

Towards Gender Equality in Education Policies and ICTs

An Action Brief and Toolbox

A collaborative effort by:







Action Brief

Information and Communications Technologies (ICTs) are radically transforming how we live and work, our future opportunities, our societies, and our economies. But what if fifty percent of the population doesn't have the same access to education and technologies as others?

Education and ICTs have been two of the most powerful forces of change in the last century, opening the doors to knowledge, opportunity, and better quality of life for

people in all corners of the globe. Education of girls and women has numerous benefits, including better health, lower fertility, and reduced infant mortality. ICTs enable women to increase their productivity and economic opportunities, improving their lives and those of their families and contributing to their communities and economies in the process. Educational systems are rapidly changing with the use of ICTs in schools. The integration of ICTs in schools has enabled new methods for teacher training, new pedagogical approaches, new assessment techniques, and new ways to organize courses and schools. ICTs are considered one part of the broader context of educational transformation. Policies and programs linking ICTs to curriculum, pedagogy, assessment, teacher professional development, and school organization and

"Gender equality is a core development objective in its own right. It is also smart economics. Greater gender equality can enhance productivity, improve development outcomes for the next generation, and make institutions more representative"

 World Bank, World Development Report 2012: Gender Equality and Development

management can transform an entire educational system and guide everyday practices of teachers and school leaders. Furthermore, ICT in Education Policy can connect education transformation to important social and economic development goals, such as promoting gender equity and reducing the gender gap. Gender gaps in education and use of ICT are holding women and girls back from tapping their potential. About two-thirds of illiterate adults in the world are women. An average of almost 25% fewer women than men are online in developing countries, and in Sub-Saharan Africa, the average shoots up to 45% fewer women than men.

Addressing gender inequality can have tremendous benefits. For example, adding 150 million more women and girls online, beyond the 450 million who are projected to get Internet access will:

- "Empower 600 million women to enhance their knowledge, skills, and rights
- Expand horizons for households totaling almost three billion people worldwide
- Open a market opportunity of USD 50-70 billion
- Contribute an estimated USD 13-18 billion annually to GDP in developing countries."

What is needed is conscious, concerted action focused on improving gender equality in education related to ICTs.

Four-Steps Toward Gender Equality

Policymakers are key actors in creating the foundation for gender equality, thereby ensuring that girls, women, societies and economies can fully benefit from education and ICT programs. This brief describes a four-step process to help policymakers think through how to advance gender equality in education policy

development in relation to ICTs.

By understanding gender issues, implementing actions to close gender gaps, working to improve those actions and measuring results, education leaders can strengthen their ICT in Education policies, enabling them to transform opportunities and lives for both females and males.

This brief builds on the Intel® Education Transformation Policy Guide and is intended to serve as a roadmap to guide gender-focused workshops for education policymakers throughout the globe. A core tenant of the approach is gender analysis – that is looking at all stages through a gender lens which entails examining how women and men, girls and boys have differentiated experiences and then addressing these. It is not just about adding girls and women to the mix and stirring. A version of this process was used in a symposium for policymakers in South Asia. The Appendix to this brief provides a toolbox of materials that can be used for similar workshops on Gender Equality in relation to Education and ICTs in other regions. The materials include a Sample Workshop Agenda, Introduction and Discussion Notes for facilitators, and other content that can be adapted and tailored to the specific gender challenges of different regions.

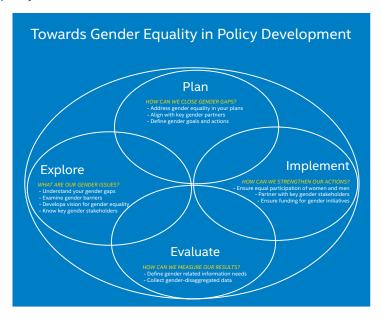
I. EXPLORE: WHAT ARE OUR GENDER ISSUES?

Understand your gender gaps.

A hard look at facts is the critical first step in assessing how gender affects education and ICTs. Examine a range of key indicators related to gender, education and technology to understand the nature and dimension of gender issues in a country and region. For example, education leaders should know whether girls are enrolling and completing primary, secondary and tertiary education at the same rates as boys; whether they are participating in math, science and technology education programs at equal rates; and whether they are graduating from computer science and engineering schools at equal rates. Access to knowledge through mobile education tools also influences access and opportunities, so policymakers should know male/female usage of the internet and cell phones.

Examine gender barriers.

Next, before attempting to address such gender gaps, it is important to understand their fundamental roots. Various socioeconomic, institutional, community, family, cultural and individual factors can act as barriers to girls' access to and use of education and educational tools, such as ICTs. Specifically, things like



curricula relevance, (safe) access to and interest in ICTs in after-school settings, prioritization of STEM/ICT resources for boys over girls, girls self-selection out of STEM/ICTs due to stereotypes, and lack of connection of STEM to real world issues are just a few examples. The use of methodologies to examine differentiated experiences of girls and young women in education and in using education tools like ICTs are important in this regard.

Develop a vision for gender equality.

Grounded with an understanding of current realities, leaders need to have a vision of what they want to achieve in order to facilitate concerted action to address barriers. Actions could include: addressing issues of safety and violence for young women to access education and ICTs in school settings, creating mentorship opportunities for girls, investing resources into STEM programs for girls as a few examples. It is important to develop a vision of education that will advance the economic and social development of females as well as of males. It is also critical to ensure that the vision specifically addresses and advances equal access to education and use of educational tools, such as ICT.

For instance, faced with alarming gender gaps in education, the Government of Papua New Guinea developed a Gender Equity in Education Policy, which states, "Schools have a role and a responsibility to contribute to the achievement of equality between males and females and in improving conditions of life for girls and women." The policy helps to ensure a common understanding across programs and facilitates coordinated joint action. http://planipolis.iiep.unesco.org/upload/Papua%20New%20Guinea/Papua_New_Guinea_gender_equity_guidelines.pdf

II. PLAN: HOW CAN WE CLOSE GENDER GAPS?

Define gender goals and actions.

