Factors affecting disparity in education

- Demand side
  - socio-economic
  - cultural factors which affect the behaviour and the choices of parents and students

- Supply side
  - political and institutional factors
  - factors linked to the school

Factors affecting disparity in education

- Socio-economic factors
  - Poverty
  - Direct costs (fees, uniforms, transportation)
  - High opportunity costs/lower rate of return
  - Girls needed for household/agricultural tasks
  - Residence in remote, low population areas
  - Limited employment opportunities for graduates
  - Lower remuneration for women

- Cultural factors which affect the behaviour and the choices of parents and students
  - Parents' low level of education
  - Lower priority for girls' education
  - Girls' education perceived as incompatible with traditional beliefs and/or religious principles
  - Early marriages and pregnancies
  - Role of the girl/woman as a wife and mother
  - Sceptical attitudes towards the benefits and outcomes from educating girls with farming cycle

Factors affecting disparity in education

- Political and institutional factors
  - Budget constraints; Structural adjustment programmes
  - Insufficient public support for the poor
  - Political instability; Inconsistent educational policies
  - Poor quality of education programmes
  - Ill-adaptation of education systems to local learning needs
  - Lack of clear strategy for women and girls' education
  - Lack of public support for women in scientific activities
  - Limited employment prospects
  - Poor data collection mechanisms; Inadequate elements for progress assessment and policy formulation
Factors affecting disparity in education

- Factors linked to the schools
  - Limited school/classroom space
  - High school fees
  - Low proportion of female teachers
  - Teachers untrained/not sensitized to gender issues
  - School curricula in conflict with traditional culture
  - Orientation of girls/women to non scientific fields
  - Lack of accommodations for or exclusion of pregnant adolescents and young mothers
  - Sexual harassment; insecurity
  - Distance from school
  - Lack of school canteens
  - Poor quality of hygienic facilities
  - School calendar incompatible with farming cycles

- Political and institutional factors

Socio-economic factors

- Limited access to schooling
  - Low female enrolment
  - School drop out
- Low participation
- High proportion of illiterate
- Scarce or low scale employment opportunities
- Reduced contribution to national economic and social development
- Limited bargaining power
- Absence from the political decision-making processes.

Cultural factors which affect the behaviour and the choices of parents and students

Factors linked to the school

- Limited access to schooling
- Low female enrolment
- School drop out
- Low participation
- High proportion of illiterate
- Scarce or low scale employment opportunities
- Reduced contribution to national economic and social development
- Limited bargaining power
- Absence from the political decision-making processes.

Analysing disparity

- Disparity issues can be described with reference to different kinds of data sets.
- At the simplest level – the absolute figures and the absolute difference between the numbers of male and female illiterates, pupils, students, teachers, etc.
- Other measurement can also be applied to derived statistics in the form of indicators such as literacy rates, admission rates, enrolment ratios, school survival and so on.
- At a more sophisticated level one can use specific gender-disparity indicators as well as multivariate statistical methods for the purposes of a more in-depth analysis.

Analysing disparity table:

<table>
<thead>
<tr>
<th>Region</th>
<th>Male Illiterate</th>
<th>Female Illiterate</th>
<th>Male %</th>
<th>Female %</th>
<th>Male-Female</th>
<th>Pct Male-Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>World total</td>
<td>884.7</td>
<td>592.7</td>
<td>148.0</td>
<td>95.0</td>
<td>53.0</td>
<td>47.0</td>
</tr>
<tr>
<td>Developing countries of Asia</td>
<td>651.0</td>
<td>409.0</td>
<td>152.0</td>
<td>106.0</td>
<td>46.0</td>
<td>54.0</td>
</tr>
<tr>
<td>East Asia Oceania</td>
<td>52.0</td>
<td>54.0</td>
<td>98.0</td>
<td>101.0</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Latin America/Caribbean</td>
<td>406.0</td>
<td>406.0</td>
<td>101.0</td>
<td>101.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Eastern Europe</td>
<td>120.0</td>
<td>120.0</td>
<td>100.0</td>
<td>100.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>415.0</td>
<td>256.0</td>
<td>169.0</td>
<td>123.0</td>
<td>46.0</td>
<td>54.0</td>
</tr>
<tr>
<td>Developed countries</td>
<td>152.0</td>
<td>152.0</td>
<td>100.0</td>
<td>100.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>


Interpretation:
- In all developing regions the number of female illiterates is higher than that of male illiterates;
- If we rank developing regions in terms of the absolute gap, Southern Asia scores the highest gap;
- If we rank them according to either the percentage female, the gender ratio Eastern Asia/Oceania presents the highest disparity.

Analysing disparity diagram:

- All the bars’ upper edges are above the level of 50%, indicating that the number of female illiterates exceeds the number of males in all regions of the world, including the developed countries.

Interpretations:
- The columns of the pie show that the absolute number of both male and female illiterates is highest in Sub-Saharan Africa;
- The proportion of males is highest in Sub-Saharan Africa and in Southern Asia; it is higher in Latin America/Caribbean, the region which comes closest to gender parity;
- Although the number of illiterates in Sub-Saharan Africa is only half that of Southern Asia, the former region, with 77% of women among illiterates, shows the highest gender disparity.
One should also not forget that, due to the structure of the population, where women outnumber men, especially among older generations, equality does not necessarily coincide with 50%. For this reason it is appropriate, when measuring disparity, to provide also a comparison of rates by gender.

