

THE SOCIETY OF WOMEN ENGINEERS (SWE)

Talking points

KNOWLEDGE

1. When was SWE formed?
2. What percentage of the engineering workforce are women?

COMPREHENSION

3. What is the difference between technical skills and soft skills?
4. What are some of the aims of the SWENext programme?

APPLICATION

5. What kinds of activities and resources could help students develop their technical skills?
6. Members of SWENext often receive mentoring from industry professionals. What questions would you ask a mentor to find out more about the field of engineering?

ANALYSIS

7. Why is it important for the SWE to encourage young girls to pursue a career in engineering?
8. Kavya, a 10th grade student, is an SWENext Influencer. In what ways has the programme helped her improve her technical and soft skills?

SYNTHESIS

9. If you were designing a workshop to help students develop their leadership skills, what activities would you include?
10. There are many factors that make it harder for women to succeed in engineering than men. One such factor is the false belief that 'men are better at science'. How could SWE design a workshop that addresses this misconception?

EVALUATION

11. Why is the SWENext project so important?
12. How inspired are you to pursue a career in engineering? How could you benefit from joining SWENext?

Activities

1. My life as an Engineer

Since as early as the 1800s, women have been overcoming the challenges of working in a system that does not treat everyone equally. As these inequalities have been addressed, the list of influential and inspiring women engineers has continued to grow.

Do some research about a women engineer that you find particularly inspiring. Write their memoir (in first person) about their career in engineering. They could be from any time in the history of engineering. Put yourself in their shoes and consider:

- What 'you' achieved during 'your' engineering career
- What impact you had on the field of engineering
- What challenges you faced during your career
- How you overcame these challenges
- What skills you demonstrated throughout your career
- How you felt about your achievements within the field of engineering.

2. A soft skills seminar

Soft skills are among the top skills that employers look for in candidates, so developing and improving your soft skills is a great way to prepare yourself for a career in any field.

Some examples of soft skills include time-management, communication, conflict management, leadership, organisation and openness to criticism. Choose one of these soft skills and design a presentation on it. Some points to consider in your presentation include:

- What is your soft skill?
- Why is it important in the field of engineering?
- Give some examples of situations where it might be needed.
- How can this skill be developed?
- A short activity that could help your peers hone this skill.

Share your presentation with someone who has chosen a different soft skill. Have a go at each other's activity and reflect on how confident you are in this skill.

More resources

• You can find many more activities and resources on the SWENext website (swe.org/k-12-outreach/swenext-club) and the All Together blog (alltogether.swe.org), including monthly engineering activities, "A day in the life" articles from professional engineers, and tips on how to become a successful engineer.

• Visit Try Engineering and have a go at some of their online engineering games: www.tryengineering.org/students/games

• If you are based in the UK, The Women's Engineering Society provides lots of information to support women in engineering: www.wes.org.uk/content/about-wes-who-we-are

Its 'She's an Engineer' page offers a great range of careers guidance: www.wes.org.uk/content/shes-engineer-1