Session 4: Gender Analysis of Curriculum

**OBJECTIVE**
By the end of the session, participants will be able to analyze curriculum content to identify common stereotypes and discuss what teachers can do to counter these common stereotypes.

**SUGGESTED TIME**
2 hours

**MATERIALS**
Chart paper, tape, markers, exercise books, Handout 5, Handout 6, Handout 7, Handout 8, Handout 9, Handout 10, guided practice image cards (Appendix 3), gender analysis group work activity cards (Appendix 3)

1. **Introduction:** Review the definition of **stereotype**. Explain that one of the main purposes in analyzing school curriculum and teaching practices is to recognize those areas where we are perpetuating bias, often through stereotypes about women, men, girls and boys. These stereotypes cut across many different areas. Explain that as teachers, what we do, what we say, how we say it, the books and TLM’s we use all have the possibility to strengthen gender stereotypes or counter them. Ask, if I say the word **counter-stereotype**, what do you think this means? Give the participants a chance to respond and then explain that a counter-stereotype is the reverse of a stereotype. While stereotypes perpetuate a typical way of thinking, eg: “girls prefer to play house while boys prefer sports” a counter-stereotype would send a different message, such as “both girls and boys enjoy competitive sports and have the ability to be good at competitive sports”. We need to first identify the stereotypes and think carefully about the messages we are communicating.

2. **Guided Practice:** Explain to participants that they are going to have an opportunity to work in groups to identify stereotypes, counter-stereotypes and to think about the messages that are communicated. Add that you would first like them to work as a whole group to practice with a few examples. Distribute **handout 5** and ask participants to decide if they view each image as a stereotype or counter-stereotype. Ask them to think about the messages conveyed by each image and write their impressions. Discuss as a whole group. Remind participants that a stereotypic image, in and of itself, is not negative. For example, an illustration of a woman in the role of “mother” is not negative. However, when this is the only role depicted and this limited role is repeated again and again, then we need to ask what message this sends? As they discuss how they view each illustration on **handout 5** and the messages they feel are communicated, complete the following chart with them using the image cards (Appendix 3 – these are the same images that are on their handout.)
Identifying Stereotypes and Counter-Stereotypes

Message:__________________________________________
__________________________________________________
__________________________________________________

Message:__________________________________________
__________________________________________________
__________________________________________________

Message:__________________________________________
__________________________________________________
__________________________________________________

Message:__________________________________________
__________________________________________________
__________________________________________________
The Role of the Teacher in Creating Curriculum Content 6

Teachers play a significant role in developing curriculum content by:

- Selecting learning materials
- Reading produced materials
- Sharing songs
- Retelling stories
- Creating text and images
- Copying text and images

Selecting materials: We need to pay attention to the materials we bring into the classroom. When selecting TLM’s look for gender balance. If we are using cans or bottles for a science class we should look at the labels. Advertising often uses stereotypes of female and male roles to sell products.

Creating your illustrations and diagrams: As teachers we often create our own images. Teachers need to be very conscious when using their own art skills. What we draw on the chalkboard or on charts can present biased messages to the students. Whether it is a picture, graph, or a pie chart, all have the potential to send negative or positive messages.

Creating your own text: Teachers often create their own text in the form of stories, sentences, word problems, etc. What we write can be a reflection of our own bias.

*eg:* Kofi has three cars and Ama has two dolls. How many toys are there in all?

Copying from a textbook: What do we do if we are working with texts that are biased? When copying, change the word problem, change the sentence, change the story, change the picture! We can change these sets before I copy them on the board. How can I change them to make them gender equitable?

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Look at an example from Mathematics, Book Three:

Draw a block graph using the table of student scores. Write 5 sentences about the graph.

<table>
<thead>
<tr>
<th>JOHNATHAN</th>
<th>MERCY</th>
<th>MOHAMED</th>
<th>LYDIA</th>
<th>KWAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>70</td>
<td>40</td>
<td>80</td>
<td>30</td>
<td>65</td>
</tr>
</tbody>
</table>

How can I change this table to show gender balance?