With the vision in mind, be concrete in determining clear, practical steps to achieving the vision. Define final and intermediate goals to overcome barriers to girls' education, along with relevant actions, programs, or initiatives to achieve these goals.

Australia's Gender Framework for education articulated five strategic directions, each of which was supported by specific actions. The directions are:

- Understanding the process of construction of gender
- · Curriculum, teaching, and learning
- Violence and school culture
- Post-school pathways
- Supporting change

http://www.mceecdya.edu.au/verve/_resources/genderframwk1-22.pdf

Address gender equality in your plans.

Ensure your education and ICT plans are designed to benefit females and males equally. Specific goals and actions tailored for girls to ensure their ongoing participation and success in education programs are often needed to achieve significant progress. Recognize that barriers and challenges as well as action plans to address them need to be geographically and culturally specific and relevant. There is no one size fits all solution across geographies.

Bangladesh is an example where explicit attention to gender equality helped to attain dramatic gains in primary school participation and achieve gender parity. The creation of a "child-friendly" school environment, focusing more on girls was a key objective, and "enabled girls to achieve the same levels of enrolment, completion and achievement as boys."

Align with key gender stakeholders.

Women's organizations and ministries understand the gender issues in your country and region and are already engaged in addressing them. Know the missions of these groups and align with them to help reach girls and women and overcome the constraints to their education. Such partnerships will enable you to achieve your vision more readily.

III. IMPLEMENT: HOW CAN WE STRENGTHEN OUR ACTIONS?

Ensure equal participation of women and men.

The way we implement our actions help to determine their success. Gender equality is not only a goal, but a way of operating, as well. Engaging women can bring different perspectives to a program, and also provide role models and resources for girls. Ask if both women and men are equally participating in the management and implementation of your education programs. If not, what measures can you take to work towards their equal participation?

Partner with key gender stakeholders.

Collaborating with the groups who know how to reach and work with girls gives education programs an advantage in ensuring girls' ongoing participation, particularly for science and technology education programs with low girls' participation rates. Develop partnerships with women's organizations and ministries, and other relevant groups to strengthen girls' access to your education programs, as well as their results.

Ensure staffing and funding for gender initiatives.

The best-laid plans have little meaning unless they have the people and financial resources to carry them out. Identify dedicated staff—and funding sources for the gender strategies and actions you develop. Develop a funding plan.

	SCHOOL POLICY OPCANIZATION AND MANAGEMENT
	SCHOOL POLICY, ORGANIZATION, AND MANAGEMENT
lave we provided a learnin	g environment that is socially and culturally supportive of female as well as male students by:
	Overcoming barriers to schooling for girls, such as lack of female teachers and other role models and lack of safe transport to school?
	Addressing parental concerns about female modesty, safety, and the lack of economic returns to girls' education, which can hamper girls' school attendance and interest to pursue quality education
	Focusing on girls' school completion rates, as well as their enrollment not only for formal education (literacy realated); but also for extracurricular activities/vocational education?
	Providing girls with math & science mentors?
	Supporting the involvement of both mothers and fathers in their children's education?
	CURRICULUM & ASSESSMENT
lave we developed curricu	a and assessments that are relevant for both females and males by:
	Affirming gender equality and positive gender norms?
	Strengthening the self-confidence, agency & decision-making of girls?
	Enhancing 21st century skills such as creativity, innovation, collaboration etc which are very critical in today's time?
	Tailoring curricula to address interests and learning styles of girls which ensure gender parity
	Enhancing female business skills and productivity, thereby improving income potential?
	PROFESSIONAL DEVELOPMENT, TEACHING, AND LEARNING
lave we sufficiently trained	our teachers and made them able enough to support the learning of both female and male students by:
	Reinforcing gender equality and addressing negative gender norms and stereotypes?
	Developing girls' critical skills, collaborative learning, and other relevant methods?
	Inculcating 21st century skills such as collaboration, decision making by way of practicing and role plays etc?
	Strengthening girls' self-confidence, agency & decision-making skills?
	Ensuring equal access to and use of technology and digital learning resources by both female and males?
	Involving both mothers and fathers in their children's education?
	Ensuring both female and male mentors participate in helping students?
	Encouraging girls to take up STEM disciplines which are usually viewed as more favorable towards boys than girls?
	RESEARCH & EVALUATION
	Do we collect gender-disaggregated information on student participation, achievement and retention?
	Do we regularly assess progress on gender equality?

IV. EVALUATE: HOW CAN WE MEASURE OUR RESULTS?

Define gender-related information needs.

Once you have planned your actions, ensure you can capture their results in your monitoring and evaluation efforts. Determine what information will be needed to understand the participation, retention and achievements of both female and male students. Then work with experts to define monitoring and evaluation strategies to gather this information. Ensure that information collected is disaggregated by gender to enable the identification and assessment of gender gaps, such as differences in the way females and males engage in and benefit from education program efforts.

Assess progress on Gender Equality. Collecting relevant data is not enough. Efforts must be made to review and assess them by specialists in the field. Ensure program mid-term and final evaluations include an assessment of progress on gender equality, along with specialized staff to carry them out.

Addressing gender equality should be part of an integrated process of policy development and educational transformation. The steps in this brief were developed to align with the overall planning process described in the Educational Policy Brief and Policy Development Toolkit, which provide government agencies with an extensive set of policy development tools.

Achieving Success: The Bangladesh Example

Despite its modest gross national product, Bangladesh has made tremendous strides in education in recent decades – including achieving gender parity in primary and secondary education. How did it do it and what lessons can be drawn from its success?

