



Name

Class

Student Worksheet

Thought-starter: What is the relationship between educating girls and climate change?

More girls than boys still remain out of school - 16 million girls will never set foot in a classroom - and women account for two-thirds of the 750 million adults without basic literacy skills. (Source: <https://en.unesco.org/themes/women-s-and-girls-education>)

Activating Prior Knowledge

1. Think, Puzzle, Explore

Jot down some thoughts around these questions and share your responses with the class.

- What do you **think** you know about climate change and how to manage it?
- What questions do you have or what **puzzles** you?
- How can we **explore** this topic?

2. Watch this 2040 clip:



<https://vimeo.com/313062680>

Empowering Women and Girls Password: 2040_EDU

- Jot down the key points.
- Record any unfamiliar words.
- Share your notes with some other students and work them to find definitions for any unfamiliar terms.

3. Group Activity

Go to the [Gender Development Index \(GDI\)](#)

The GDI shows the information in order of countries who have the 'best' gender development.

In groups, your task is to investigate a subset of the data, e.g. expected years of schooling or estimated gross national income per capita and construct back-to-back stem-and-leaf plots and histograms to compare statistics of men and women. Your teacher will assign you your countries.

- Write down the names of your countries here:

The first two steps will help you create both representations of the data (1. The back-to-back stem and leaf plot *and* 2. The histogram/s).

Step 1.

Make a table below and copy the data from the GDI for 'Expected years of schooling' (for your set of countries only) into it.

Step 2.

Re-order the numbers for males and females from lowest to highest, below:

Step 3.

To begin making your back-to-back stem and leaf plot, draw a T-type shape and label the columns, in the space below. Don't forget to include a 'Key' e.g. are we talking thousands, millions, billions?! Now, write the stems (the first digit or digits) and leaves in numerical (usually the last digit) order.

Step 4.

Describe what you notice from the back-to-back stem and leaf plot.

Making a Histogram

Step 1.

Record the frequency table for the data below

Range	Frequency (females)	Frequency (males)

Step 2:

Construct a histogram for males and another for females using the resources your teacher has provided.

Step 3.

Are the histograms skewed, symmetrical or bi-modal?

Step 4.

Describe the histograms in writing:

What other observations do you have about the data?

Take Action

In your groups select one option from the 'Share your learning' column and one option from the 'Make a stand column'. Before beginning any of the activities, inform your teacher of your choices and discuss your ideas for how to implement them.

Share your learning	Make a stand
<p>Develop a brief presentation that provides information about your findings from the subset of GDI data that you investigated and the connection between climate change and the education of girls.</p>	<p>Provide the ticket to education: clean water.</p> <p>Did you know girls in poor communities often miss school because of a lack of clean water in their village? Instead of attending class, millions of girls and women around the world spend 200 million hours each day (UNICEF https://www.unicef.org/esaro/54402016_collecting-water.html) fetching water that is often dirty and dangerous to their health.</p> <p>Check out these great organisations: Water Aid - providing clean water, sanitation and hygiene. (https://www.wateraid.org/au/) Human Appeal - building water wells. (https://www.humanappeal.org.au/clean-water-wells/)</p>
<p>Write an article for the school newsletter (or other appropriate school communication channel) that discusses information about your findings from the subset of GDI data that you investigated and the connection between climate change and the education of girls.</p>	<p>Donate, raise money, or invest in micro-loans</p> <p>Invite family, friends and members of your community to support you in donating to (or raising money for) charities that support the empowerment of women and girls.</p> <p>Check out these great organisations: - Room to Read - providing literacy education for girls. (https://www.roomtoread.org/literacy-girls-education/) - One Girl - educating girls. (https://www.onegirl.org.au/) - Kiva - you can provide a small loan directly to a woman who is running or starting up her own business. (https://www.kiva.org/lend/women)</p>
<p>Develop an infographic that</p>	<p>Become a Change Maker</p>

Share your learning	Make a stand
<p>presents information about your findings from the subset of GDI data that you investigated and the connection between climate change and the education of girls.</p>	<p>Attend a World Vision Youth Conference and meet thousands of other students from around Australia to build your social awareness and learn how your actions can help put a stop to global injustice.</p>
<p>Write a letter to your local Member of Parliament to help strengthen the voice for climate change action in Australia. Find out how to do this here.</p>	<p>Join an organisation, become an ambassador or volunteer</p> <p>Join 1 Million Women and help fight climate change.</p> <p>Volunteer or become an activist with Amnesty International to stand up for women and girls.</p> <p>Become an ambassador for the One Girl, Do it in a Dress campaign.</p>
<p>Develop a social media campaign to raise public awareness about the connection between climate change and the education of girls.</p>	<p>Make a pledge</p> <p>Visit Drawdown EcoChallenge and make a pledge to support the empowerment of women and girls.</p>

Reflection

- **Column A:** Answer the questions in this column on your own first.
- **Column B:** Talk about the findings and your thoughts with your partner, then add anything in column B that you hadn't originally thought of.

	A	B
Look back at your answers to the Think, Puzzle, Explore. What has changed? What has stayed the same?		
What is the most interesting thing that you have learned in this lesson?		

Record any impactful mathematical information that you heard throughout the class here:

These lessons have been created in partnership with

2040, Good Thing Productions

