MIND THE GAP

GENDER & EDUCATION

FACILITATOR GUIDE

Activities for Junior and Intermediate Grades

UNESCO
INSTITUTE *for* STATISTICS

United Nations
Educational, Scientific and
Cultural Organization

Contents

MIND THE GAP
Gender and Education

Introduction

The online data exploration tool **Mind the Gap: Gender and Education** brings gender and access to education statistics to life. Users of the tool, developed by the UNESCO Institute of Statistics, can explore and compare access to education for children, adolescents, students and adults living in different countries of the world.

This Facilitator Guide provides educators and facilitators with engaging activities that are suitable for a wide variety of learning environments. These activities provide an introduction to the topic of gender and education, give a framework for exploring the online data tool, and suggest further ways to extend learning.

Learning Outcomes

Through the learning activities in this guide, participants will:

- Understand that all children have the right to an education
- Examine why millions of children are out of school
- Explore the reasons for the gaps in access to education for girls and boys
- To reinforce mathematical concepts and processes
- Analyze and interpret information and data relevant to inquiry questions
- Evaluate evidence and draw conclusions
- Identify and describe the significance of some indicators commonly used to measure quality of education and quality of life
- Compare findings from lesser-developed countries and more developed countries with respect to selected indicators
- Communicate mathematical thinking visually and in writing using everyday language.

Suggested Audience

The activities in this guide are most suitable for young people in grades 5 through 10 participating in classroom settings, clubs and youth groups, and homeschools that are exploring global citizenship and education themes. Additionally, the content in this guide can be adapted for a wider variety of learning levels and environments.

Time Required

Designate at least five hours to complete all of the activities in this guide as described. Or choose the activities that best suit your time, resources and learning environment. Each activity suggests a time allotment to help you plan.

Mind the Gap Online

To access the online data exploration tool **Mind the Gap: Gender and Education**, visit:
http://www.uis.unesco.org/mind-the-gap

Player Instructions

Find the technical instructions for how to use **Mind the Gap: Gender and Education** on page 11 of this guide and in a separate downloadable PDF at **http://www.uis.unesco.org/mind-the-gap**.

Unequal Education: Millions out of School

Progress towards Universal Primary Education has slowed

Gains have been made towards achieving the goal of universal primary education (UPE) by 2015, an aim that was set during the World Education Forum in 2000. At the time there were 102 million children out of school. That number had dropped to 58 million by 2012. Yet data show that the world is still unlikely to achieve this important goal as progress towards universal primary education has slowed.

Certain regions of the world remain more vulnerable than others. In sub-Saharan Africa, progress has stalled with more than one-half of the world's out-of-school children living in this region. More than one-fifth of the primary school-aged children in sub-Saharan Africa have either never attended school or left before completing primary school. The region is unable to meet the rising demand for education from its ever growing school-age population.

Some Children are More Vulnerable than Others

In many key areas, the gaps between different groups of vulnerable children remain despite progress. Children living in extreme poverty, isolated rural areas and regions grappling with humanitarian crises, such as conflict and HIV and AIDS, and children in socially disadvantaged groups, particularly girls, children with disabilities and working children, have less access to education. In some cases these children live in areas where there are no schools. In many places, families cannot cover the costs of school (tuition, uniforms, books, etc.), while the children may not relate to the content being taught or cannot attend classes because of work or family obligations. And finally, many children are simply discriminated against.

Girls' Education is Important for Development

Despite progress towards gender parity in education, girls and women continue to be disadvantaged and excluded from education throughout their lives. An estimated 31 million girls of primary school age and 34 million girls of lower secondary school age were not enrolled in school in 2011. Only two out of 35 countries in sub-Saharan Africa have equal numbers of boys and girls attending primary school.

Girls' education is not only a fundamental right but also a critical component of achieving other development objectives. Data show that the education of girls and women transforms lives. Educated women are less likely to die in childbirth and marry early or against their will. At the same time, educated women are more likely to: avoid complications during pregnancy; be better informed about health and recognize signs of illness in their children early enough to seek advice and reduce preventable child deaths; ensure their children are nourished; and enrol them in school. Educated women are also more likely to acquire skills that will lead to increased income-earning power.

