Empowering women and girls through education

Study for the FEMM Committee
Empowering women and girls through education

Abstract

Upon request by the FEMM committee, this study explores challenges and opportunities for the empowerment of women through education. Based on an analysis of existing research, the study shows how various factors like poverty, gender stereotypes and institutional cultures impact upon educational outcomes. Consequently, a more equitable distribution of educational resources, gender sensitive institutional cultures and practices, and challenging social norms and expectations of men and women are needed. Greater access to the labour market, better earnings, and personal empowerment will be the return. The challenge for policy makers is finding the right policy mix and the political will to address the complex factors that affect women’s and girls’ empowerment through education.
ACKNOWLEDGMENT

The authors would like to thank:

Madlen Serban, Anastasia Fetsi, Ummahan Bardak and Outi Karkkainen from the European Training Foundation for their advice.

The Policy Department C: Citizens’ Rights and Constitutional Affairs would like to thank:

Markus Prutsch and Patricia Henning from Policy Department B: Structural and Cohesion Policy for their cooperation in the finalisation of the study.
CONTENTS

ACKNOWLEDGMENT 3

LIST OF ABBREVIATIONS 6

LIST OF TABLES 7

LIST OF FIGURES 7

EXECUTIVE SUMMARY 8

1. INTRODUCTION 14
   1.1. Methods 17
   1.2. Defining discrimination and empowerment 17

2. ACCESS TO EDUCATION 19
   2.1. Literacy rates for males and females 19
   2.2. Access to primary education 22
   2.3. Access to secondary education 22
   2.4. Field of study choice for males and females 23
   2.5. Educational outcomes and access to tertiary education in Europe 24

3. DISCRIMINATION AT THE INTERSECTION OF POVERTY, ECONOMIC STATUS, GENDER AND EDUCATION 28
   3.1. Direct and indirect costs of schooling 28
   3.2. Economic status, gender and education in higher income countries 29

4. PERPETUATION OF GENDER INEQUALITIES THROUGH EDUCATION POLICY AND INSTITUTIONS 30
   4.1. Educational institutions and classroom culture 30
       4.1.1. The impact of ‘streaming’ on educational outcomes of girls and boys in compulsory education 31
       4.1.2. Field of study choice 31
       4.1.3. Gender mainstreaming in education policy 32
   4.2. Teacher attitudes, values and approaches 33
       4.2.1. Attention given to female and male students 33
       4.2.2. Gendered education of teachers and in academia 33

5. SOCIAL NORMS, VALUES AND PRACTICES WHICH PERPETUATE DISCRIMINATION 35
   5.1. Social beliefs on gender and its impact on education 35
   5.2. Bullying and gender based aggression 37
6. GENDER, EDUCATION AND THE LABOUR MARKET 40
   6.1. The gender wage gap 40
   6.2. Careers advice and vocational training 42

7. ADDRESSING THE VICIOUS CIRCLE: ACHIEVING EMPOWERMENT THROUGH EDUCATION 43
   7.1. Addressing the direct and indirect costs of education to get girls into school 43
   7.2. Overcoming social norms and attitudes that block equality in education, through education 44
   7.3. Intergenerational transfers of values and benefits 45
   7.4. Overcoming discriminatory practices in educational institutions: same sex schools 46
      7.4.1. Single sex schools 46
      7.4.2. Making schools and colleges gender sensitive 47
   7.5. Addressing sexual harassment and gender based violence both through and in education 47
   7.6. Education and health and reproductive rights 47
   7.7. Educating for empowerment 48

8. CONCLUSIONS AND RECOMMENDATIONS 49
   8.1. Conclusions 49
   8.2. Recommendations that follow from this review include: 51
      8.2.1. Recommendations for educational institutions: 51
      8.2.2. Recommendations for government and European union institutions: 52

REFERENCES 53

ANNEX I: ADDITIONAL TABLES ON EDUCATIONAL ACCESS AND ATTAINMENT BY GENDER 57
LIST OF ABBREVIATIONS

CEDAW Convention on the Elimination of Forms of Discrimination Against Women
CEE Central Eastern European
EU European Union
GPI Gender Parity Index
OECD Organisation for Economic Cooperation and Development
QA Quality Assurance
STEM Science, Technology, Engineering, Maths
UNESCO United Nations Educational, Scientific and Cultural Organization
UPE Universal Primary Education
UK DFID United Kingdom Department for International Development
VET Vocational Education and Training
LIST OF TABLES

TABLE 1
Percentage of female graduates in different fields of study by region, 2008 24

LIST OF FIGURES

FIGURE 1
Challenges and opportunities for empowering girls through education, negative feedback loop 15

FIGURE 2
Challenges and opportunities for empowering girls through education, positive feedback loop 16

FIGURE 3
Male literacy rate aged 15-24, 2012 20

FIGURE 4
Female Literacy rate aged 15-24, 2012 21

FIGURE 5
Children out of school of primary school age, global. 22

FIGURE 6
Male graduates in Maths and Science per 1000 population in Europe, 2012 26

FIGURE 7
Female graduates in Maths and Science per 1000 population in Europe, 2012 27
EXECUTIVE SUMMARY

