

E-SOC Lesson Plan

Gender bias in STEAM world

Learning Objectives: To develop an understanding that women and girls can make significant contributions to the world of STEAM.

(SMART)

Learning outcomes: By concluding this session/class participants will have:

(Use Bloom's taxonomy

action verbs)

Knowledge:

to understand that women have and will continue to play an integral role in the world of science, technology and the arts.

Skills:

to identify personal skills that will engage more girls (and boys) in STEAM

Attitudes:

to connect our personal skills with potential careers in the world of STEAM, breaking down gender bias

Target group:

Primary and Secondary School Teachers

School students from 11 to 15 years old

Subject DoW and Integrated Science

Activity Title & number	Short description of the activity	Resources needed	Time 1 hour in total
Lead In: 1. Formative knowledge harvest	Ask the children to write a list of famous scientists, engineers, designers, technology leaders that they know. Work in groups and then share with the class.	Paper Flipchart Markers	10 - 15 mins
2. Exploring gender stereotypes and busting the myths	Look at images of famous scientists and try to name as many of them as possible. The slides will start with prominent male scientists. How many did the children name? Move on to slides of famous women in science and technology. How many of those can they name or recognize? What does this tell us? What conclusions can we draw from this about gender bias in the world of science and technology?	Slideshow	15-20 mins
3. Personal reflection: my strengths and future plans	1. Ask the children to think about all their personal strengths. What things do they think they are good at. They will list these skills as a word cloud, writing their strongest skills in large letters. 2. How could these personal strengths be used to decide future careers? Children will write down potential career choices they could make using these skills.	Worksheet	20 mins
4. Discussion and conclusions	Invite children to share ideas about what their perceived strengths are. Encourage children to share which potential careers they are interested in. How many are linked to the world of STEAM? Is there any gender bias in the careers chosen by the boys and girls in the class? What have we learned about gender bias in the world of STEAM from this discussion?		10 mins
5. Follow-up	Watch the film “Hidden Figures” and discuss how gender bias and racism held back women at this time.	Film: Hidden Figures	



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Annexes:

WORKSHEET 1: My strengths and career plans

My Strengths and Career plans

Name: _____

1. My personal strengths and qualities:

Think about your personal strengths and qualities. What are you good at? What subjects do you like? What personal traits do you think are useful and helpful?

List them below in the form of a word cloud. You could make some words larger than others, if you think they are more important or sum you up well. Use the example in the slideshow to help you.

2. Future careers:

Now use this list of personal strengths to consider potential careers for your future. What jobs do you think you could do or would like to do. You could also explain why you thought of this job.

Career	Reason for choice



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