A number of actions focused on improving gender equality in education contributed to Bangladesh's extraordinary success. These included:

- Articulating gender equality goals. One objective of its national education project was to create a "child-friendly" school environment with a specific focus on girls.
- Creating female role models. Bangladesh increased its percentage of female teachers to 38 percent in 2001 from 21 percent in 1990.
- Developing gender focused strategies. Bangladesh undertook a national communication campaign to promote quality primary education and girls' education.
- Partnering to improve reach to girls. In 2005 the NGO, BRAC, was providing access to education for over 1.4 million children of the rural poor, 65 percent of whom were girls.

Sources

Nasreen, Mahbuba and Sean Tate, 2007. Social Inclusion: Gender and Equity in Education Swaps in South Asia: Bangladesh Case Study. Katmandu: UNICEF http://www.ungei.org/resources/files/Bangaladesh_Case_Study.pdf; UNICEF. The Second Primary Education Development Programme (PEDP-II) http://www.unicef.org/bangladesh/Quality_Primary_Education_(PEDP-II).pdf

Appendix: Toolbox for Action

- Introduction
- Example Workshop Goal, Objectives and Expected Outcomes
- Example Workshop Agenda
- Example Facilitators' Agenda
- Introduction and Discussion Notes for Facilitators
- Example Pre-Work Tool
- Commitment Card Template
- List of Workshop Materials
- Gender Prompts by Policy Planning Phase
- Gender Resources

INTRODUCTION

This Toolbox for Action is full of materials to be used to help guide workshops for policymakers on Gender Equality in relation to Education and ICTs. Materials similar to these were used in a symposium for policymakers in South Asia in September 2013. These materials should be adapted as appropriate to local constraints and challenges in other regions. This introduction provides some tips on how they may be used and adapted.

Workshop Intensity

The Workshop Agenda and related materials are divided into different leading questions and activities. As needed, these can be edited for low, medium and high intensity workshops, as appropriate to the time availability and needs of policymakers in different regions, as follows or through other variations:

Low Intensity Workshop (4 hours)

I. WHERE DOES GENDER FIT IN OUR POLICY DEVELOP-MENT PROCESS?

II. WHAT ARE OUR GENDER ISSUES?

Activity 1: Brief Presentations on Gender Disparities

Activity 2: Visual Ranking of Key Gender Barriers

Medium Intensity Workshop (8 hours)

I. WHERE DOES GENDER FIT IN OUR POLICY DEVELOP-MENT PROCESS?

II. WHAT ARE OUR GENDER ISSUES?

Activity 1: Brief Presentations on Gender Disparities

Activity 2: Visual Ranking of Key Gender Barriers

III: HOW CAN WE CLOSE GENDER GAPS?

Activity 3: Identification of strategies and practical actions to improve gender equality related to education and ICTs

High Intensity Workshop (12 hours)

Pre-work

I. WHERE DOES GENDER FIT IN OUR POLICY DEVELOP-MENT PROCESS?

II. WHAT ARE OUR GENDER ISSUES?

Activity 1: Brief Presentations on Gender Disparities

Activity 2: Visual Ranking of Key Gender Barriers

III: HOW CAN WE CLOSE GENDER GAPS?

Activity 3: Identification of strategies and practical actions to improve gender equality related to education and ICTs

IV. WHAT ACTIONS CAN WE TAKE?

Activity 4: Action Commitments

V. HOW CAN WE MEASURE OUR RESULTS?

Activity 5: Defining Gender Indicators

Key Actors

The materials in this toolbox refer to the following key actors:

- Moderator An internal expert who is well versed in the Intel Education Transformation Policy Guide so that they can help to tie all the efforts of this workshop back to the policy development process. They introduce and close each session, and help to guide it if needed, to ensure it achieves its expected outcome. They will use the Workshop Goals, Objectives & Expected Outcomes, Facilitators' Agenda and the Introduction and Discussion Notes. They may also use the Gender Prompts to ensure a close link with the policy development process.
- Facilitator An external expert in gender, ICT or education invited to facilitate a particular session or activity.
 They will follow the lead of the Moderator and bring in their own expertise to enrich the activities and discussions. They will use the Workshop Goals, Objectives & Expected Outcomes, Facilitators' Agenda and the Introduction and Discussion Notes.
- Gender Consultant An internal or external expert in gender who will ensure the gender aspects of the workshop stay grounded in practical examples. They may pull additional materials from the Gender Resources if they feel workshop participants may need extra coaching or specific examples in particular areas. They also will use the Workshop Goals, Objectives & Expected Outcomes, Facilitators' Agenda, the Introduction and Discussion Notes, and Gender Prompts. For a high intensity workshop, they may also be prepared with examples from the Sample Gender Indicators.
- Event Management Team Internal or external assistants to facilitate the workshop process. They ensure the workshop materials are in place as required, help to organize and manage breakout groups, and provide assistance as needed to workshop leaders and participants. They will use the Workshop Goals, Objectives & Expected Outcomes, Facilitators' Agenda and the Introduction and Discussion Notes to familiarize themselves with the workshop process and expected outcomes.

Depending on the intensity of the workshop and the number of participants, the number of actors may vary widely. Not all these actors may be necessary, or additional experts/facilitators may be needed.

Example Workshop Goal, Objectives, and Expected Outcomes

Goal:

To enable policymakers to begin to develop their own vision and to identify actions for strengthening gender equality in relation to education policy and ICTs in their country/region.