KEY FINDINGS

- Poverty has a strong influence on gender equal access to education due to both direct and indirect costs of sending children to school.
- Providing free access to school is a very effective way of addressing gender inequalities in education.
- Strategies to improve gender equal educational access must address not only direct costs of schooling but also the wider social factors that impact a families’ decision to send their children to school.
- There is evidence of gender segregation in University and schools hierarchies in Europe and advanced economies which is both horizontal and vertical in nature.
- Teachers' attitudes and beliefs towards gender similarly reinforce students’ gender roles, often to the disadvantage of girls.
- Bullying is found to have a profound effect upon educational outcomes.
- Boys and girls are likely to experience bullying to similar extents however, they are likely to experience different types of bullying and be affected by these experiences in different ways.
- Whilst girls may outperform boys at school, families and communities’ expectations of their future careers may prevent them from translating educational success into career success
- Recommendations for educational institutions on how to empower women and girls include:
  - All educational and support staff should be trained and supported to be aware of the impact of gender roles and stereotypes on their students’ self-confidence and personal identities in particular, the influence of gender norms and stereotypes on subject choice.
  - Higher education institutions should investigate how their own gender norms and ideas impact upon women’s academic career options.
  - Meso level educational institutions such as education departments or ministries must consider the wider influence and impact of social, and economic norms and practices which affect girls and boys differently, when designing policies for increasing educational access for girls.
- Recommendations for national governments and European institutions include:
  - Policies designed to improve the economic prospects of different regions should include programmes to increase the numbers of women and girls in education.
Empowering women and girls through education

Policies designed to increase the numbers of women and girls in education should consider three domains of how education can empower women: through social norms and values on gender, through institutions and through the equitable distribution of educational resources.

Aims

The purpose of this review is to understand key challenges for education systems in addressing gender discrimination and opportunities for building gender equality. The main questions are:

- What forms of gender discrimination exist within education systems and why?
- How does this discrimination translate into labour market and other forms of gender discrimination in society?
- How might education systems better empower girls both as students and as future participants in society?

Methods

Methods involved using defined search terms to explore selected databases of research literature published in English, Polish and Spanish. Studies were selected according to pre-designed inclusion and exclusion criteria, briefly, these were: that articles were written after 1995, and that they addressed features of gender and education identified in the conceptual diagrams above.

Access to education

Across regions of the globe, while the numbers of children out of school have been declining since 2005, girls comprise a slightly higher proportion than boys. In total, around 28 million males and 30 million females of primary school age are out of school, globally. However, there are significant regional differences. There is also wide variation in out of school rates for girls and boys of secondary school age across regions.

Generally speaking, in low and middle income developing countries, there is still considerable concern with the gender dimension in the access to primary and lower secondary education, across different regions of the globe.

This is due to the wide variation between access and attainment rates between males and females also across the EU. On the one hand, girls seem to do better than boys in terms of leaving school early and also in numbers of higher education graduates. On the other hand, there are more male than female graduates in maths, science and technology, in all EU states where data are available – subjects that are linked to better occupational outcomes and higher wages.
Discrimination at the intersection of poverty, economics status, gender and education

Worldwide, the influence of gender on educational outcomes is not the result of simple direct gender discrimination but takes place at the intersection of gender and other factors such as household wealth and geographic location. Girls and boys from the poorest households experience greater disparities in terms of access to education, compared to those from richer households.

In developing countries direct and indirect costs of education affect girls disproportionately. **Direct costs** include school fees, uniforms or books. Many families, where income is constrained, choose to make these expenditures on sons rather than daughters. **Indirect costs** include labour taken away from household production (eg farming or trading) or lost care work which also negatively affects girls’ access to schooling.

Where absolute poverty rates are not so much of a consideration - in higher income countries - low economic status also has an impact on gender equality in education. Gender differences in educational achievement is likely influenced by the **socio-cultural aspects of the family environment**.

Perpetuation of gender inequalities through education policy and institutions

A number of studies suggest that girls and women receive less encouragement, experience and opportunities in these areas because teachers and school managers consider it a ‘male’ subject, for which women do not have skills, understanding or aptitude. Subsequently, girls are discouraged from following what are traditionally viewed as ‘male’ subjects of science, engineering, technology or maths subjects.

Teacher attitudes, classroom atmosphere and learning approaches all contribute to constructing gender stereotypes which are reproduced by both teachers and students. For example, male and female teachers may reproduce traditional male and female roles in the classroom - female teachers may follow the ‘supportive sympathetic’ archetype, whilst male teachers follow the ‘authoritative’. Other research finds that across ages that boys are given more attention than girls by teachers, although male teachers' attention to girls is higher with older girls. Female teachers give attention to boys more than girls whatever their ages. The authors conclude that **unconscious gender related processes** which may be aggressive or even ‘libidinous’ in nature may play a role in teachers’ approaches to their students.

Teachers’ gender roles may be perpetuated through the teacher-training system. Research reviewed describes **vertical and horizontal segregation in the teacher-training institutions**, with more men in secure and senior positions in the institutions’ hierarchies.

Gender segregation, both vertical and horizontal is also found to be a factor in higher education institutions. For example research shows the subtle ways of **expectations** regarding how women dress and present themselves have a detrimental impact on women’s career. Other research argues that management processes such as Quality Assurance in universities may contain ‘**disguised messages**’ which favoured male identities and which disproportionately disadvantaged female academics.
Social norms, values and practices which perpetuate discrimination

Young girls’ attitudes and views towards motherhood impact on their educational attainment. One paper shows that girls who reject traditional gender roles tend to do better at school and achieve higher grades, compared to girls who hold traditional views on gender. By contrast, gender role attitudes and aspiration towards parenthood had no influence on the educational attainment of boys. Adolescents’ views on gender roles are likely to shape their expectations and aspirations for future career and also shape the culture within schools.

Gender roles and their relation to education are perpetuated also through the media. For example, national media in the UK drew attention to the impact of the role of single working mothers on low educational attainment. This demonstrates how women are singled out for scrutiny for their role in the family, not only when it comes to employment but also in education. Other research identifies in both media accounts and academic research a tendency to blame educational and social inequalities on women, particularly middle class mothers, for making ‘hypocritical’ choices to work rather than look after children. The focus on mothers represents a shift in research away from the impact of state and organisational cultures within schools.

A number of articles in this review examined the gendered impact of bullying and aggression within schools. This body of research commonly identifies bullying as a pervasive and potent experience for students which may affect their educational outcomes.