Discuss bias with the students: Sample Questions

- What do you think of this picture?
- Is it fair?
- Do boys also know how to sweep?
- Do girls also enjoy taking part in sports?
- How can we change this picture to make it more balanced?

These discussions require understanding and commitment on the part of the teacher. Teachers cannot be forced to have these discussions. The discussion may come across as false and may even reconfirm bias depending on how the issue is treated.

SAMPLE DISCUSSION

Teacher: Do boys also know how to sweep?
Student: Yes, but girls are better at it.
Teacher: Yes, it’s true. Girls are better at it, but shouldn’t we also help them?

Although the teacher is attempting to be gender sensitive, lack of understanding has confirmed the bias in the illustration. The message we receive is: *sweeping is girl’s work*, just as the picture suggests, *but boys might take time out from their sports to “help out.”* The discussion also suggests that girls are naturally better at domestic chores.
**Singing Songs**

<table>
<thead>
<tr>
<th>KOJO HAMMERS</th>
<th>WE’LL ALL HAVE TEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abdi hammers with no hammer</td>
<td>Fatima put the kettle on</td>
</tr>
<tr>
<td>Then with one.</td>
<td>We'll all have tea.</td>
</tr>
<tr>
<td>Abdi hammers with one hammer</td>
<td>Patience take it off again</td>
</tr>
<tr>
<td>Hammers with one,</td>
<td>They've all run away.</td>
</tr>
<tr>
<td>Then with two,</td>
<td></td>
</tr>
<tr>
<td>Abdi hammers with two hammers,</td>
<td></td>
</tr>
<tr>
<td>Then with three.</td>
<td></td>
</tr>
</tbody>
</table>

When we sing these songs with children what messages do they receive? Can you think of any messages communicated through songs that you sing with your students?

**Teachers need to ask critical questions:**

- Who is at the center of the text/image?
- Who speaks, and who is spoken to or spoken about?
- Who is missing from the text/image?
- Who is shown as active, and who is passive?
- Are people shown as simple gender stereotypes?
Gender Analysis Questions

**Character Attributes**

- Are both female and male characters shown as competent in various areas?
- Do both female and male characters express opinions about important matters?
- Are both female and male characters confident and assertive?
- Do both male and female characters express various emotions?
- Does character action or inaction communicate particular characteristics such as passivity or perseverance?
- Do the words or silence of the characters communicate certain characteristics such as passivity or perseverance?

**Division of Labor and Roles**

- Do both female and male characters do domestic chores? Are those chores based on gender?
- Are both male and female characters involved in childcare, teaching, playing, advising and disciplining, physical care?
- Are both boys and girls shown performing similar household/classroom chores?
- Are menial jobs given to both male and female characters?
- Is female labor shown as obligatory while male labor is linked to currency?
- Do both female and male characters appear to be technically competent?
- Are female and male characters shown in leadership roles in various areas outside the home?
- Do both mothers and fathers hold leadership roles in the family and if so in what areas?
- Do both female and male characters take part in decisions on important matters?

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**Academic Representations**

- Is there a balance in the total number of girls and boys depicted as students throughout the text?
- Are male and female teachers shown teaching various subjects and at various levels?
- Are girls and boys shown going to school at all levels (i.e. basic, senior high, tertiary)?
- Are girls and boys shown having equal opportunity to ask and answer questions?
- Are boys and girls handling the learning materials and equipment?
- Are boys and girls shown having equal access to the teacher and receiving equal attention?
- Are girls and boys praised for similar reasons?
- Are girls and boys depicted as intellectual?
- Are both boys and girls depicted as having an interest and aptitude in math, science and technology?

**Occupations**

- Do both men and women hold jobs requiring high academic training?
- Do both men and women hold high status jobs or positions of power?
- Are women restricted to the lower levels of the occupational hierarchy in any given field (i.e.: female nurse vs. male doctor)?
- Do both women and men engage in various technical trades?
- When salaries are mentioned, are men and women equally remunerated for the same work?
- Is equal respect shown to both women and men for doing the same job with the same qualifications?
- Do both women and men hold positions in government and at various levels?
- Are job titles inclusive? (e.g.: firefighter)
Travel and Transport

- Are vehicles and other forms of transport owned by both women and men?
- Is commercial driving done by both women and men?
- Do both female and male characters have equal opportunities to travel?
- Do both female and male characters use and control various forms of transport (i.e. bicycle, train, airplane, etc.)?
- Do both female and male characters use maps and other navigational tools?
- Do both female and male characters have equal freedom of movement and activity?