Objectives:

To enable policymakers:

- · To understand gender gaps and barriers related to education and ICTs in their country/region
- To recognize what needs to be done to address gender equality and strengthen access to education and ICTs in their country/region
- To identify concrete steps for moving forward on policies and actions for gender equality in relation to education policy and ICTs

Expected Outcomes:

- · Identification of gender gaps and barriers related to education and ICTs
- Identification of strategies/actions that can improve gender equality in relation to education and ICTs
- · Identification of key gender indicators related to education and ICTs
- · Policymakers' commitments to implement one action to strengthen gender equality in relation to education and ICTs

Example Workshop Agenda

Pre-Workshop

Dinner and Screening of Film, "Girl Rising"

Day One

I. WHERE DOES GENDER FIT IN OUR POLICY DEVELOPMENT PROCESS?

9:00-10:00 Opening and Discussion

- · Keynote speaker 1
- Keynote speaker 2
- Q & A and discussion

10:00-11:00 Gender and the Policy Development Process for ICTs and Education

- Overview of Policy Development Process for ICTs and Education
- · Overview of gender equality in relation to education and ICTs
- Q & A and discussion

II. WHAT ARE OUR GENDER ISSUES?

11:00-12:00 Activity 1: Brief Presentations on Gender Disparities

- · Participants present gender disparities in their countries/regions
- · Participants discuss commonalities, differences and implications of the gender gaps they face

12:00-1:00 LUNCH

1:00-2:15 Activity 2: Visual Ranking of Key Gender Barriers

- · Participants identify the gender barriers contributing to gender gaps in their countries/regions
- The gender barriers are visually ranked using Intel's Seeing Reason Thinking Tool and UNESCO-GENIA Toolkit for Promoting Gender Equality in Education
- Participants discuss and debate the barriers and rankings

III: HOW CAN WE CLOSE GENDER GAPS?

2:15-5:00 Activity 3: Identification of strategies and practical actions to improve gender equality related to education and ICTs

- In breakout groups, participants identify strategies and practical actions to address the gender disparities and barriers that were identified in the earlier discussions
- · Groups briefly present their strategies/actions
- In plenary, participants visually rank the importance of the strategies/actions
- · Participants discuss the strategies/actions and the ranking

Day Two

IV. WHAT ACTIONS CAN WE TAKE?

9:00-10:00 Activity 4: Action Commitments

- Each participant identifies one key action that they will work to implement in their own country/state within the
 next 6 months
- Actions are shared and discussed

V. HOW CAN WE MEASURE OUR RESULTS?

10:00-11:00 Activity 5: Defining Gender Indicators

- · In breakout groups, participants identify and select priority gender indicators
- Groups display their priority indicators for viewing by all participants.
- In plenary, participants discuss the indicators which are common to all lists and what is missing

11:00-12:00 Closing Plenary

- Presentations on Workshop Outcomes
- Closing Keynotes

Example Facilitators' Agenda

Dinner and Screening of Film, "Girl Rising"

Day One

I. WHERE DOES GENDER FIT IN OUR POLICY DEVELOPMENT PROCESS?

9:00-10:00 Opening and Discussion

Moderator welcomes participants and introduces the workshop's goal, objectives and expected outcomes. He/she then introduces the Keynote speakers.

- Keynote speaker 1
- Keynote speaker 2

10:00-11:00 Gender and the Policy Development Process for ICTs and Education

Moderator introduces speakers.

- Overview of Policy Development Process for ICTs and Education
- Overview of gender equality in relation to education and ICTs
- Q & A and discussion

Discussion facilitated by the Moderator

II. WHAT ARE OUR GENDER ISSUES?

11:00-12:00 Activity 1: Brief Presentations on Gender Disparities

Moderator to introduce the activity and the speakers. Gender Consultant and Moderator to facilitate discussions.

- Moderator asks participants to briefly present gender disparities in their countries or regions. (Prior to the workshop, the moderator selects participants to make brief presentations on gender disparities in their country/region at the workshop and shares the Guidance Notes to facilitate the development of presentations.)
- Participants discuss commonalities, differences and implications of the gender gaps they face. (Gender Consultant and Facilitator guide the discussion according to the discussion notes. Moderator closes discussion.)

12:00-1:00 LUNCH

1:00-2:15 Activity 2: Visual Ranking of Key Gender Barriers

Moderator to introduce the activity. Gender Consultant and Moderator to facilitate discussions.

- Participants identify the gender barriers contributing to gender gaps in their countries/regions.
- The gender barriers are visually ranked using Intel's Seeing Reason Thinking Tool and UNESCO-GENIA Toolkit for Promoting Gender Equality in Education.
- Participants discuss and debate the barriers and rankings (Gender Consultant and Facilitator guide the discussion according to the discussion notes. Moderator closes discussion.)

III: HOW CAN WE CLOSE GENDER GAPS?

2:15-5:00 Activity 3: Identification of strategies and practical actions to improve gender equality related to education and ICTs

Moderator to introduce the activity. Gender Consultant and Moderator to facilitate discussions.

• In breakout groups, participants identify strategies and practical actions to address the gender disparities and barriers that were identified in the earlier discussions

- Groups briefly present their strategies/actions.
- In plenary, participants visually rank the importance of the strategies/actions by placing colored dots on priority strategies/actions.
- Participants discuss the strategies/actions and the ranking (Gender Consultant and Facilitator guide the discussion according to the discussion notes. Moderator closes discussion.)

Day Two

IV. WHAT ACTIONS CAN WE TAKE?

9:00-10:00 Activity 4: Action Commitments

Moderator to introduce the activity. Gender Consultant or Moderator to provide guidance on developing a SMART outcome according to Introduction and Discussion Notes. Gender Consultant and Moderator to facilitate the discussion.

- Each participant identifies one key action that they will work to implement in their own country/region within the next 6 months.
- Actions are shared and discussed (Gender Consultant and Facilitator guide the discussion according to the Introduction and Discussion Notes. Moderator closes discussion.)