Bullying affects girls and boys but the impacts are different for each. Female victims of direct (such as hitting or kicking or direct insults) and indirect (such as manipulation or gossiping) bullying rate their academic abilities lower than those not affected – this effect was not found in male victims of indirect victimisation.

Girls’ ability to form coping strategies to address aggression and bullying may be undermined by their belief that in asserting their authority and struggle for a stronger power base, they risked being thought of as unfeminine.

One study shows how educational professionals need greater training and awareness of how to address bullying, particularly that of a sexual nature. Bullying takes on many forms and recently, the problem of ‘sexting’ (text messaging of an explicit nature) is highlighted. Researchers note that this issue is highly gendered and sensitive in nature.

Another study concludes that the close relationship between sexism and support for a dominance-submission model of gender relations underlies bullying. Efforts to tackle bullying should also address this wider model dominance and submission that accompanies traditional views on gender roles. In this respect, researchers recommend that gender sensitive sexuality education is an important potential tool to combat these destructive gender relations and promote gender equality in school and society.

Gender, education and the labour market

Education systems vary in how much they are able to undo some of the wider gender inequalities reproduced in society. However, in all countries the transition between formal education and the labour market is one where gender inequalities, which may have been held at bay during schooling, reappear.
Gender gaps in employment rates are narrowing in most OECD and EU countries, as more women enter the labour force. However, the earnings differentials between men and women are still pronounced. One explanation for the persistency of the gender wage gap is the high degree of occupational segregation and some of the roots of this lie in the education system. However, whilst gender segregation in field of study choice is a significant factor in explaining the gender wage gap, it is not sufficient. Such features as collective bargaining power and the availability of affordable child care will impact wages, in addition to educational factors.

**Careers advice** provided to girls from minority ethnic backgrounds was shown in one study to perpetuate gender and racial stereotypes. Advice provided by official careers advice networks as well as girls’ own social networks was found to encourage minority ethnic girls towards professions and choices that are traditionally dominated by women from ethnic minorities. In particular, the author notes discriminatory attitudes experienced by women wearing a headscarf.

One study based in Germany notes women with intermediate level skills are more likely to move horizontally in their career than vertically. This underlines the importance for women in engaging with **continuing education and training**, which places greater demands on women, who frequently juggle child care commitments also, as formal qualifications are usually required for promotion in the German labour market.

**Addressing the vicious circle: achieving empowerment through education**

The challenges reviewed in this study are diverse. They relate to a) the distribution of educational provision and financial resources available to help girls get educated; b) policies and institutional factors that deliver education; c) cultural and social norms relating to gender. The review identified a number of recommendations for meeting those challenges:

**Recommendations for educational institutions:**

- All educational and support staff should be trained and supported to be aware of the impact of gender roles and stereotypes on their students’ self-confidence and personal identities in particular:
  - The influence of gender norms and stereotypes on subject choice
- All educational and support staff should be trained and supported to address the gendered nature of bullying and harassment including an awareness of the different impacts of bullying on girls and boys
- Institutions that train teachers should investigate their own gender norms and ideas and how these are likely to impact upon the student teachers that they train
- Higher education institutions should investigate how their own gender norms and ideas impact upon women’s academic career options
- Meso level educational institutions such as education departments or ministries must consider the wider influence and impact of social, and economic norms and practices which affect girls and boys differently, when designing policies for increasing educational access for girls
• **Careers advice** services should ensure they are not reproducing gender or other minority group stereotypes in the advice they provide

• **Sexual education** should adopt an empowerment approach, whereby women and girls are encouraged to take informed decisions about their sexual practices

**Recommendations for Government and European Union Institutions**

• Policies designed to improve the economic prospects of different regions should include programmes to increase the numbers of women and girls in education

• Policies designed to increase the numbers of women and girls in education should consider **three domains** of how education can empower women: through social norms and values on gender, through institutions and through the equitable distribution of educational resources
1. INTRODUCTION

This literature review was commissioned by the FEMM Committee of the European Parliament in view of International Women’s Day and the Millennium Development Goals specific targets on the empowerment of women and the provision of Universal Primary Education by 2015. The purpose is to understand key challenges for education systems in addressing gender discrimination and opportunities for building gender equality. The main questions are:

- What forms of gender discrimination exist within education systems and why?
- How does this discrimination translate into labour market and other forms of gender discrimination in society?
- How might education systems better empower girls both as students and as future participants in society?

The review focuses on education in European Union states. It also includes evidence from outside of the EU, primarily from low and middle income countries. The intention is to understand evidence from a range of contexts and different research approaches, to provide most in-depth insight with regard to the research questions.

The analysis has been developed from the following conceptual mapping, which builds from an earlier rigorous literature review (Unterhalter et al, 2014) commissioned by the UK DFID. Two contrasting pathways through challenges and opportunities are set out in figures one and two below.
Empowering women and girls through education

Figure 1: Challenges and opportunities for empowering girls through education, negative feedback loop

Source: Author E. Unterhalter et al, 2013.
Figure 2: Challenges and opportunities for empowering girls through education, positive feedback loop

Source: Author E. Unterhalter et al, 2013
The first diagram maps a **vicious circle** pathway through which a context of intolerance and discrimination against women and girls is sustained by a range of discriminatory institutions which support an education system that limits access, or subordinates women through various forms of discrimination in relation to teaching, learning, assessment and management. This means that education is not able to realise its full potential to expand opportunities or underpin rights, and social divisions come to be reproduced, not challenged.

By contrast, the second diagram maps a **virtuous circle** in which a climate of opinion and complementary institutions support the building of gender equality in and through the education system, leading to access, quality and empowerment for girls and young women, and sustainable views about equality.