When all children have equal access to education a ripple effect of opportunity creates conditions for sustainable development and improvements for generations to come.

Sources:
UNICEF (2013). *Basic Education and Gender Equality: Equitable Access*
http://www.unicef.org/education/bege_61657.html (Accessed on 15 February 2014.)

UNICEF (2013). *Basic Education and Gender Equality: Girls' Education and Gender Equality*
http://www.unicef.org/education/bege_70640.html (Accessed on 15 February 2014.)

UNESCO Institute of Statistics (2013). *Gender and Education*
http://www.uis.unesco.org/Education/Pages/gender-education.aspx (Accessed on 10 February 2014.)

Teach UNICEF (2011). *To Educate a Girl – Middle School Viewing Guide*
http://teachunicef.org/sites/default/files/documents/to_educate_a_girl_middle_school_final.pdf (Accessed on 10 February 2014.)

Activity 1: The Test

Every child has the right to an education yet each day millions of children do not go to school. This activity introduces inequities in access to and quality of education.

Purpose

- To understand that not all children have equal access to education and school supplies
- To understand that all children have the right to an education.

Materials

1 desk, pencil, and sheet of paper per participant
Masking tape, red paper and blue paper

Suggested Time

45 minutes

Preparation

- Cut out one small square of paper per participant (enough for ¼ of the total number of participants in red paper, and enough for ¾ of the total number of participants in blue).
- Use the masking tape to mark off an area on the floor equivalent to ¼ the size of the room.
- Designate the small area as the blue area and the large area as the red area.
- Organize the desks so that ¼ are inside the blue (small) area and ¾ are inside the red (large) area.
- Organize the pencils and paper into two piles: one with ¾ of the supplies; another with ¼ of the supplies.

Instructions

1. Stand by the door to welcome the participants as they enter the room. Hand each one a coloured square and ask them to sit in the area designated by their colour.

2. Announce to the group that they will take a spelling test. Each participant is to write her or his name and the dictated words on their own sheet of paper. They must use only the pencils and paper provided. Explain that a mark of 80% or greater is a pass. Ask the participants to not talk during the test.

3. Distribute the small group of supplies to the large group of participants inside the blue (small) area, and the large group of supplies to the small group in the red (large) area.

4. Dictate the words (below) quickly but at a pace that the small group can manage. Deflect questions or protests with simple statements like "do the best that you can with the materials that you have".

5. When the test is complete, have the participants switch their test with a peer. Read the proper spelling aloud and have the participants mark the tests. Then collect the sheets to determine who passed (this will be mostly the small group). Congratulate them on their efforts.

6. At this point, acknowledge the strong feelings in the room. Explain that this has been a simulation meant to highlight unequal access to education around the world. Discuss the questions below and supplement the discussion with information from **Unequal Education: Millions out of School** (page 4).

Dictation Words for Spelling Test

Education	Cooperate	Literacy	Equal
Fairness	Advocate	Justice	Rights

Activity 1: The Test (continued)

Discussion

- What words would you use to describe the situation in this activity?
- How did the members of the large group feel during the activity?
- How did the members of the small group feel during the activity?
- Did you try to do anything to balance the situation? If so, what effect did it have?
- How is learning affected by lack of access to schools, teachers, or enough school supplies? In the short term? In the long term?

Final Comments

Explain that the simulation was based upon statistics of the current number of primary-aged school children (five to 11-years-old) out of school. Three-quarters of the entire population of primary school-aged children not enrolled in school live in sub-Saharan Africa and South and West Asia. The remaining one-quarter of out-of-school children live in all the other regions of the world. Children living in sub-Saharan Africa are particularly vulnerable to not having access to education. Share the following statistics to give context to the situation in sub-Saharan Africa:

- More than one-half of the world's out-of-school children live in sub-Saharan Africa.
- Nigeria is home to the largest population of out-of-school children with one-sixth of the world's out-of-school children living in that country alone.
- In Chad, the average first grade class has 85 pupils.
- In Cameroon, there is one math textbook for every 13 pupils.
- In Niger, 75% of the schools have no toilets.
- In Burundi, 98% of the schools have no electricity.