V. HOW CAN WE MEASURE OUR RESULTS?

10:00-11:00 Activity 5: Defining Gender Indicators

Moderator to introduce the activity. Gender Consultant and Moderator to facilitate the discussion.

- In breakout groups, participants identify and select priority gender indicators, which they list on chart paper.
- Groups exhibit their priority indicators for viewing by all participants.
- Participants are invited to "View the Exhibition" and note types of and themes among the indicators, as well as specific priority indicators.
- In plenary, participants are asked to identify key types and themes among the indicators. Then they discuss the indicators which are common to all lists and what is missing. (Gender Consultant and Facilitator guide the discussion according to the Introduction and Discussion Notes. Moderator closes discussion.)

11:00-12:00 Closing Plenary

- Presentations on Workshop Outcomes
- Closing Keynotes

Introductory and Discussion Notes for Facilitators

I. WHERE DOES GENDER FIT IN OUR POLICY DEVELOPMENT PROCESS?

Opening and Discussion

Introduction facilitated by Moderator

- [Welcome all participants and introduce Workshop Goal, Objectives and Expected Outcomes]
- To reach this goal over the next two days we will explore four questions during this Workshop:
 - I. Where does gender fit in our policy development process? In the presentations this morning, we will look at this question to explore how gender affects our children and societies through its impact on education and use of ICTs.
 - II. What are our gender issues? In Activity 1&2, we will examine what shape and form the gender issues take in each of our countries or regions.
 - III. How can we close gender gaps? In Activity 3, we will look at the practical actions we can take to address gender issues.
 - IV. What actions can we take? In Activity 4, we will define specific actions we can each take to improve gender equality.
 - V. How can we measure our results? In Activity 5 we will identify indicators we can use to measure the success of our actions

The Workshop presentations and activities are designed to help us think through and work through each of these questions.

Gender and the Policy Development Process for ICTs and Education

Discussion facilitated by Moderator

"Do you have any questions related to the presentations or is there anything you would like to add?"

II. WHAT ARE OUR GENDER ISSUES?

Activity 1: Brief Presentations on Gender Disparities

Introduction facilitated by Moderator

- "What are our gender issues? To prepare for this Workshop, some of us have begun to explore the gender issues and gaps we face in our countries and regions. In this activity, we will have a chance to share what we have learned."
- "Several of you have been selected to make brief presentations about gender disparities in your countries or regions so
 that we can begin to delve into the types of issues we are facing. After the presentations we will have a chance to explore
 the similarities and differences in the issues we are facing."

Discussion facilitated by Gender Consultant and Facilitator, using the following questions:

A. Current situation

- What is the range of literacy female and male in our region (high and low)?
- · Are there any places in which women's literacy is equal to or surpasses men's?

B. Pipeline

- Are there any countries where gender parity has been achieved in primary education the ratio of girls to boys is the same or greater?
- What about secondary?
- What about tertiary?
- What do completion rates reveal? Are there places in which girls are experiencing particular difficulties? What are some of the reasons girls may have difficulty staying in school or participating in after-school ICT programs?
- What is the ratio of boys to girls in STEM related fields? What does this reveal?

C. How educational gender disparities translate into professional outcomes and achievements

- Are there any places where women are equally represented in politics, the non-agricultural sector and engineering and technology?
- Are there any places in which women are equal in any one of these sectors?
- · What is the range of the proportion of women's participation in these fields of employment in the region?
- In what field is the region doing the best?
- In what field is it doing the worst?
- Has the situation been improving over time?

D. How professional outcomes and achievements can be affected by access to and use of ICTs

- · Are there any places in the region when women's access to mobile phones is equal to men's?
- How might this lack of access affect women's ability to succeed professionally?
- Are there any places in the region when women's use of the internet is equal to men's?
- How might this lack of use affect women's ability to succeed professionally?
- · Are there any places in the region where women's participation in STEM courses and schools are limited?
- How might this lack of use affect women's ability to succeed professionally?

Activity 2: Visual Ranking of Key Gender Barriers – Technology Approach

Introduction facilitated by Moderator

- "In this activity we will have a chance to explore the roots and causes of our gender issues. We are going to brainstorm in groups about the gender barriers contributing to gender gaps in our countries and regions. A facilitator will take notes on the list of gender barriers developed by each group."
- "Then the Event Mgtmt Team will put all the lists of the different groups together to develop one comprehensive list of gender barriers. Each group will rank the list of barriers. To prepare for the visual ranking part of the exercise, we'd like each group to develop their own criteria for ranking the barriers before we break for lunch. Then you can dive into ranking as soon as we resume the meeting."
- "Once you are done with ranking, we will display and compare the rankings of different groups, so we can discuss and debate the barriers and their rankings."

Towards Gender Equality in Education Policies and ICTs

Discussion facilitated by Gender Consultant and Facilitator, using the following questions:

Ranking Criteria:

• What do the rankings reflect? What were the criteria you used for the ranking?

Types of Barriers:

- Can we categorize the barriers into different types?
 - E.g. socio-economic, institutional, community, family, individual
- · Among these are there particular types of barriers that are particularly relevant for education policymakers

Regional Patterns:

- Are the gender barriers the same across the South Asia region?
- Are the gender barriers the same across India?
- · What are some differences?

Order of Ranking across all groups:

- · What gender barriers should have higher rankings? Why?
- What gender barriers should have lower rankings? Why?