Most counties in the EU are not at the extremes of wither the vicious or the virtuous cycle, but somewhere in between. In our review of the literature we show how we tend to know more about how education is implicated in reproducing processes of discrimination and subordination, but the ways in which it supports building cultures, norms and institutions of equality still needs further investigation.

### 1.1. Methods

The evidence presented is the result of semi-systematic review methods. This involved using defined search terms to explore selected databases of research literature published in English, Polish and Spanish.

10 searches were applied using the search terms to ISI Web of Science, ERIC and ELDIS. A total of 503 articles were identified in the first search, of these, 60 were selected for further review and 55 were included in the final selection of articles for review. Studies were selected according to pre-designed inclusion and exclusion criteria, briefly, these were: that articles were written after 1995, and that they addressed features of gender and education identified in the conceptual diagrams above.

### 1.2. Defining discrimination and empowerment

Discrimination is defined in this review as any situation within or in connection with formal education that directly causes or is indirectly associated with a woman/girl being less well treated than a man/boy. It can refer both to contemporary situations, historical structures and processes, and future opportunities.

The definition of empowerment derives from the Convention of the Rights of the Child and the Convention on the Elimination of Forms of Discrimination Against Women (CEDAW) as well as area ‘B’ of the Beijing Platform for Action. These texts are central to EU policy towards gender equality. The texts emphasise **equal access to education** for girls and boys, including actions to reduce drop-out rates among girls; equal access to education of the **same quality**, which draws attention to features of learning, teaching, assessment and management. Empowerment is also associated with ensuring **dignity** and an **interconnected framework of rights and wellbeing** among children in education. Empowerment signals a connection with economic, social, cultural and political relationships beyond the education system, both as sites for the realisation of education empowerment,
and the building of the insights and attributes associated with empowerment and education.

In these key texts empowerment and education emphasise both equality of opportunities and concerns with outcomes of education linked with rights, dignity and wellbeing.

The literature on empowerment and education offers a wide range of definitions which draw out different facets of the relationship. Kabeer (1999) identifies the importance of measuring and categorising empowerment and distinguishes between facets associated with resources, women’s agency, and achievements or outcomes. Stromquist (2002) identifies four dimensions of empowerment associated with education - the cognitive (critical understanding of reality), psychological (self esteem), political (awareness of inequalities & capacity to mobilize) and economic (capacity to generate income). Monkman’s review (2011) stresses empowerment in education must be understood as a process entailing individual and collective relationships, and working with boys and men.

The context, which needs to take account of formal and informal sites of education, is a key component of any reflection. Murphy-Graham (2008) developed an understanding of educations’ link to empowerment based on research with Honduran women and girls. She finds that education may begin an ‘empowerment process’ if it expands women’s knowledge and understanding, self-confidence and awareness of gender equity. For Murphy-Graham, empowerment comes from an explicit, politicised form of understanding rights. Her monograph developing this work (Murphy-Graham (2012)) highlighted the importance of linking educational sites of empowerment, thus tracing some of the paths of our virtuous circle. Unterhalter (2015 forthcoming) considered some of the critiques that empowerment had become an empty and co-opted ‘buzzword’ of policy and sought to identify a number of key processes associated with education that could angle the notion towards a politics of transformation of social injustices. These entail building an understanding in institutions and among key actors of the way context shapes both actual and potential opportunities arising from education, how women’s agency, as an aspect of empowerment, needs to be actively constructed in a direction of solidarities, rather than self-interest through educational encounters, and how evaluation of empowerment requires deliberative democracy and participatory processes.

The literature reviewed offers also a wide range of definitions of empowerment. This may be represented by the high level policy agenda. Moghadam and Senftova (2005) argue that the Beijing Platform for Action redefined gender equality to focus on positive actions to promote empowerment of women, rather than reduce discrimination and gender inequality. This process is the subject of extensive critical reflection. The authors in the literature reviewed define empowerment as a ‘multi-dimensional process’ covering ‘social, economic, political, and cultural domains’. 14 studies specifically used a concept ‘empowerment’ in their research. The definitions of these include ‘economic empowerment’ – defined as ability to earn one’s own money, ability to support oneself, knowledge of budgeting and planning one’s own money. Sexual empowerment is also included: defined as knowledge of sexual practices and risks. Afodi (2010) measures ‘empowerment’ by levels of education and personal autonomy in India; Gervais (2011) ascribes ‘agency’ and ‘voice’ as qualities of empowerment. Zhao (2010) identifies empowerment with autonomous social movements.
2. ACCESS TO EDUCATION

Key findings

- While the numbers of children out of school have been declining since 2005, girls comprise a slightly higher proportion than boys.
- In total, around 28 million males and 30 million females of primary school age are out of school, globally. However, there are significant regional differences.
- There is also wide variation in out of school rates for girls and boys of secondary school age across regions.
- There is wide variation between access and attainment rates between males and females across the EU.
- On the one hand, girls seem to do better than boys in terms of leaving school early and also in numbers of higher education graduates.
- On the other hand, there are more male than female graduates in maths, science and technology, in all EU states where data are available – subjects that are linked to better occupational outcomes and higher wages.

This section presents evidence from international statistics on the status quo of access to education by gender. An important shortcoming of the available data is that there are no consistent data for all countries in the world, which makes comparison very difficult. Data come from three main sources. the United Nations collection contains data from 195 different countries across global regions, OECD data contain information on 34 countries and EU data contains data from all 28 EU member states.

2.1. Literacy rates for males and females

The UNESCO data (figure 3 and 4 below) (which does not include North American and many Western European country data) map the rates of literacy for females and males. One can see a trend of low literacy through Central America, the sub-Saharan Africa (except South Africa) and the Indian subcontinent.

Afghanistan has the highest differences in literacy rates in 2012 between men and women; 23% more men are literate than women although male literacy rates are still quite low. Women in the Central African Republic, Niger, Benin and Liberia are 20% more illiterate than men.