Adapted from: Fountain, S. (1993). "The Test". *It's Only Right! A Practical Guide to Learning About the Convention on the Rights of the Child*. New York: UNICEF, pp 31-33.

Extension

- **Explore a child's right to an education under the Convention on the Rights of the Child.**

  Organize the participants into small groups of three to five. Give a copy of the United Nations Convention on the Rights of the Child (in child-friendly language) to each group (Download the Convention at the link below).

  Have participants determine which articles outline a child's right to education (*answer: Articles 28 and 29*). Then have them examine the remaining articles and determine which ones are of particular importance to a child's education. Ask them: Which rights need to be fulfilled and protected in order for children to have access to a good quality education? Help the participants see that the articles of the Convention are interdependent and interrelated and therefore all important for the realization of a child's right to education.

  To learn more about the Convention on the Rights of the Child, visit:
  http://www.unicef.ca/en/policy-advocacy-for-children/about-the-convention-on-the-rights-of-the-child

Activity 2: Why are Children Out of School?

A variety of barriers keep millions of children out of school. Begin to explore these barriers using this activity.

Purpose

- To examine why millions of children are out of school.

Materials

Multimedia projector, screen, laptop, speakers

Suggested Time

25 minutes

Preparation

- View the **Reaching Out-of-School Children** video (3:16)
  http://www.uis.unesco.org/Education/Pages/reaching-oosc.aspx

Instructions

1. Write the following statistic on the front board and draw a circle around it:

   Around the world, there are 58 million primary school-aged children out of school (2012).

2. Initiate a discussion about out-of-school children. Ask:

   - Why do you think so many children are out of school?
   - What might make it difficult for some children to get to school?
   - Do all schools have the same resources, teachers and supplies?
   - Are there equal numbers of boys and girls out of school?
   - How does the situation differ around the world?

3. Write the participants' answers in a mind map formation around the central statistic.

4. Show the video **Reaching Out-of-School-Children** (3:16).

5. Ask participants to share what they learned from the video about why children are out of school around the world. Ask them to contribute what surprised them most or what they found most interesting. Record their ideas on the mind map.

6. Explain that the next few activities will help them understand inequitable access to education more deeply. Leave the mind map on the front board in order to add to it further.
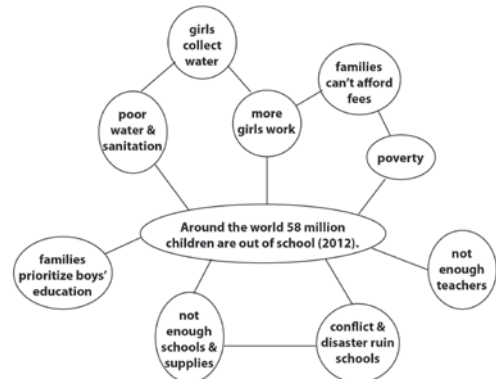
Mind Map

Activity 3: Using Mind the Gap

Visual representations of data tell stories. Use this activity to explore and understand access to education for children around the world through UNESCO's online data exploration tool **Mind the Gap**.

Purpose

- To identify and describe the significance of some indicators commonly used to measure access to education
- To compare findings from lesser-developed countries and more developed countries with respect to selected indicators
- To evaluate evidence and draw conclusions
- To reinforce mathematical concepts and processes.

Materials

Scissors (one for every two participants)
Copies of activity handouts (see Preparation section)
Computer access to the Internet

Suggested Time

1 hour

Preparation

- Write the **Measuring Access to Education Statistics** (see box) on the front board.
- Copy Participant Handout 2 **Measuring Access to Education** (page 10) - one for every two participants.
- Copy the Player Instructions **Using Mind the Gap** (pages 11-13) – one per participant.