III. HOW CAN WE CLOSE GENDER GAPS?

Activity 3: Ranking of practical actions to improve gender equality

Introduction facilitated by Moderator

- "In this activity we will examine how we can close the gender gaps and overcome the barriers we have identified (if there are key ones that have not been identified, the gender facilitator can also identify them and add them here). We will get into breakout groups related to the four major areas of education policy development:
 - Policy, Organization and Management
 - Content, Curriculum & Assessment
 - Professional Development, Teaching and Learning
 - Research & Evaluation"
- "Each group will identify strategies and practical actions related to their area to address the gender disparities and barriers that were identified earlier. We like each group to prepare a chart of all of the strategies/actions to present in plenary. You will have ___ minutes to present your charts. You will have ___ minutes in your breakout groups to prepare your chart. Each group should pick a person or two to write the chart and a person or two to present."
- "Then after the presentations we will have a chance to discuss the strategies and actions and we will do a Low-tech visual ranking of them."
- "After each team presents, there is a discussion of the strategies/actions. Moderator asks all participants to identify any other strategies/actions that might be missing.
- "After the presentations and a discussion of all the strategies/actions, the Event Mgtmt Team gives each participant 20 colored stickers in the shape of dots. Moderator will ask participants to place the dots on what they think are the most important strategies and actions to address gender disparities."
- Participants review the charts and discuss where most of the dots fall.

Discussion facilitated by Gender Consultant and Facilitator

Gender Consultant and Facilitator will stimulate discussion through the following questions:

- · What do you think about the ranking of actions? Do you agree/disagree?
- · What patterns do you see in what has been selected?
- · Are there gaps that exist?
- Now let's think back to the gender issues and barriers we identified earlier. Are they addressed by the strategies/actions
 we have selected?
- Now let's think of our current policies and strategies related to education and ICTs. Think about to what extent they cover
 the strategies/actions we have selected. I'm going to point to an action and I want each of you to raise your hand if you
 have any related policy or strategy in place. [Gender Consultant runs through all or a number of the actions, depending
 on time.]

Conclusion: We've still got a lot of work to do to address our gender issues and strategies. This should give us all lots of food for thought for tomorrow session in which we identify actual actions we plan to take to strengthen gender equality.

IV. WHAT ACTIONS WILL WE TAKE?

Activity 4: Action Commitments

Introduction facilitated by Moderator

- "Yesterday we had lots of time to explore our gender issues and barriers and think through all the different things we can
 do to address them. Now we have come to the time for ACTION. We'd like each of you to identify one key action that you
 will work to implement in your own countries/states within the next 6 months."
- "I know you may have ideas for lots of different things you'd like to do. Here we just want a concrete one. This will be your commitment to gender equality. And we will touch base with you in six months to get an update from you on the implementation of the action.
- "We will give you a postcard and envelope. Please list the action you have chosen on the post card and date and sign it. Address the envelope to yourself. We will post the letter with the postcard to you in six months. You will then give us a brief update on the card and send it back to us so we can get an update on your commitment."
- (Event Mgmt Team to distribute and collect the Commitment Cards)
- (Event Mgmt Team to enter the commitments on the Slide Templates developed prior to the workshop and to show the slides.)

Guidance on developing a SMART objective: facilitated by Gender Consultant/Moderator

• Specific: Develop a goal that is clear and unambiguous; It should answer:

What do I want to accomplish?

Measurable: Include concrete criteria for measuring progress toward the attainment of the goal, such as:

How much? How many? How will I know when it is accomplished?

• Attainable: Should be realistic and attainable, and answer the question:

How can the goal be accomplished?

• Relevant. Choose a goal that will drive your efforts forward and is in alignment with other goals (e.g. Education for All). Should positively answer the question:

Does this match our needs/other objectives?

Towards Gender Equality in Education Policies and ICTs

• Time-bound: Provide a time frame for its completion. Should answer:

What can I do six months from now?

Discussion facilitated by Gender Consultant and Facilitator, using the following questions:

- What types of actions have you chosen?
- Where do they fall in the four groups of education policy?
- What type of gender issues and barriers are these actions designed to address?
- Are these actions related specifically to ICTs?
- Are there key actions that you now realize are missing?

VI. HOW CAN WE MEASURE OUR RESULTS?

10:00-11:00 Activity 5: Defining Gender Indicators

Introduction facilitated by Moderator

- "We know what our gender issues are, and we know what actions we want to take to try to resolve them, but do we know how to assess whether our actions are successful? In this exercise we will look at how we can measure our results. We will define indicators of measurement for gender."
- "First we will get some brief guidance on different types of indicators and key characteristics of good indicators"
- "We will get into breakout groups to identify and select priority gender indicators. Each group will list their priority indicators on chart paper."
- "Then we will ask you to exhibit your charts for viewing by all."
- "Each of you should 'View the Exhibition' and note types of and themes among the indicators, as well as specific indicators that consistently standout as priorities."
- "Then we will get back into plenary for a discussion."

Guidance on indicators: facilitated by Gender Consultant/Moderator

• Types of Indicators: Indicators can be either:

Quantitative indicators help to answer questions about things that are inherently expressed in numbers. They help to answer questions such as: How many? How often? How much?

Qualitative indicators help to demonstrate, describe or measure that something has happened. They help to answer questions such as: How? When? Who? Where? What? Why?

Both qualitative and quantitative indicators are important.

Indicators can be broken down into different types, such as inputs, outputs and outcomes/impact Indicators.

INPUTS	OUTPUTS	OUTCOMES/IMPACTS
WHAT RESOURCES GO INTO A PROGRAM	WHAT IS PRODUCED THROUGH THOSE ACTIVITIES	CHANGES OR BENEFITS RESULTING FROM A PROGRAM
E.g. Money, staff, equipment	E.g. Number of workshops held, people trained, manuals produced	E.g. Increased skills/knowledge/confidence, leading to better economic or professional outcomes, etc.

Characteristics of Good Indicators:

- · Important: Is it relevant to your organization? Does it provide information that is critical to future action?
- Simple: Is it clear and direct enough to be understood by all involved?
- Disaggregated: Is it disaggregated by gender and other key variables that may affect outcomes
- Practical: Can this indicator be measured easily? Is measurement of this indicator affordable?

