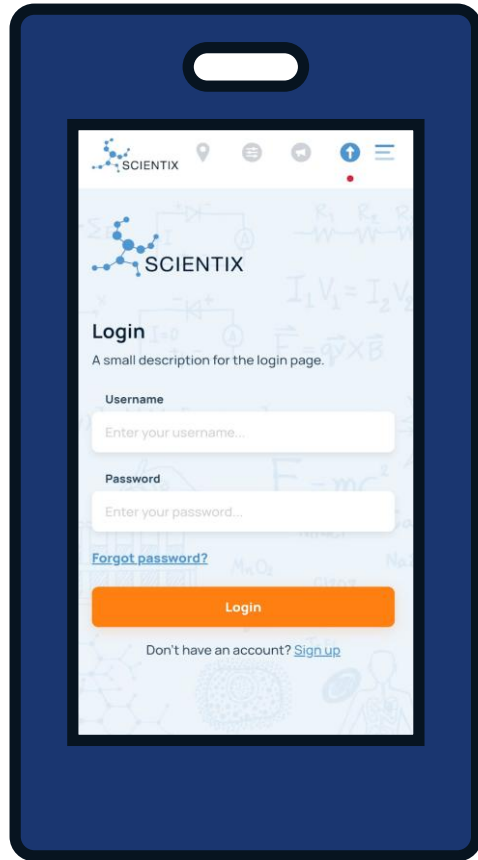
THE SCIENTIX CAMPAIGNS: SHARING STEM KNOWLEDGE WITH THE WORLD, AND EACH OTHER!



- Scientix organises multiple campaigns all year round to showcase projects, STEM topics, events, and new resources
- Every year, the **STEM Discovery Campaign puts YOUR teaching on the map** by sharing your activities, lesson plans, resources, etc.
- During the campaigns, join events, webinars and workshops to get inspired and learn
- Follow the Scientix social media channels to stay up to date with the latest STEM Education development in Europe!

 <https://www.scientix.eu/campaigns/sdc>

STEM DISCOVERY CAMPAIGN APP



SCIENTIX AWARDS

- Submit your entry through the app
- Get the chance to win a Scientix Award






Stay tuned on:

<https://www.scientix.eu/news-events/events>

scientix@eun.org

Scientix® is an initiative of



A photograph of a classroom setting. A male teacher in a red t-shirt is leaning over a desk, looking at a document held by a female student in a dark blue school uniform. Another male teacher in a light blue polo shirt stands behind the student, also looking at the document. The background shows a typical classroom environment with a white wall and a door.

INSPIRING STEM CAREERS: EMPOWERING STUDENT AMBITIONS

**A CLASSROOM PERSPECTIVE ON STEM
CAREERS, ROLE MODELS, AND GENDER
EQUALITY**

WHO I AM

- TEACHER
- FATHER OF 3
- RESOURCE CREATOR
- STEM COMMUNICATOR
- STEM WITH MR N – YOUTUBE



STEM

with Mr. N



8.3.22



WHY STEM CAREERS MATTER EARLY

- PRIMARY IS WHERE PUPILS START DECIDING WHO THEY ARE AND WHAT'S FOR THEM.
- WE CAN NORMALISE, NOT JUST PROMOTE, STEM.
- RESEARCH: CHILDREN AS YOUNG AS SIX BEGIN TO FORM GENDERED BELIEFS ABOUT INTELLIGENCE AND STEM (BIAN ET AL., 2017).
- IF STEREOTYPES START EARLY, SO SHOULD EQUALITY.

USING RESOURCES TO MAKE STEM REAL

- **CREATED THE A TO Z OF STEM CAREERS – SHARED WITH 400+ SCHOOLS IN 23 COUNTRIES.**
- **USES GENDER-NEUTRAL LANGUAGE AND DIVERSE IMAGES.**
- **GOAL: MAKE DIVERSE STEM CAREERS VISIBLE AND RELATABLE.**
- **PUPILS REALISED THAT STEM CAREERS AREN'T JUST LAB COATS AND TEST TUBES.**

A TO Z OF STEM CAREERS

MARINE BIOLOGIST

FROM BLUE WHALES TO PLANKTON, MARINE BIOLOGISTS STUDY ALL THINGS UNDERWATER, EXPLORING THE EFFECTS OF HUMANS ON THE ENVIRONMENT, LIFE AND PHYSICAL FEATURES OF THE OCEAN.