Recreation and Leisure

- Do both female and male characters rest and relax?
- Do both female and male characters share equal domestic responsibilities so that they can have time to rest?
- Do both female and male characters have time for hobbies?
- Are male and female characters engaged in games and sports?
- Do both female and male characters have time to visit friends?
- Do both girls and boys have equal access to play objects, field space and field time?
- Do both female and male characters take part in activities which require specialized skills or knowledge?
- Do the representations perpetuate the stereotype of the “delicate, inactive, uncompetitive female” versus the “strong, active, competitive male”?

Commercial Activity

- Do both women and men handle and control cash?
- Do women and men buy and sell goods of the same value (i.e. men buying property vs. women buying sugar)?
- Are both women and men shown as entrepreneurs?
- Do both women and men do banking activities?
- Do both women and men have purchasing power?
Science, Technology, Engineering and Mathematics (STEM)

**Women in STEM:** Across the world women are underrepresented as STEM professionals. Women make up only 8.7% of STEM professionals in the United Kingdom and only 27% of all computer science jobs are held by women in the US. On the continent of Africa, the majority of STEM professionals are men, with women making up 15% of technology jobs and about 25% of science researchers. For example, in Kenya, only 15% of STEM jobs are filled by women and only 2% of registered Engineers are women.

Why are there so few women in STEM?

- Historical bias toward girls’ academic abilities
- Social expectations of balancing home and career
- Low performance of girls in mathematics, science & technical subjects
- Career decisions on subject choices made at an early age without students knowing the impact
- Lack of interest in science subjects (Mathematics, Physics and Chemistry) by many girls
- Lack of mentors and role models for girls
- Lack of career counsellors or gender biased counsellors

In the early part of the 19th century, an argument against the involvement of girls in science was put forward by highly respected educationists. The prevailing attitude was that girls are born biologically inferior in many respects, including their capacity to participate in academic pursuits. This “fact” was published in respected academic journals which stated that girls should not be taught science because the expenditure of nervous energy in the mastery of analytic concepts is harmful to their health. The current situation of women in STEM cannot be disconnected from this biased thinking.

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9Kenya’s Engineers Registration Board membership as at May 2012

Women in STEM

DR. SAHWA ADIL NOUREIN, MEDICAL DOCTOR, SUDAN¹¹

Dr. Nourein specializes in the study of diseases prevention with a focus on diseases that affect women. She encourages girls to study science and keep their career options open. She is also the recipient of the Prestigious UNESCO International Fellowships Program for Young Women in Life Sciences (2013) and through this award is able to further her studies.

FRANCISCA NNEKA OKEKE, PHYSICS, NIGERIA¹²

Professor of Physics at the University of Nigeria at Nsukka, Professor Okeke has recently received the UNESCO Women in Science Award for her contribution to research on climate change. Okeke emphasizes that girls need encouragement and we need to let the guardians and parents know the importance of women participating in science.

Two other Nigerian scientists have won this prestigious international award:

- Grace Oladunni L Taylor (1998) Biochemist
- Adeyinka Gladys Falusi (2001) Molecular genetics

DR. EUCHARIA OLUCHI NWAICHI, ENVIRONMENTAL BIOCHEMIST, NIGERIA¹³

Dr. Nwaichi says she always did well in mathematics and physics. Her parents encouraged her and sent her to a high school that specialized in science. She works at the University of Port Harcourt where she researches methods for removing toxic waste from the environment. Her research focuses on the use of two local plants to that can be used for cleaning up polluted land in the Niger Delta so that it can be used for much-needed food crops.

CAPTAIN IRENE MUTUNGI, PILOT, KENYA

An airline captain is the ultimate position for a professional pilot. Of Kenya Airways' 340 pilots, 26 are women (4 captains, 22 co-pilots). Irene is the first female commercial airline captain in Kenya and Africa. She was inspired to become a pilot by her father who was also a pilot and encouraged her career aspirations!