> **Measuring Access to Education Statistics**
>
> Primary Enrolment Population = 30,000
>
> Population of Primary School-Aged Children = 40,000
>
> Lower Secondary Enrolment Population = 5,000
>
> Population of Lower Secondary School-Aged Adolescents = 12,000

Instructions

1. Organize the participants into pairs. Handout one copy of **Measuring Access to Education** to each pair. Have them work together to cut out the cards and then organize them into groups of three related cards. Each group will contain a related term, definition and calculation card.

2. Then pairs calculate the value of each of the four indicators using the figures on the board and their understanding from the cards as to how it is calculated.

3. When pairs are finished discuss the correct groupings of cards and calculated values with the large group so pairs can check their work.

4. Be sure to discuss the significance of statistics in understanding complex issues around access to education. Explain that these are just a few of the indicators used to determine access to education.

> **Correct Groupings of Cards**
>
> Cards 1, 2 and 6   Cards 8, 5 and 4
>
> Cards 3, 9 and 7

> **Calculation Answers**
>
> Primary Net Enrolment Rate = 75%
>
> Out-of-School Children of Primary Age = 10,000
>
> Lower Secondary Net Enrolment Rate = 42%

5. Handout one copy of the **Using Mind the Gap: Player Instructions** to each participant. Introduce **Mind the Gap** as an online data exploration tool developed by the UNESCO Institute of Statistics.

6. Ask the participants to form pairs. Explain that each pair will work together to explore **Mind the Gap** using the Player Instructions on their handout.

Activity 3: Using Mind the Gap (continued)

7. When participants have finished their exploration of the tool using the child profile and the adolescent profile ask them to share their findings with their partner and discuss the Big Questions on their handout.

8. Then bring the large group back together and use the discussion questions below to determine what participants learned. Add ideas to the mind map created in Activity 2 (where appropriate) to record learnings.

Discussion

*   What were your impressions of the Mind the Gap tool? What information stood out to you?
*   What were your thoughts on the Big Questions?
    *   Education is a universal human and children's right, but do all children have equal access to education?
    *   In which parts of the world are children more likely to go to school? In which parts are they less likely to go to school?
    *   What are the consequences of poor access to education for individuals and their community?
    *   What did you notice about girls' access to education versus boys'? How do you feel about this?

Extension

*   **Explore the complexities behind the education of girls and why such inequities in access to education still remain.**

    View the film **To Educate a Girl** (74:02), in its entirety or by segment. This film was produced by the United Nations Girls' Education Initiative (UNGEI) in 2010. Filmmakers Frederick Rendina and Oren Rudavsky traveled to Nepal and Uganda, two countries emerging from conflict and struggling with poverty, to find the answer to the question: **What does it take to educate a girl?** The film provides a visually stunning view of that effort through the eyes of girls out of school, starting school or fighting against the odds to stay in school.

    Stream the video:
    http://teachunicef.org/explore/media/watch/educate-girl-feature-length-film

    Download the lessons:
    http://teachunicef.org/sites/default/files/documents/to_educate_a_girl_middle_school_final.pdf

Measuring Access to Education

Cut out the cards below. Then arrange them into the correct groupings of three containing the related **term**, **definition** and **calculation** cards. Finally use the calculations on the cards and the figures on the front board to determine the correct value for each.

Term **Primary Net Enrolment Rate** 1	**Definition** Enrolment of children of the official primary school age group in either primary or secondary schools, expressed as a percentage of the population in that age group. 2	**Term** **Out-of-School Children of Primary Age** –
Calculation $$\frac{\text{Lower Secondary Enrolment Population}}{\text{Population of Lower Secondary School-Aged Adolescents}} \times 100$$ 4	**Definition** Enrolment of adolescents of the lower secondary school age in lower secondary school, expressed as a percentage of the population in that group. 5	**Calculation** $$\frac{\text{Primary Enrolment Population}}{\text{Population of Primary School-Aged Children}} \times 100$$ 6
Calculation Population of primary school-aged children *subtract* Primary Enrolment Population 7	**Term** **Lower Secondary Net Enrolment Rate** 8	**Definition** Children in the official primary school age range who are not enrolled in either primary or secondary school. 9

Using Mind the Gap

Mind the Gap is an online information tool designed to bring global education data to life. It highlights the wide gaps in access to education between girls and boys, and between haves and have-nots. Create a profile and see how your character's situation compares to that of others around the world. The more you play, the more you will learn!