In Central and East Asia, Latin America and Central and Eastern Europe, the difference in terms of literacy between males and females do not reach a 1% in favour of any gender.
Figure 3: Male literacy rate aged 15-24, 2012

Source: UNESCO Institute for statistics database
Figure 4: Female Literacy rate aged 15-24, 2012

Source: UNESCO Institute for statistics database
2.2. Access to primary education

Figure 5: Children out of school of primary school age, global.

Source: UNESCO

It can be seen from figure 5 above that across regions of the globe, while the numbers of children out of school have been declining since 2005, girls comprise a slightly higher proportion than boys. In total, around 28 million males and 30 million females of primary school age are out of school, globally. However, there are significant regional differences. Table one in Appendix one shows the Gender Parity Index (GPI) scores for enrolment in primary school, for a range of countries where data are available in 2012. A GPI score of 1 is equality in enrolment rates, rates below 1 means there are more boys than girls enrolled and a GPI of above 1 means there are more girls than boys. Afghanistan has the lowest GPI score (0.72), followed by the Central African Republic (0.74) and Chad (0.76). Of the countries with GPIs of 1 or more, scores vary little above 1. Guyana has the highest GPI score of 1.13, meaning there are more girls than boys enrolled in primary school.

2.3. Access to secondary education

Table two in appendix one shows wide variation in out of school rates for girls and boys of secondary school age across regions. The data show the Gender Parity Index (GPI) score for selected countries, in 2012 for secondary school enrolment. Of the countries where data exist, Chad has the lowest GPI score of all countries, with a GPI of 0.46, which means that for every boy enrolled in secondary school, there are only 0.46 girls (less than half). This is followed by Central African Republic (0.51), Afghanistan (0.55) and the Democratic Republic of Congo (.59). Of countries with GPIs of 1 (equality) or above, Lesotho has rates of 1.4. European countries included in the data set, have rates at 1 or very close to 1.
Generally speaking, in low and middle income developing countries, there is still considerable concern with the gender dimension in the access to primary and lower secondary education.

### 2.4. Field of study choice for males and females

Table 1 below shows differences between males and females in terms of subject choice in different global regions. The difference between students graduating in sciences, mathematics and technology by gender in the EU is significantly high in Ireland (20%), Finland (18%), United Kingdom and Austria (both 15%).

In Italy there are relatively fewer men than women who graduated in Science, Maths and Technology subjects (4.6%), followed by Greece, Bulgaria and Romania with 5%.

Only in Central Asia and the Arab states is the proportion of women studying pure sciences and technology-related disciplines higher than that of men, albeit by a small amount. This reflects the high proportions of women in these societies in higher education.

The percentages of ‘life science’ female graduates are notably higher in every continent than for ‘physical science’ or maths or computing. In physical science the proportion of women to men does not exceed the 40/60 ratio in any direction, except for the Arab States in which 61% of students of that subject are women.

Every subcontinent except Central Asia has more women in social sciences than men. Proportions are almost equal in East Asia and the Pacific and Arab states, both with 53% of students in these subjects being women. In Central and Eastern European (CEE) countries, more than 60% of students in social sciences are women. Journalism and information disciplines show a significant proportion of women in CEE (68%). In North America and Western Europe women are significantly more involved in social sciences than in ‘pure’ and natural sciences.
Table 1: Percentage of female graduates in different fields of study by region, 2008

<table>
<thead>
<tr>
<th>Region</th>
<th>Arab states</th>
<th>Central and Eastern Europe</th>
<th>Central Asia</th>
<th>East Asia and the Pacific</th>
<th>Latin America and the Caribbean</th>
<th>North America and Western Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science (total)</td>
<td>51</td>
<td>47</td>
<td>53</td>
<td>48</td>
<td>41</td>
<td>40</td>
</tr>
<tr>
<td>life science</td>
<td>73</td>
<td>70</td>
<td>68</td>
<td>60</td>
<td>67</td>
<td>60</td>
</tr>
<tr>
<td>physical science</td>
<td>61</td>
<td>54</td>
<td>44</td>
<td>58</td>
<td>51</td>
<td>43</td>
</tr>
<tr>
<td>maths and stats</td>
<td>59</td>
<td>53</td>
<td>60</td>
<td>62</td>
<td>53</td>
<td>48</td>
</tr>
<tr>
<td>computing</td>
<td>33</td>
<td>29</td>
<td>39</td>
<td>29</td>
<td>31</td>
<td>21</td>
</tr>
<tr>
<td>social science</td>
<td>53</td>
<td>61</td>
<td>41</td>
<td>53</td>
<td>57</td>
<td>57</td>
</tr>
<tr>
<td>social and behaviour science</td>
<td>69</td>
<td>62</td>
<td>46</td>
<td>56</td>
<td>70</td>
<td>64</td>
</tr>
<tr>
<td>journalism and information</td>
<td>58</td>
<td>69</td>
<td>60</td>
<td>64</td>
<td>61</td>
<td>63</td>
</tr>
<tr>
<td>business and administration</td>
<td>55</td>
<td>58</td>
<td>34</td>
<td>51</td>
<td>52</td>
<td>59</td>
</tr>
<tr>
<td>law</td>
<td>56</td>
<td>58</td>
<td>34</td>
<td>51</td>
<td>52</td>
<td>59</td>
</tr>
</tbody>
</table>

Source: UNESCO

2.5. Educational outcomes and access to tertiary education in Europe

In the EU gender, poverty, and adult illiteracy is also an issue, although on a much smaller scale to many developing countries, where this continues to be a large scale challenge as set out above. Debates on gender equality in education in the EU largely focus on field of study choice and the inequalities associated with the post compulsory phase rather than issues of access to primary school, given that education is compulsory to at least lower secondary level throughout the EU.