CATHERINE MAHUGU DIRECTOR OF TECHNOLOGY AND INNOVATION AT SHOP SOKO, KENYA

Catherine studied computer science at the University of Nairobi with a focus on internet technology (IT). At only 25 years of age she is a proprietor of Shop Soko. Shopsoko.com is a website that provides artisans with a location to promote and sell their products locally and internationally. Catherine says, “Don’t be your own barrier. Remove the notion that you cannot do what the men are doing in IT.”

SARAH WANDAI AUTO MECHANIC, KENYA

Sarah has been a mechanic for 10 years. After she completed Form Six, she attended Mombasa College to study business. However, she did not enjoy this course and had a passion for mechanics. She dropped her business course to become an auto mechanic. Like many women, Sarah is a working mother and says she wakes at 5:00 AM to get her child ready for school and to get to work on time. Sarah is working at a mechanic site located at White House area, a few meters away from Nakuru-Nairobi highway. She says she really enjoys her work and is accepted in her role as mechanic.

DR. MARIAN EWURAMA ADDY, BIOCHEMIST, GHANA\(^\text{17}\) (1942-2014)

Dr. Addy is a well-known biochemist who also hosted a TV show *Brilliant Science and Maths Quiz*. She worked as a senior lecturer in Biochemistry at the University of Ghana for much of her career. She is quoted as saying that when she attended school in the 1950s there was a general trend to discourage girls from pursuing science. She said, “Girls were mostly in girls’ schools where there weren’t many good science teachers, and if they were in mixed schools it was not feminine to have an interest in science. You were encouraged to do the proper thing, history or some other course like that.”

REGINA AGYARE, COMPUTER SCIENCE, GHANA\(^\text{18}\)

Agyare graduated from Ghana’s Ashesi University in 2005 with a degree in Computer Science. She was one of the top software developers in her class. After graduation, Regina was hired by a prestigious international bank in Accra as the first and only woman in the IT department. After six years in the banking/technology industry, Agyare decided to follow her passion and founded her own company, Soronko Solutions. She has a passion for promoting an interest in technology among girls and women and people living with disabilities.

FADZAI ZENGEYA, AGRICULTURAL SCIENTIST, ZIMBABWE\(^\text{19}\)

Fadzai is an Agricultural Scientist. Her research focuses on the movement of cattle and buffalo. Her work will increase knowledge of livestock movement, landscape selection and grazing preferences. This will not only aid farmers in acquiring knowledge on how they can better manage their livestock, but also help promote conservation management by examining their movements near wildlife preserves and developing strategies to ensure that the natural habitat is not endangered by livestock movement.

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\(^{17}\) Ministry of Education. (2001). *Gender and Education SourcBook. Girl Child Education Project, WUSC/UNICEF.*


\(^{19}\) [http://www.rp-pcp.org/training/phd/on-going/fadzai-zengeya](http://www.rp-pcp.org/training/phd/on-going/fadzai-zengeya) (Photo credit: © A. Caron)
Women in Leadership

*Power and decision-making*\(^{20}\)

Women are underrepresented in leadership and decision making across the globe.

**Women in Government and Private Sector**

- 19.5% of parliamentarians are women.
- 17% of the world’s Minsters are women.
- Of the world’s heads of state/heads of government only 18 are women.
- Of the 500 largest corporations in the world, only 13 have a female chief executive officer.

**Country specific examples of women in parliament**\(^{21}\)

Rwanda: 56.3%, Ghana: 8.3%, Kenya: 19.48%, Nigeria: 6.8%, United States: 16.8%

**PRESIDENT JOYCE BANDA, MALAWI (APRIL 2012 - 2014)**\(^{22}\)

President Joyce Banda became president of Malawi following the sudden death of President Bingu wa Mutharika. She was Malawi’s fourth president and its first female president. President Banda is known as one of Africa’s most influential women. She has long fought for the rights of women and children and has a particular interest in supporting young women leaders. She says she is influenced by Nelson Mandela and his power of forgiveness and love. She says “I learned that leadership is about falling in love with the people that you serve and the people falling in love with you.”