Discussion facilitated by Gender Consultant and Facilitator, using the following questions:

- What are common indicators across a number of charts?
- What types of indicators have been chosen?
 - Qualitative, Quantitative?
 - Input, Output, Outcome/Impact?
 - Are these indicators:
 - Important
 - Simple
 - Disaggregated
 - Practical:
- · What indicators or types of indicators are missing?

Example Pre-Work Tool

Directions for Facilitator

Provide participants with the attached 5-step Pre-Work Tool for the Workshop, along with the goals and agenda for the Workshop 1-2 weeks before the Workshop starts. Also send them relevant statistics on gender disparities related to education and ICTs in their countries/regions. These statistics may include:

- Literacy rate of females, Literacy rate of females
- Ratio of literate females to males of 15-24 year olds
- Ratio of girls to boys in primary, secondary, and tertiary education
- Proportion of M/F pupils starting grade 1 who reach last grade of primary
- Share of women in wage employment in the non-agricultural sector
- Proportion of seats held by women in national parliament
- Share of women in engineering and technology research
- M/F participation in math, science, and technology education
- M/F subscribers of cell phones
- M/F use of the Internet
- M/F use of Facebook

Ask participants to complete and return the form prior to the Workshop, using relevant statistics on gender disparity related to their countries.

5-Step Prep

A Pre-Work Tool for Workshop on Gender Equality in relation to Education Policy and ICTs

1. Know what is coming up at the Workshop: Review the Goal, Objectives, Expected Outcomes

and Pre-work for the Workshop as well as the Agenda.

2.	Reflect on Your National Gender Disparities: Review statistics on gender disparities related to education and ICTs within your country/region as provided to you by the Intel Country Manager or Workshop Facilitator. Select several statistics you would like to present at the Un-Conference:
•	
•	
•	
•	
3.	Brainstorm about Key Gender Barriers related to Education and ICTs: Brainstorm about causes for these disparities and identify 2-3 gender barriers that have contributed to the differences in male and female access and use related to education and ICTs.
•	
•	<u></u>
•	
4.	Prepare for Discussion: Please come to the workshop prepared to discuss your answers, and to engage in identifying strategies and practical actions to improve gender equity.
5.	Reflect on Expectations for the Workshop: Identify two to three of your main expectations for the workshop.
•	
•	

Commitment Card Template

I,, commit to strengthening gender equal taking the following action in the next six months:	uality in education and ICTs by under-
Name:	
Signature:	
Date:	
This card will be mailed back to you in six months so you ca in the space below. Once you receive the card in the mail, p mail it back to the following return address: [PLACE RETURN ADDRESS HERE] Six-Month Update	, , , , , ,
1. I completed the action on	[enter date]
3. I have made some progress on the action. If you checked number 2 or 3, Please provide details about achieved and any reasons for unanticipated delays:	what you have or have not yet

List of Workshop Materials

Activity 1

None

Activity 2

- Large Colored Magic Markers (At least one for each participant)
- Large Chart Paper (At least 1 piece for each group)

Activity 3

- Large Colored Magic Markers (At least one for each participant)
- Large Chart Paper (At least 5 pieces for each group)
- Colored stickers shaped like small dots (about one centimeter each)
 (At least 20 for each participant)

Activity 4

- Commitment Postcards (At least for each participant, plus 25% extra)
- Slide Templates for Commitments (with photos)

Activity 5

- Large Colored Magic Markers (At least one for each participant)
- Large Chart Paper (At least 5 for each group)

Gender Prompts by Policy Planning Phase

Phase: Envision the Future

Step: Creating a Shared Vision

National Vision

- How does the national vision advance economic and social development for both females and males?
- How does the vision of education advance the welfare of both females and males?
- Sharpening the Education Vision
- How does this vision of education advance equal access to education and use of educational tools, such as ICT, for both females and males?
- How does your vision statement advance economic and social welfare of both females and males?

Idea Starters

To help you with your thinking about your national vision, here are some potential idea starters:

- Improve socioeconomic and gender equality
- Increase education access to girls
- Reduce the attendance or performance gap between females and males
- Increase access to high-quality education for both females and males
- Increase access to educational tools, such as ICT, for low-income families and both females and males

Sharpening Your Vision

- What will be done to provide a learning environment that is socially and culturally supportive of female as well as male students?
- What will be done to ensure the curriculum has relevance for both males and females?
- How will teachers support the learning of both female and male students?
- What role will parents and the community play? How might both mothers and fathers be more involved in their children's education?
- What about other human resources, such as business people, scientists, and other experts? How might both females and males participate in helping students?
- What kind of technology and digital learning resources will students have? What resources will teachers have? Who will create these? How will students and teachers access and use them? What will be done to ensure equal access and use for males and females?
- What information will be needed to understand the participation, achievements, and retention of both female and male students? How will this information be used? Where will this information come from? How often will it be collected and by what agencies?

Step: Analyze the Socio-Ecosystem

Analyzing your Current State

- How are students assigned to grades or classes? Are females and males treated differently?
- Are females and males treated differently in the curriculum?
- How do teachers support the learning of both female and male students?
- What role do parents and the community play in education? Is the role different for mothers and fathers?
- What about other human resources, such as business people, scientists, and other experts? What role, if any, do they play? Do both females and males participate?
- What information is collected to understand the participation, achievements, and retention of both female and male students?

Phase: Develop a Master Plan

Is the ICT plan is designed to benefit females and males equally?

Phase: Implement Initiatives

• In the management plan, will both men and women participate equally? If not, what measures can be taken to work toward their equal participation?

Phase: Evaluate and Adapt

What information will be needed to understand the participation, achievements, and retention
of both female and male students? How will this information be used? Where will this information come from? How often will it be collected and by what agencies?