This is due to the wide variation between access and attainment rates between males and females across the EU as shown in Table 3, appendix one and figures 6 and 7 below. On the one hand, girls seem to do better than boys in terms of leaving school early and also in numbers of higher education graduates. On the other hand, there are more male
than female graduates in maths, science and technology, in all EU states where data are available – subjects that are linked to better occupational outcomes and higher wages.

During the 1990s, higher-education institutions became increasingly feminized. This strong trend has been particularly evident in CEE and South East Europe (SEE) countries, the Baltic States, and the Western CIS. For example, a difference of more than 15% in gross enrolment ratios between female and male students has been recorded in Bulgaria, Estonia, Lithuania, Poland, Russia, and Slovenia. In Latvia, this difference reached 25% in the 1998–99 academic year (Magno et al, 2004).
**Figure 6: Male graduates in Maths and Science per 1000 population in Europe, 2012**

Source: UNESCO Institute for statistics database
Figure 7: Female graduates in Maths and Science per 1000 population in Europe, 2012

Source: UNESCO Institute for statistics database
3. DISCRIMINATION AT THE INTERSECTION OF POVERTY, ECONOMIC STATUS, GENDER AND EDUCATION

**Key findings**

- Poverty has a strong influence on gender equal access to education due to both direct and indirect costs of sending children to school.
- Providing free access to school is a very effective way of addressing gender inequalities in education.
- Strategies to improve gender equal educational access must address not only direct costs of schooling but also the wider social factors that impact a family's decision to send their children to school.
- Parental behaviour, for example reading with children, can counter the effect of socio-economic disadvantage on children's educational outcomes.

Much of the literature reviewed points to links between poverty or low economic status and educational outcomes for males and females.

Worldwide, the influence of gender on educational outcomes is not the result of simple direct gender discrimination but takes place at the intersection of gender and other factors such as household wealth and geographic location. **Poverty** plays a significant role in the education gender gap. Girls and boys from the poorest households experience greater disparities in terms of access to education, compared to those from richer households. There is also a wider gap between girls and boys in rural areas, compared to urban areas (Warner et al 2012).

**3.1. Direct and indirect costs of schooling**

In developing countries, according to Rose and Subrahmanian (2005) direct and indirect costs of education affect girls disproportionately. **Direct costs** include school fees, uniforms or books. Many families, where income is constrained, choose to make these expenditures on sons rather than daughters. **Indirect costs** include labour taken away from household production (e.g., farming or trading) or lost care work. The employment of girls in these core household functions can account for an earlier school leaving age for girls compared to boys (Rose and Subrahmanian 2005). It should be noted that these trends are also features of the household economics of poverty and education in a number of **EU countries**.

There are clear associations between what costs are incurred for education and which members of the household gain access. When fees are charged, there is evidence that girls, because of the norms associated with the division of paid and unpaid labour between men and women, are the ones who are withdrawn from school, more than boys. For example, in Deininger’s 2003 study of the impact of free primary school policy in Uganda, it is shown...
that direct and indirect costs of schooling are a **significant barrier** to poorer children attending school, in particular girls.

Other research shows the disadvantages that **Romani populations** of all countries in the Central Eastern European region face. Enrolment rates in school for Romani children are substantially lower than national averages, indicating barriers to access and participation in education. Further, Romani women have significantly lower levels of education than Romani men. The intersection of minority status, poverty, gender, and education in countries in transition requires further exploration according to Silova & Magno, (2004).

### 3.2. Economic status, gender and education in higher income countries

Where absolute poverty rates are not so much of a consideration - in higher income countries - low economic status also has an impact on gender equality in education. Research conducted in the **UK** in 2010, for example, found that relative socio-economic disadvantage has a negative impact on educational achievement. Furthermore, this effect is **greater for boys than for girls**. For example, boys whose mothers lack qualifications, live in poor quality housing or whose mothers began childrearing at a young age (proxies for lower socio-economic status) are increasingly disadvantaged in terms of education, compared to girls from similar backgrounds. The authors argue that gender differences in educational achievement is likely influenced by the **socio-cultural aspects of the family environment**, as measured by mothers’ education, age and quality of the local area environment, rather than to the level of family resources (Mensah and Kiernan, 2010).
4. PERPETUATION OF GENDER INEQUALITIES THROUGH EDUCATION POLICY AND INSTITUTIONS

**Key findings**

- There is evidence of gender segregation in University and schools’ hierarchies in Europe and advanced economies which is both horizontal and vertical in nature – male academics tend to earn more than female and women are more likely to be associated with non-science subjects. This segregation reinforces gender stereotypes throughout the education system.

- Teachers' attitudes and beliefs towards gender similarly reinforces students’ gender roles, often to the disadvantage of girls. For example, teachers are more likely to under-rate girls’ maths abilities and over-rate boys’.

- There is a considerable literature detailing horizontal segregation among students in their choice of subject in which girls are discouraged from taking subjects that are perceived as ‘male’, for example, science, technology, engineering and maths.

- Horizontal segregation is found to be associated with the extent to which girls and boys adhere to traditional gender roles as well as teachers’ attitudes towards children, which may reinforce gendered views of students’ abilities.

- Literature also pointed towards more pronounced educational inequalities for girls in ethnic minority groups, this is explained both by direct discrimination against ethnic groups and socio-economic factors associated with ethnicity.

- Bullying is found to have a profound effect upon educational outcomes.

- Boys and girls are likely to experience bullying to similar extents however, they are likely to experience different types of bullying and be affected by these experiences in different ways.

- Bullying is found to be closely related to dominance-submission models of gender relations whereby those holding ‘traditional’ views of gender relations are also more likely to be bullies.