EXECUTIVE PRESIDENT ELLEN JOHNSON-SIRLEAF, LIBERIA

Ellen Johnson-Sirleaf is the 24th President of the Republic of Liberia and the first elected female Head of State in Africa. She is serving her second term as president after winning the 2011 presidential election. After decades of fighting for freedom, justice and equality in Liberia, in 2011 President Sirleaf shared the prestigious Nobel Prize for Peace with two other women – fellow Liberian Leymah Gbowee, and Tawakkul Karman of Yemen. They were recognized for their non-violent struggle for the safety of women and for women’s right to full participation in peace-building work. President Johnson-Sirleaf says, “The size of your dreams must always exceed your current capacity to achieve them. If your dreams do not scare you, they are not big enough.”

Women as leaders in legal enforcement

- Globally, women average 27% of judges and 26% of prosecution staff.
- In a review of 84 supreme, constitutional and regional courts, women make up 23% of justices and hold the role of Chief Justices in 12 courts.
- On average only around 1 in 10 police officers in the world is a woman.
- Sub-Saharan Africa has some of the highest numbers of women police officers, with 12% being women.

Remember you do not need to be a politician or a president to lead the way. Many women lead in their daily lives by breaking down barriers and opening doors for women and girls.

In Wajir, Kenya Bishara Farah is not only the youngest team member of Wajir’s emergency department, but also the first and only woman to drive an ambulance. She travels extensively over long distances to pick up patients with different medical needs, including pregnant woman, victims of animal attacks, and road accidents. Bishara then rushes them to the hospital for medical care. “My job involves saving lives and this requires me to be alert the whole day. Sometimes I have to speed to ensure I get to people in need of help.” Bishara does not want to discourage other women and girls by telling them how tough her job is, but rather focuses on one thing that motivates her - saving lives. She is a great role model, leading the way for all girls and women to believe they can do anything they set their mind to even if they are the first to do it!

What can teachers do?

- **Supplement your curriculum**: Highlight the success stories of woman as leaders in various areas such as politics, law, journalism or business.
- **Avoid tokenism**: Do not present women as tokens of female success. Make it the norm!
- **Highlight leaders in your community**: Invite women and men from your community who have succeeded as leaders to visit your class. Ask them to talk about their path to success, their challenges, how they dealt with their challenges and so on.

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24 UN Women,(2012). Progress of the World’s Women Fact Sheet. UN Women New York, N.Y. USA

Language Bias

Gender bias is embedded in our everyday language. We do not tend to question our words and ask what messages are communicated through language.

Traditional Sayings

In all cultures, traditional sayings or proverbs can also be vehicles for gender bias. Read the proverb below. What message is embedded in the language?

“The hen knows when it is morning, but it leaves the crowing to the cock.” (Akan Proverb, Ghana)

“This is to say men are entitled to have a voice, and women should know this and hold their breath, even when they know what is to be said.” (Interpretation by Amba Ewudziwa at the Symposium on Violence Against Women, November 24, 1998).

Do you have any proverbs or saying that you feel promote gender bias?

The words we choose

As teachers, the words we choose send messages to our students. We need to make a conscious effort to use gender equitable terms. Do you see any bias in any of the terms below? How can we change them to make them inclusive?

<table>
<thead>
<tr>
<th>GENDER BIASED</th>
<th>GENDER INCLUSIVE ALTERNATIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cameraman</td>
<td>Camera operator</td>
</tr>
<tr>
<td>Chairman</td>
<td>Chair, Chair person</td>
</tr>
<tr>
<td>Fireman</td>
<td>Firefighter</td>
</tr>
<tr>
<td>Forefathers</td>
<td>Ancestors</td>
</tr>
<tr>
<td>Manmade</td>
<td>Handmade, manufactured, artificial</td>
</tr>
<tr>
<td>Mother land</td>
<td>Home land, home country, birth country</td>
</tr>
<tr>
<td>Mother tongue</td>
<td>First language</td>
</tr>
<tr>
<td>Newsman</td>
<td>Reporter, newscaster, journalist</td>
</tr>
<tr>
<td>Policeman</td>
<td>Police officer, Police</td>
</tr>
<tr>
<td>Salesman</td>
<td>Sales person, sales associate/agent</td>
</tr>
<tr>
<td>Watchman</td>
<td>Security Guard</td>
</tr>
<tr>
<td>Workman</td>
<td>Workers, construction worker, laborer</td>
</tr>
</tbody>
</table>
Can you think of any gender biased terms in other languages?