Getting Started

- Use the following instructions to play **Mind the Gap** as part of a classroom or group activity.

- Find a partner to help do the activities and discussion. It's more fun that way!

- Prepare to use **Mind the Gap** on your tablet or laptop.

- Go to **http://www.uis.unesco.org/mind-the-gap**

- Click **"Let's Start"**.

- Create a profile for your character as:

  o   a **child** (7-11 years old)

  o   or an **adolescent** (12-18 years old).

- Play through the game once and consider the **Big Questions** (below) as you go.

- Record your findings on your handout.

- Then experiment with different profiles by changing the age, sex, level of education, and country.

- When you have finished the handout for the child and adolescent profiles, compare your findings with your partner. Give some more thought to the **Big Questions**.

- If time permits, go on to explore the **student** and **adult** profiles as well.

- When everyone has finished, your facilitator will bring you back as a large group for a discussion.

> **Player Tips**
>
> - Use the "Pause/Play," "Next" and "Previous" buttons to move through at your own pace.
>
> - Each statistic is named at the bottom of the screen above the country name.

> **Big Questions**
> Consider these as you play:
>
> 1. Education is a universal human and children's right, but do all children have equal access to education?
> 2. In which parts of the world are children more likely to go to school? In which parts are they less likely to go to school?
> 3. What are the consequences of poor access to education for individuals and their community?
> 4. What did you notice about girls' access to education versus boys'? How do you feel about this?

Using Mind the Gap – Examining the Child Profile

Create your child profile and then record your findings and ideas here. Leave the second column blank so you can compare your results with a partner after you are finished.

1. In the country you chose, what percentage of girls and boys are going to school?

		Your Country:_____	Partner's Country:_____
Primary Net Enrolment Rate (%)	**Female**		
Primary Net Enrolment Rate (%)	**Male**		

2. What is the total number of children out of school in your country and the world?

		Your Country	World	Partner's Country
Out-of-School Children (total #)	**Female**			
Out-of-School Children (total #)	**Male**			

3. What differences (if any) are you noticing about girls' and boys' access to education?

4. What do you think are some of the reasons for the differences between the percentage of boys and girls in school?

5. In the country you chose, what is the percentage of boys and girls who are dropping out before finishing primary school?

		Your Country:_____	Partner's Country:_____
Primary Dropout Rate (%)	**Female**		
Primary Dropout Rate (%)	**Male**		

6. What do you think are some of the reasons why boys and girls are dropping out of school early?

7. What reasons do some of the other characters give for not going to school?

Using Mind the Gap – Examining the Adolescent Profile

Create your adolescent profile and then record your findings and ideas here. Leave the second column blank so you can compare your results with a partner after you are finished.

1. **What is the total number of adolescents out of school in the country you chose and the world?**

		Your Country	World	Partner's Country
Out-of-School Adolescents (total #)	**Female**			
Out-of-School Adolescents (total #)	**Male**			

2. **In the country you chose, what is the percentage of adolescent boys and girls who are enrolled in lower secondary school?**

		Your Country	Partner's Country
Lower Secondary Enrolment Rate (%)	**Female**		
Lower Secondary Enrolment Rate (%)	**Male**		

3. **What is the percentage of adolescent boys and girls that are enrolled in upper secondary school in your country versus sub-Saharan Africa (regional average)?**

		Your Country	Sub-Saharan Africa	Partner's Country
Enrolment in Upper Secondary Education (%)	**Female**			
Enrolment in Upper Secondary Education (%)	**Male**			

4. **What reasons do some of the characters give for why adolescents drop out of or do not attend secondary school?**

5. **In many places more adolescent girls are out of school than boys, but did you notice a country where the opposite was true?**

6. **What do you think your character's chances are of going on to further schooling (e.g. university)? List a few reasons.**

You can end the activity here or explore the **Student** and **Adult** profiles.