METEOROLOGIST

USE MATHS, SCIENCE, COMPUTERS AND OTHER TOOLS TO STUDY AND PREDICT THE WEATHER, TRACK STORMS OR EVEN TALK ABOUT WEATHER ON THE TV.

PROFESSIONAL VOICES IN THE CLASSROOM

- **INTRODUCE STEM PROFESSIONALS THROUGH SHORT VIDEO CLIPS.**
 - **GUESTS INCLUDE ENGINEERS, PROGRAMMERS, ENVIRONMENTAL SCIENTISTS – MANY WOMEN.**
- **PUPILS LOVE HEARING REAL STORIES ABOUT JOURNEYS AND CHALLENGES.**
 - **BRINGING REAL VOICES INTO THE CLASSROOM TURNS SUBJECTS INTO FUTURES.**

STEM CAREER INTERVIEWS



SPACE FOR ART

STEM CAREER INTERVIEW WITH



FORMER NASA ASTRONAUT
NICOLE STOTT



SCIENTIX

STEM

DISCOVERY
CAMPAIGN

2025



**NBS
EduWORLD**

2025 SCIENTIX AWARDS

This certificate is proudly presented to

Stuart Naismith

United Kingdom

for winning the

Scientix Next-Gen Shapers Award

for the entry



Isidora Salim

2025 Scientix Awards Coordinator,
European Schoolnet



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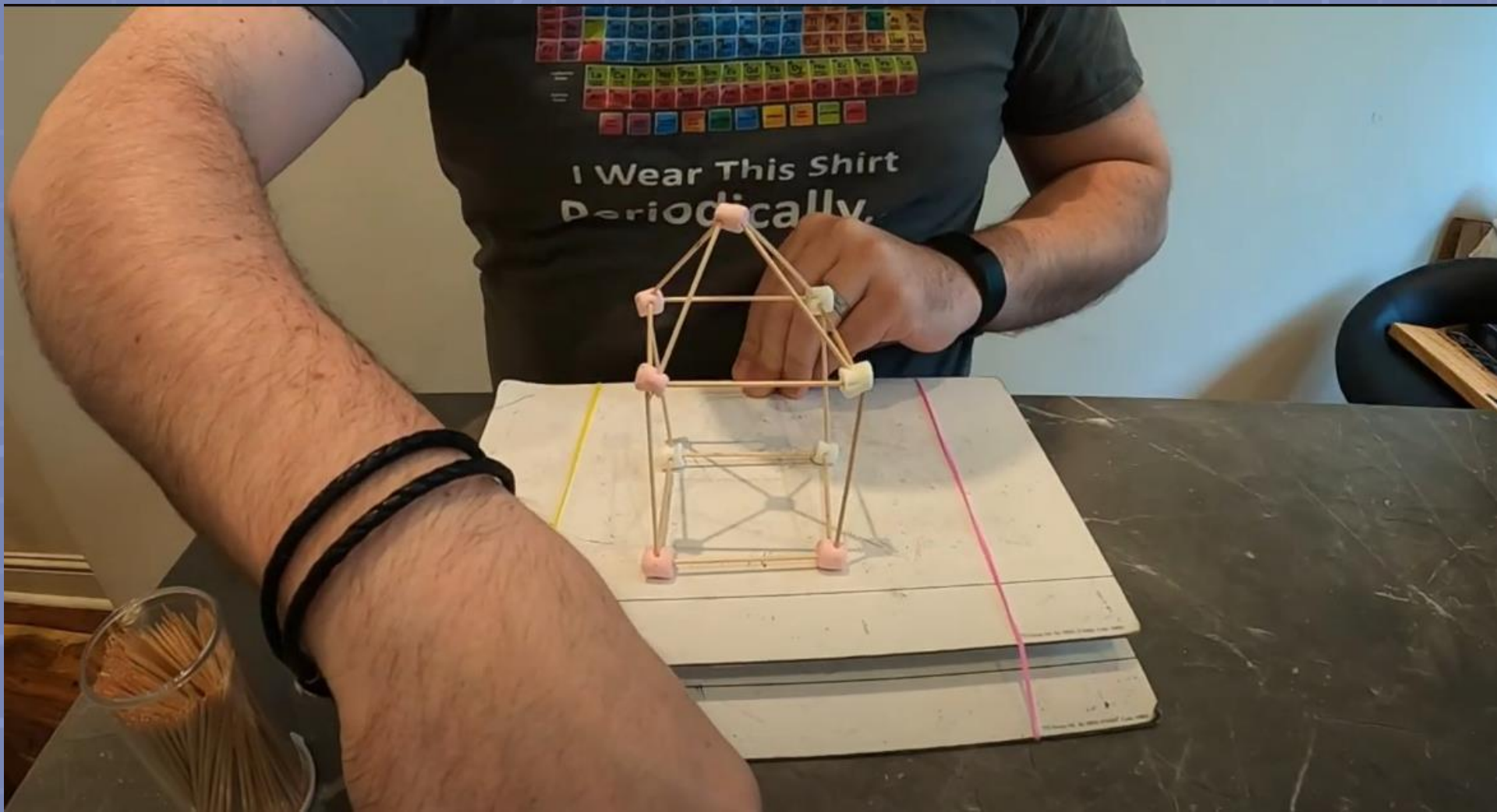


