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Session Guide: African Women in STEM

Session Outline

Description

Gender inequality is a serious issue worldwide and in particular in Africa. This session presents one area where this is evident: careers in STEM. It presents an article to raise awareness of this issue and 10 exemplary African women who have managed to make substantial contributions in STEM areas. Learners will then select one of them and read a more extensive article or biography about them and write a short reflective presentation to share with the rest of the group.

Session Objectives

The objectives of this session are to:

- Raise awareness of gender inequality in STEM, particularly in Africa.
- Increase aspirations of young learners and help them become more interested in careers in STEM areas.
- Develop presentation skills.
- Be able to provide positive feedback.

Expected Outcomes

By the end of the session learners will have:

- Read about gender inequality in STEM areas in Africa and some examples of African women working in STEM.
- Chosen one African woman in STEM to study in more detail.
- Read an article or biography about their chosen person.
- Written a reflective presentation about their reading.

Areas involved

- Environment
 - o Careers in Science



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- o (Non)Communicable Diseases
- o Environmental Conservation
- Business Resources
- Agribusiness
- Life skills
 - Choosing subjects and careers
 - Goal setting
- Language
 - Reading
 - Writing
- Citizenship
 - Values formation
 - Social Entrepreneurship

Activity: 10 African Women in STEM

Objectives

- To raise awareness of gender inequality in STEM, particularly in Africa.
- To learn about 10 African women (or groups of women) who made and are making an impact in STEM internationally.
- To increase aspirations of young learners and help them become more interested in careers in STEM areas.

Expected Outcomes

- Learners will have read an article about 10 African women who are making an impact in STEM areas internationally.
- Learners will have discussed the article.
- Learners will have selected one of the 10 people presented to study in more detail.

Teaching Instructions

Provide the following article for learners to read: These powerful African scientists are changing the world. When learners finish reading the article, lead a discussion about it, focused on what reasons they think might lead to gender inequality in STEM and on who they found most interesting and why. Each learner should then select one of the 10 women in the article to learn more about.









Student Instructions

Read the article '<u>These powerful African scientists are changing the world</u>'. What do you think are the main reasons that lead to gender inequality in STEM? Who did you find most interesting in the article? Why?

Select one of the 10 women in the article that you would like to learn more about.

Activity: Exploring their Work

Objectives

- To learn more about the life and work of one of the women presented in the article.
- To identify potential challenges they might face in developing careers in STEM.
- To be inspired by the achievements of an individual.

Expected Outcomes

- Learners will have read an article or biography about their selected woman or women.
- Learners will have written a short presentation about their reading.

Teaching Instructions

Provide learners with the article about their chosen women in STEM (links included below). While they read they should identify the key challenges, achievements and motivations of their selected person. They should then write a short presentation about what they found most interesting, focusing on these two points.

Student Instructions

Read the following article or biography about your selected woman in STEM. While you read you should identify the key challenges, achievements and motivations of your chosen person. After reading, write a short presentation about what you found most interesting, if possible focusing on these two key points.

- 1. Wangari Maathai
- 2. Quarraisha Abdool Karim
- 3. Francisca Nneka Okeke
- 4. Ozak Esu
- 5. Margaret Mungherera
- 6. Alta Schutte



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- 7. Sherien Elagroudy
- 8. Julie Makani
- 9. Jamila Abass
- 10. 'The Restorers'
- 11. Purity Ngina

Activity: Presenting

Objectives

• To present their summaries to the rest of the group.

Expected Outcomes

- Some learners will have presented their work to the rest of the group.
- Learners will have provided constructive criticism for presentations.

Teaching Instructions

Select volunteers to share their presentation with the rest of the group. Try to get learners who wrote about different women in STEM rather than allowing more than one presentation on the same person. After each presentation learners provide feedback to the presenter identifying at least one good point and at least one point that could be improved.

Student Instructions

Share your presentation with a friend or family member and discuss what you found most interesting. Ask them what they think was good and what you could have done better in your presentation.