Student Profile: The purpose of this sequence is to illustrate enrolment in higher education. Take note of the gender differences and the fields of study. In some countries, especially in North America and Europe, women are more likely than men to be studying at this level. However, the fields of study remain fairly traditional: women in the Humanities, men in Sciences. What do you think you will study later on? Ask your friends too. Is the gender breakdown in your group reflected in the percentages presented in Mind the Gap?

Adult Profile: The purpose of this sequence is to draw attention to the number of illiterate adults in the world. About 774 million adults who never had a chance to go to school can't read and write and will likely never learn. More than 2/3 of them are women. What would your life be like if you or your parents couldn't read?

Activity 4: Statistics Tell Stories

Statistics tell interesting stories particularly when visuals are used to illustrate numbers. In this activity participants create infographics to share with and inform others.

Purpose

- To analyze and interpret information and data relevant to inquiry questions
- To evaluate evidence and draw conclusions
- To create an infographic to convey information about access to education and educate others
- Communicate mathematical thinking visually and in writing using everyday language.

Materials   ## Suggested Time

Copies of **Creating Infographics** (see Preparation section)   1 - 2 hours
Examples of infographics from the Internet
Computer access to the Internet
Materials for creating posters (paper, coloured pencils, stickers, glue, scissors, magazines, etc.)

Preparation

- Make copies of Participant Handout 3 **Creating Infographics** (page 16) – one per participant.
- Source and print examples of infographics from the Internet (see UNESCO examples at:
  http://www.unesco.org/new/en/education/themes/leading-the-international-agenda/efareport/infographics/)

Instructions

1. Explain that with the increased use of the Internet and social media, infographics have become a popular format for displaying complex information in a way that can be easily shared and understood. Today infographics are created using computer programs like Adobe® Illustrator® and other graphic design software. This way the infographic can link to online content and it can be shared easily over social media. Often infographics go viral spreading widely on the Internet and reaching a vast audience. (For the purposes of this activity, the infographics can be made using poster materials if graphic design software not feasible.)

2. Distribute one copy of Participant Handout 3 **Creating Infographics** to each participant. Discuss the content of the handout and pass around examples of infographics.

3. Explain that the purpose of this activity will be to choose an interesting aspect of access to education and frame it as an inquiry question. For example: Why are more girls than boys out of school? How does the education of girls help attain development goals?

4. Then participants research the information and statistics they need to answer the question and tell a story about the topic. Suggest websites that would provide a good place to start research:

- **UNESCO Institute of Statistics**
  – Interactive Data Tools
  http://www.uis.unesco.org/Pages/interactive-content-archive.aspx

- **UNICEF ChildInfo – Education**
  http://www.childinfo.org/education.html

- **UNESCO Education for All Reports**
  http://www.efareport.unesco.org

- **UNESCO Institute of Statistics**
  – Data Centre
  http://www.uis.unesco.org/DataCentre/Pages/default.aspx

Activity 4: Statistics Tell Stories (continued)

5. Have participants create infographics based on their research to be shared and posted publicly. Encourage participants to use hand-drawn, collaged, clip art, and free vector images, graphs and charts. Consider simulating an online environment by having participants post their infographics in a foyer, in common hallways or on bulletin boards and then invite peers to 'like' their infographics with stickers or dots. If participants have access to graphic design software, encourage them to design their infographics on the computer and then to share them online.

Extension

- **Encourage participants to brainstorm an action that they can do individually or as a group for the Global Campaign for Education's Global Action Week.**

  Go to the Global Campaign for Education's website (**http://www.campaignforeducation.org/en/**) for information on the current campaign efforts. There are different education campaigns run by the organization. Participants can choose to contribute to the one that resonates with them the most.

  Be sure to register your action with the GCE so they are aware of your efforts!

Creating Infographics

Infographics have been used widely for many years to visually display data, but with increased use of the Internet and social media infographics have become a popular format for displaying complex information in a format that can be easily shared and understood.

What is an infographic?

An infographic (also called information graphic) is a visualization of data and evidence that helps the reader quickly understand complex ideas. Infographics present data in a visually appealing way in order to tell the story the data illustrates.