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CLASSROOM ACTIVITIES THAT CONNECT TO CAREERS

- **STEM CHALLENGES LINK CONCEPTS TO REAL JOBS.**
 - **EXAMPLES:**
 - **SURVIVE AN EARTHQUAKE → STRUCTURAL ENGINEERING**
 - **PARACHUTE DESIGN CHALLENGE → AEROSPACE ENGINEERING**
- **SMALL SHIFTS IN GROUP WORK CAN CHANGE WHO SEES THEMSELVES AS CAPABLE.**

SURVIVE AN EARTHQUAKE: STRUCTURAL ENGINEERING



ROLE MODELS & REPRESENTATION

“YOU CAN’T BE WHAT YOU CAN’T SEE.”

- **ANNUAL STEM WEEK BRINGS DIVERSE PROFESSIONALS – MAJORITY FEMALE – TO SCHOOL.**
- **DEEPER CONNECTION AS VISITORS ARE FROM THEIR COMMUNITY.**
- **WHEN DIVERSITY BECOMES NORMAL, STEREOTYPES LOSE THEIR POWER.**



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United Kingdom

for winning the

Scientix Providers Award



for the entry

STEM Week



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2025 Scientix Awards Coordinator,
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GENDER IN STEM: ADDRESSING THE IMBALANCE EARLY

- **GENDER STEREOTYPES FORM YOUNG AND CAN CLOSE DOORS EARLY.**
 - **TACKLE IT THROUGH:**
 - **GENDER-NEUTRAL LANGUAGE (FIREFIGHTER, ENGINEER)**
 - **BALANCED VISUALS AND STORIES**
 - **EQUAL OPPORTUNITIES IN STEM WORK**
 - **EVERYDAY MESSAGES MATTER**

THE POWER OF MENTORSHIP



BEST PRACTICES & QUICK WINS FOR TEACHERS

- ✓ USE INCLUSIVE LANGUAGE (“SCIENTIST” NOT “LADY SCIENTIST”)
- ✓ EMBED ROLE MODELS NATURALLY
 - ✓ SHOWCASE LOCAL STEM PROFESSIONALS
- ✓ BUILD EQUALITY INTO TEAMWORK
- ✓ CONNECT LEARNING TO CAREERS REGULARLY

REPRESENTATION ISN'T AN EXTRA – IT'S HOW WE BUILD BELONGING.

BEYOND THE CLASSROOM

- **MEDIA AND FAMILY MESSAGES SHAPE PERCEPTIONS.**
- **ONLY ABOUT 1 IN 3 STEM CHARACTERS ON SCREEN ARE FEMALE (GEENA DAVIS INSTITUTE, 2018).**
 - **PARENTS, LIBRARIES, AND MUSEUMS ALL PLAY A ROLE.**
- **IT'S NOT ABOUT PUSHING GIRLS DOWN A PATH BUT CLEARING THE SHRUBBERY SO THEY CAN SEE THE ROUTE FOR THEMSELVES.**

CLOSING MESSAGE

EVERY WORD WE USE, EVERY EXAMPLE WE SHARE, IS EITHER REINFORCING THE LIMITS OF THE PAST OR OPENING THE DOORS TO THE POSSIBILITIES OF THE FUTURE.

WHEN CLASSROOMS, MEDIA, MENTORS, AND COMMUNITIES ALL WORK TOGETHER TO MAKE STEM VISIBLE AND INCLUSIVE, CHILDREN DON'T WONDER IF THEY BELONG — THEY SIMPLY KNOW THEY DO.

THANK YOU!

STEM

with Mr. N



STEMWITHMRN@OUTLOOK.COM