4.1. Educational institutions and classroom culture

A key strand in the literature relates to the impact of institutional arrangements and education-institution cultures that reproduce forms of discrimination. This research focuses on the impact and effectiveness of both macro level education policy (for example, programmes to increase enrolment in different levels of school) and meso-level educational management and culture (for example gender mainstreaming or gender beliefs dominant in schools and universities). Analysis highlights both the effects of flawed policy - how inadequately formulated policy fails to dismantle gender and other connected
inequalities - and how difficult it is to put even some of the best policies and practices into effect.

4.1.1. The impact of ‘streaming’ on educational outcomes of girls and boys in compulsory education

In high income countries, where legislation on compulsory school education for girls and boys has sometimes been in effect for more than 100 years, a persistent challenge is discrimination related to cultural beliefs about gender within educational institutions. A number of authors (see also, Paecnter; Evans; Fuller) note how the introduction of ‘streaming’ into academic and vocational institutions in adolescence exacerbates gender stereotyping. Pekkarinen examines the impact of age at which students are ‘streamed’ into either academic or vocational education. In Europe, most educational systems stream students into either general or vocational education before the end of upper secondary school. The age at which this is done varies between EU countries. For example, Austria and Germany stream students at the age of 10. Denmark, Spain, Iceland, Norway, Finland and Sweden stream students much later, at 16 years. The remaining Western EU states stream students between the ages of 12 and 15.

Pekkarinen examines the impact of reforms to the Finnish educational system which changed the age at which students are streamed into different institutions from age 10 to the age of 16. The effect of this reform is compared across cohorts who were and, were not, affected by the reform (due to the policy being implemented in stages). The research indicates that the increase in age at which a student is channelled increased girls’ likelihood of choosing an academic path, through which higher education is more likely to result, whereas it decreased boys’ likelihood. The author concludes that there was a 25% increase in gender difference in students choosing the academic path as a result of the reform. Furthermore, the reform also increased the gender difference in the likelihood of students going into tertiary education by 2% in favour of girls. Pekkarinen argues that the gender differences in the impact of the increase in streaming age is explained by girls being ahead of boys in terms of psychological and cognitive development, as girls on average reach puberty two years before boys. While other authors (eg. Moss) consider that some of the attainment differences between girls and boys need to be explained at the level of classroom practices, it is clear that system wide processes such as streaming or channelling students by either ability or subject preference have a gender dynamic also.

4.1.2. Field of study choice

A key area of attention in the literature reviewed, and elsewhere, has been differences between males and females enrolling in subjects linked to science, technology and engineering. A number of studies suggest that girls and women receive less encouragement, experience and opportunities in these areas because teachers and school managers consider it a ‘male’ subject, for which women do not have skills, understanding or aptitude (Altermatt et al, 1998; He & Freeman, 2010; Peterson, 2010, Huffman, et al, 2013).

Consequently, in many countries, women have difficulties in accessing careers in technology or engineering that may pay better than some of the public sector caring
professions, in which many women are employed. In the US, Huffman and Whetten (2013) detail differences of teaching approaches and how students rate their own abilities in computer science and technology at university. They find that women and men rate their abilities in these subjects differently, men higher than women. The authors conclude that gender roles, particularly those surrounding masculinity are the reason behind this difference. They found that, even after controlling for other factors that may be relevant, the gender of the students explained the differences in their self-rating beyond those other factors. Men have more ‘socially acceptable interactions with technology’, according to the research, which means they develop the skills, motives and beliefs necessary to complete technological tasks. The absence of this for women holds them back from better paying and higher status technology careers, the authors conclude. In response, the authors urge universities to adjust current teaching methods and intervention strategies to accommodate gender differences in approaches and beliefs about technology subjects (Huffman and Whetten, 2013).

Gender segregation has also been found to occur in the choices that girls and boys make in the types of schools they attend. For example, in Austria, where students are able to choose from vocational schools with different subject specialisms, there has been a high degree of gender segregation, with girls choosing traditionally ‘female’ oriented vocational schools such as those for domestic science and boys choose traditionally ‘male’ oriented schools such as technical schools. In one Austrian city, Linz, authors report that the mean share of girls in technical schools between 1979 and 2002 was 5%, and never exceeded 9% in any year included in the study (Schneedweis and Zweimuller, 2012).

4.1.3. Gender mainstreaming in education policy

Gender mainstreaming is one policy ‘tool’ that has been used to improve equality in education. Gender mainstreaming is the process by which gender considerations are systematically built into policy, either at the national or institutional level. Two papers included in the review assessed the role of gender mainstreaming in education.

Para-Mallam (2010) argues that whether gender mainstreaming focuses on technical outputs such as improving test scores or addresses wider social structures of gender inequality is important. For example, based on the experiences of gender mainstreaming in education in Nigeria, gender inequalities remain despite Government policies which try to improve girls’ enrolment in school. This was because the policy did not take into account the influence of local social norms and values or local economic features that affect males and females differently (Para-Mallam, 2010).

This finding is supported in Unterhalter and North’s paper which reviews recent research on the on the experiences of gender mainstreaming in development contexts (2010). Gender mainstreaming can be seen as a narrow technical fix of simply appointing women to certain posts in an organisation, or reviewing certain key outputs of an education institution. However, it can also be a way for an entire organisation to place gender equality concerns at the centre of its business and review all policies and practices to support and sustain this. The latter approach is more likely to have lasting and profound impacts (Unterhalter and North, 2010).

---

1 The process of dividing students into different classes or schools by either academic ability or preference for particular subjects.
4.2. Teacher attitudes, values and approaches

4.2.1. Attention given to female and male students

Teacher attitudes, classroom atmosphere and learning approaches all contribute to constructing gender stereotypes which are reproduced by both teachers and students. Arnot (2015) notes, with regard to the UK, that gender stereotypes around the role of the mother and the father – where the father is seen as a source of authority and the mother a source of emotional support - are replicated in the classroom. Thus, female teachers’ roles follow the ‘supportive sympathetic’ archetype, whilst male teachers follow the ‘authoritative’. In this way, teachers' gender roles reproduce and do not challenge gender stereotypes which limits both boys’ and girls’ aspirations. Similarly, in Sweden, Einarsson and Granström (2010) find across ages that boys are given more attention than girls by teachers, although male teachers’ attention to girls is higher with older girls. Female teachers give attention to boys more than girls whatever their ages. The authors conclude that unconscious gender related processes which may be aggressive or even ‘libidinous’ in nature may play a role in teachers’ approaches to their students.