Creating an Infographic

When creating an infographic use these steps:

1. Collect interesting, current and reliable data.
2. Determine what you want your reader to understand from the graphic and how they will use it.
3. Brainstorm visual images that will tell the story.
4. Create a visually appealing graphic using colour, words, figures and images that accurately tells the story of the data.
5. Cite all data sources you used.

Be Critical

Consider the following things to ensure your infographic can stand up to a critical assessment by readers:

• Choose data that is up-to-date and from reputable and reliable sources. Ask yourself, did I choose sources that are experts in this field? Do my sources have a reputation for presenting credible research?
• Be careful not to build bias or stereotype into your graphic. Ask yourself, am I manipulating the reader through text, colour or graphics? Do the visuals accurately tell the story of the data?

UNESCO Institute of Statistics (2011). *Education for All Monitoring Report: Infographics*.
http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/ED/GMR/excel/dme/WTD_infog.gif (Accessed on 10 February 2014.)
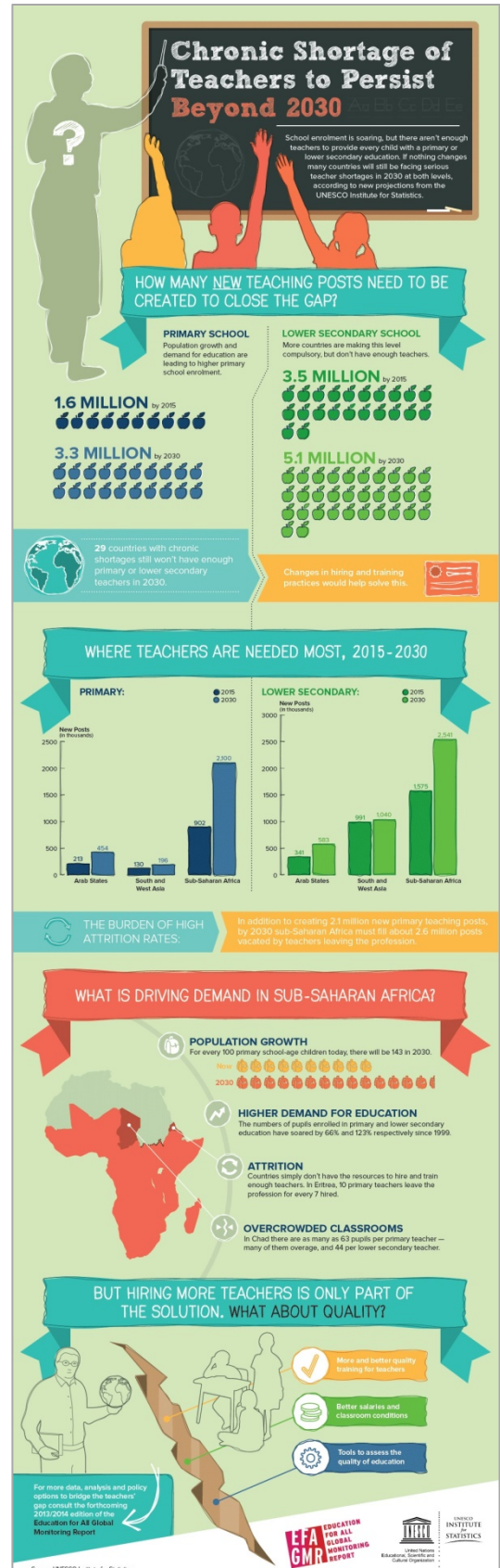
MIND
THE
GAP

GENDER & EDUCATION

Teach young people about the gaps and inequities in access to education using the online data tool - **MIND THE GAP**.

Statistics come alive with a click of a button allowing users to easily compare and contrast education statistics for girls and boys from countries around the world.

Online learning is bolstered by the engaging facilitated activities, suitable for a variety of learning environments, found in this guide.

UNESCO **INSTITUTE** *for* **STATISTICS**

United Nations Educational, Scientific and Cultural Organization