- Kojo-Basia (tomboy, Fanti)
- Obaa-Barima (woman-man, Twi)
- Yoobi (mother’s boy, Ga)

How can I change the sentences below to make them gender equitable?

- When an editor rushes through his work the publication suffers.
- A doctor uses his stethoscope to listen to the patient’s heart.
- A mechanic usually has to save at least Ksh 10,000 to buy his tools.
- A nurse needs to show great care and concern for those in her care.
- A parent who reads to a child promotes his intellectual growth.
- How does a farmer look after animals on his farm?

We can make the above sentences gender inclusive by:

- **Eliminating the pronoun**: A mechanic usually has to save Ksh 10,000 before buying tools or when an editor rushes though work the publication suffers.
- **Using the Plural**: Doctors use their stethoscopes to listen to the patient’s heart.
- **Replacing with he/she**: A nurse needs to show great care and concern for those in his or her care.
- **Repeating the noun**: A parent who reads to a child promotes the child’s intellectual growth.

**Gender Bias and Body Language**: Body language shows an individual’s attitudes, emotions and feelings. It can be displayed by behaviors such as relaxed arms, folded arms, gesturing warmly, body tense, eye contact, yawning relaxed posture or fidgeting.

- Body language, and the way it is interpreted, is cultural. For example, sustained eye contact is interpreted differently in different cultures.
- Body language is also linked with gender. Since men and women are socialized differently we might display different body language.
- The gender of the speaker may also influence our body language. In professional situations (e.g., staff meetings) and in the classroom we need to be aware that our body language shows equal attention, encouragement and general responsiveness.
As educators we need to ask critical questions: If we are speaking, reading a book, preparing notes, writing sentences or stories we can ask critical questions to determine if the language is biased:

- Are terms such as 'he' and 'man' used generically? (i.e., are male terms used when referring generally to both genders?)
- Are job titles inclusive or exclusionary? (e.g., fire man, fire fighter)
- Are separate terms used when giving job titles? (chairman, chairwomen)
- Are terms made exclusive through illustration? For example, are the words 'government' or 'doctor' supplemented by only male representations?
- Is there bias in the way the language has been arranged? (i.e., do male terms always precede female terms?)
- Are some characters named while others become 'she,' 'the woman' or 'the wife'?
Appendix 3: Activity Cards
Gender Analysis: Illustrations for Guided Practice
Gender Analysis Activity Cards: Division of Labor
Gender Analysis Activity Cards: Recreation and Leisure

A day at the lake

Back home
Gender Analysis Activity Cards: Travel and Transport

Travel to a conference
Gender Analysis Activity Cards: Academic Representations

Counting

Singing

Science Class - Botany

Math Class

Science Experiment – electricity

Science Class

Are there enough Science books for each girl to have one?
Gender Analysis Activity Cards: Occupations
Gender Analysis Activity Cards: Mathematics Textbooks

Matching Sets

Are there enough buckets for each girl to have her own bucket?

Matching Sets

Can each boy have his own ball?
Zigawa wants to nail together 3 pieces of board. One piece is 1.2 cm thick, another piece is 3.1 cm thick and the third piece is 0.7 cm thick. He doesn't want the end of the nail to be seen. What is the longest length of nail that Zigawa can use?

Mrs. Okine bought sugar for KES 500, oranges for KES 400 and eggs for KES 300. How much change did she get from KES 2000?

Mr. Addo bought a car for KES 1,000,000.00 The value of the car decreased by 10% after one year. Find the value of the car after one year.
Classroom Organization Activity Cards

Mats

Rows of desks facing each other

Benches

Traditional rows facing the board