Gender Resources

Phase: Envision the Future

Example Gender Vision Statement
Papua New Guinea's Gender Equity in Education Policy states:
http://planipolis.iiep.unesco.org/upload/Papua%20New%20Guinea/Papua_New_Guinea_gender_equity_guidelines.pdf

Video Presentations and Discussions Related to Gender Equity

- www.youtube.com/watch?v=YJc9xaQQ4ZI
- www.youtube.com/watch?v=y3PkyRudAC0
- www.youtube.com/watch?v=GptX922Ohhl

Situation Analysis Related to Gender Issues:

- Helping Bridge the Gender Gap in Computing Careers
 Only 29 percent of future computer scientists will be women.
 What needs to be done to bridge the gender gap in technology careers?
 www.youtube.com/watch?v=xnEJp8ef sE
- Gender and Education Project
 Reaching for equity in science education
 www.youtube.com/watch?v=swv-wTo93ck&feature=related
- Teachers Turn Trendsetters in Rural Nigeria
 Increasing female teachers and role models in a patriarchal community
 www.youtube.com/watch?v=z5ivW4XTnOA
- Daniel Koretz on Gender and Education
 Exploration of the gender gap in education
 www.youtube.com/watch?v=GZYC tgurX4
- Huyer, S. (2003) "Gender, ICT, and Education" in Engendering ICT.
 http://digitalknowledgecentre.in/files/2012/02/Gender-ICT-and- Education1.pdf
- Swedish Agency for Development Evaluation (SADEV). (2011). Gender equality in and through education. Karlstad: SADEV. (See Appendix 2 Obstacles to and opportunities for female education)
 - http://www.oecd.org/derec/sweden/48350382.pdf

Phase: Develop a Master Plan

Example Master Plans and Strategies

Gender Project in Australia

www.mceecdya.edu.au/verve/ resources/genderframwk1-22.pdf

Other Gender Resources

Gender project in Bangladesh.

www.moedu.gov.bd/old/edu system edu policy.htm

Aikman, S. and Unterhalter, E., eds. (2007). Practising Gender Equality in Education. Dorset: Oxfam. http://www.ungei.org/resources/files/ProgIns_wholebook.pdf

Corner, L. (2008). Making MDGs work for all. UNIFEM. http://www.unifem.org/attachments/products/Making_MDGs_work_ for_all_complete.pdf

Gill, K. et al. (2010). Bridging the Gender Divide: How Technology Can Advance Women Economically. Washington, DC: International Center for Research on Women. http://www.icrw.org/publications/intel-learn-program-through-gender-lens

Intel Corporation and Dalberg, 2013. Women and Web: Bridging the Internet gap and creating new global opportunities in low and middle-income countries. http://www.intel.com/content/www/us/en/technology-in-education/women-in-the-web.

html?wapkw=women+and+web

Lloyd, C. (2013). Education for Girls. Alternative Pathways for Girls' Empowerment. Girleffect.org. http://www.girleffect.org/resources/2013/3/education-for-girls-alternative-pathways-to-girls-empowerment/

Nasreen, Mahbuba and Sean Tate, 2007. Social Inclusion: Gender and Equity in Education Swaps in South Asia: Bangladesh Case Study. Katmandu: UNICEF http://www.ungei.org/resources/files/Bangaladesh_Case_Study.pdf

Tømte, C. (2008). Return to Gender: Gender, ICT, and Education. Oslo: OECD. Background paper for OECD Expert meeting hosted by the Norwegian Ministry of Education and Research Oslo, Norway 2-3 June 2008. www.oecd.org/edu/ceri/40834253.pdf

UNESCO. (2003). Education For All Global Monitoring Report. Gender and Education for All - The leap to equality

http://www.unesco.org/new/en/education/themes/leading-the-international-agenda/efareport/reports/20034-gender/

UNESCO, 2012. Education For All Global Monitoring Report. Youth and skills: Putting education to work.

http://www.unesco.org/new/en/education/themes/leading-the-international-agenda/efareport/reports/2012-skills

UNICEF. The Second Primary Education Development Programme (PEDP-II) http://www.unicef.org/bangladesh/Quality_Primary_Education_(PEDP-II).pdf Ring, S. (2008). Tech gURLs: Closing the Technological Gender Gap. Edutopia.org. www.edutopia.org/computer-science-technology- gender-gap

World Bank. What Development Practitioners Need to Know about Gender, ICT and Education? Technical Education, Training, and Women's Participation in the ICT Sector. (Accessed 1/6/2014): http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTGENDER/EXTICTTOOLKIT/0,,contentMDK:20272989~menuPK:562602~pagePK:64168445~piPK:64168309~theSitePK:542820,00.html

Phase: Implement Initiatives

UNESCO. (2010). Gender Responsive Budgeting in Education. Bangkok: UNESCO. http://unesdoc.unesco.org/images/0018/001894/189456e.pdf

Phase: Evaluate and Adapt

African Development Bank Group. (2009). Checklist For Gender Main- streaming In The Education Sector With A Special Focus On Higher Education, Science And Technology Sub Sector. African Development Bank Group.

http://www.afdb.org/fileadmin/uploads/afdb/Documents/Policy-Documents/Checklist%20for%20 Gender%20Mainstreaming%20in%20Governance%20Programmes%20EN.pdf

Towards Gender Equality in Education Policies and ICTs

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Kirrin Gill is an Independent Consultant with over 20 years of experience working on gender and development in Asia, Africa, and the Americas. She works with international agencies, foundations, non-governmental organizations, and the private sector to improve women's well-being, addressing key issues such as women and technology. She was formerly the Director of Learning and Impact at the International Center for Research on Women (ICRW), and has worked for the World Bank, UNICEF, the Pan American Development Foundation, the Nike Foundation, the Global Health Council, and PATH.

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