It is always necessary, when analyzing education and literacy not to rely solely on absolute figures but also on relative values, such as the rates and ratios calculated in relation to the corresponding population.

### Table 1: Enrolled adult illiteracy rates and gender parity index by sex and by region, 1995

<table>
<thead>
<tr>
<th>Region</th>
<th>Male (%)</th>
<th>Female (%)</th>
<th>GPI (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>World total</td>
<td>22.6</td>
<td>21.1</td>
<td>17.2</td>
</tr>
<tr>
<td>Developing countries of which:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>43.2</td>
<td>33.4</td>
<td>19.7</td>
</tr>
<tr>
<td>Arab States</td>
<td>65.4</td>
<td>51.1</td>
<td>24.9</td>
</tr>
<tr>
<td>Latin American/Caribbean</td>
<td>84.4</td>
<td>62.3</td>
<td>22.1</td>
</tr>
<tr>
<td>Eastern Asia/Oceania</td>
<td>95.4</td>
<td>94.9</td>
<td>14.2</td>
</tr>
<tr>
<td>Southern Asia</td>
<td>90.1</td>
<td>83.4</td>
<td>26.9</td>
</tr>
<tr>
<td>Developed countries</td>
<td>1.3</td>
<td>1.1</td>
<td>0.6</td>
</tr>
</tbody>
</table>


### Table 2: Gross enrolment ratios in secondary education by sex and by region, 1995

<table>
<thead>
<tr>
<th>Region</th>
<th>Male (%)</th>
<th>Female (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>World total</td>
<td>103.2</td>
<td>109.9</td>
</tr>
<tr>
<td>Developing countries of which:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>72.8</td>
<td>50.9</td>
</tr>
<tr>
<td>Arab States</td>
<td>81.7</td>
<td>51.8</td>
</tr>
<tr>
<td>Latin American/Caribbean</td>
<td>116.3</td>
<td>63.1</td>
</tr>
<tr>
<td>Eastern Asia/Oceania</td>
<td>177.1</td>
<td>58.4</td>
</tr>
<tr>
<td>Southern Asia</td>
<td>184.6</td>
<td>52.3</td>
</tr>
<tr>
<td>Developed countries</td>
<td>120.9</td>
<td>115.0</td>
</tr>
</tbody>
</table>


### Absolute gaps versus relative disparities

The absolute gender gap $M - F$ and Gender parity index (GPI) disparities in different ways.

Disparities in favour of women are indicated by a negative value of the gender gap and by a value exceeding 1 of the gender parity index.
Interpretation:

- All regions fall below the diagonal. In other words, total equality between male and female enrolment ratios has not been reached in any of the regions of the world except for developed countries where the gap is insignificant.
- Sub-Saharan Africa has the lowest enrolment ratios and quite high gender disparity. Southern Asia and the Arab States have somewhat higher enrolment ratios, but fairly high gender gaps and disparity.


Interpretation:

- Combined gross enrolment ratios for primary and secondary education are, on average, lower for females (68) than for males (78);
- Both the standard deviation (SD) indicate that cross-country variation of female enrolment ratios is larger than that of male enrolment ratios.

Changing over time

- Disparities can also be analyzed by looking at changes over time to see whether gap become wider or narrower.

Interpretation:

- For the world as a whole, the improvement in the female enrolment ratios (columns 2 and 5) is larger than that in the male enrolment ratios (columns 1 and 4) at both levels of schooling and there is a consequent decline in the gender gaps at both levels (columns 3 and 6).
- For the developing regions:
  - gender gaps decrease in all regions (the values in column 3 and 6 are always negative);
  - there are increase in the female enrolment ratio for both primary and secondary schooling except in Sub-Saharan Africa;
  - there are comparatively significant increase in female enrolment ratio in Southern Asia.
Interpretation:
- The decrease of the gaps between 1985 and 1992 is observed for all regions (with the exception of the developed countries, where the gap was negligible in 1985).
- Among them, Eastern Asia and Oceania is the biggest.

Interpretation:
- In all the regions the male GER is higher than the female GER in both years, except for developed countries, where male and female ratios are very close.
- The biggest increase in GER was in the case of Southern Asia.
- In the case of Sub-Saharan Africa there was a decline in GER during the period under review.
- In four of the developing regions (Sub-Saharan Africa, Arab States, Southern Asia and Eastern Asia) the change was in favour of girls.

Comparing input and output

• Identify the issue (what you want to say)
• Find out an appropriate data, indicators
• Check the data
  • Accuracy
  • Source
• Choose an appropriate presentation
  • Table
  • Chart/Graph
  • Map
• Decide what you want to find out from the data (pattern, gap, trend)
• One to five conclusions per presentation
  • Informative
  • Succinct
  • Clear

Acknowledgement

This presentation is prepared based on the UIS publication on "Gender-Sensitive Education Statistics and Indicators – practical guide". An electronic format of full report could be found in the CD on workshop materials.

Hand-on assignment

Using the data from your country, please prepare a one and half or two pages of analytical write-up highlighting disparity (gender, geographical, socio-economic, cultural context) in one of the following areas:
• Access to Education
• Participation in Education
• Quality in Education
• Transition to one education level to another
• Literacy and non-formal education
• Early childhood Education
• Internal efficiency

The write-up should include at least one graph/table supporting the analysis.