The issue of how much time and attention teachers give to girls and how this affects their engagement with their work has been studied by a number of authors (eg. Francis and Skelton), who show how class, ethnicity and race all interact with gender in shaping different outcomes.

4.2.2. Gendered education of teachers and in academia

Kreitz-Sandberg (2013) explores the gendered nature of the teachers’ education system – where teachers learn their profession - and reports on how teachers’ gender roles are reproduced. The author details both vertical and horizontal segregation in the teacher-training institutions, with more men in secure and senior positions in the institutions’ hierarchies. The research also finds that male and female teacher educators are likely to have different roles. Males are more likely to teach secondary student teachers and in science subjects, whereas women are more likely to teach student teachers intended for younger children and in ‘care’ or arts subjects. The author argues that gender roles that are perpetuated in teacher training will continue through to the students that teachers will be responsible for.

Pritchard (2010) explores the experiences of female academics in Britain and Germany. The research shows the subtle ways of expectations regarding how women dress and present themselves have a detrimental impact on women’s career. Her study notes how women experience difficulties that men do not, in combining an academic career with pressure to work long hours and with raising a family. Thus challenges are present in institutions that, ostensibly, pursue gender equality but where covert gender biases persist (Pritchard, 2010).

Similarly, Berkovitz explores the institutional culture of universities in Israel by examining official publications of a university between 1974 and 2004. Whilst the number of women contributing to academic publications and university increased over the time period examined, the authors finds that women’s images and roles continue to be ‘feminised and sexist’. These images and roles as represented in the official publications, produce messages that are sometimes contradictory to the official gender equalities policies of the university and provide ‘blind spots’ of discrimination (Berkovitz, 2009). The author goes
on to argue that the ‘masculine character’ of most social organisations and institutions such as universities need to be considered when attempting to understand the ways in which gender inequalities are reproduced.

Smith (2008) argues that the Quality Assurance (QA) process within English Universities discriminates against women. QA monitors and manages academic and administrative standards. Based on qualitative interviews with academics, the QA process was found to contain ‘disguised messages’ which favoured male identities and which disproportionately disadvantaged female academics (Smith, 2008).
5. SOCIAL NORMS, VALUES AND PRACTICES WHICH PERPETUATE DISCRIMINATION

Key findings

- Whilst girls may outperform boys at school, families and communities’ expectations of their future careers may prevent them from translating educational success into career success.

- In some countries girls are less likely than boys to continue education into higher levels.

- In other countries, particularly in advanced economies, although women may outnumber men in tertiary education, they may choose fields that are not as lucrative or prestigious (science or technology subjects), owing to embedded beliefs that these are not ‘female’ subjects.

- Media attention to the influence of family dynamics on educational outcomes has scrutinised mothers’ roles disproportionately.

Education policies and institutional processes reproduce some of the gender inequalities of wider society inside educational institutions. These can be exacerbated by norms and actions which undermine women’s security and support within the education sector. At one end of the spectrum, these actions may be implicit or unconscious institutional beliefs about gender. At another end they are linked with sexual harassment and gender based violence.

5.1. Social beliefs on gender and its impact on education

Scott (2004) finds that young girls’ attitudes and views towards motherhood impact on their educational attainment. Girls who reject traditional gender roles tend to do better at school and achieve higher grades, compared to girls who hold traditional views on gender. By contrast, gender role attitudes and aspiration towards parenthood had no influence on the educational attainment of boys. For Scott, this means that even children aged 11 are aware that there is a conflict between motherhood and family and education and career but that this conflict is only present for girls and not boys.

Scott’s analysis also suggests that adolescent boys are more likely than their fathers to hold views that support traditional male roles whereas adolescent girls are more likely to hold gender egalitarian views, compared to their mothers. That adolescent boys’ views tend to support the status quo is because it is less problematic for boys and even beneficial for them. These views on gender roles are likely to shape adolescents’ expectations and aspirations for future career and also shape the culture within schools (Scott, 2004).

The author also draws attention to the central role that families are perceived to play by the wider public through the media. In the UK, single, working mothers have been subject to scrutiny and criticism that their children do less well at school. This assertion was the
subject of a nationally-broadcasted documentary entitled ‘Missing Mums’ which attracted much attention and caused national debate. According to Scott, this demonstrates the importance of gender-roles in debates about educational attainment, in which women are singled out for scrutiny for their role in the family (Scott, 2004).

Power (2006) also draws attention to public discourses about the role of mothers in their children’s educational success. The author identifies in both media accounts and academic research a tendency to blame educational and social inequalities on women, particularly middle class mothers, for making ‘hypocritical’ choices to work rather than look after children. The focus on mothers represents a shift in research away from the impact of state and organisational cultures within schools.

De Jong (2013) explores the experiences of educational disadvantage of second-generation migrant youth in Italy, France, the Netherlands, Spain, Denmark and the UK. The study shows that disadvantages experienced by this group in relation to school progression and attainment are largely due to their ethnicity and social class (de Jong, 2013). Second generation immigrant girls from these backgrounds perform better than boys at school. However, only a minority enter non-vocational secondary school streams and go on to attain university degrees. This is a result of a number of disadvantages associated with gender and ethnic minority status. Inequality in education is experienced among this group in the form of language gaps, early dropout, poor performance and attendance at vocational schools. In terms of gender, young women in this group are also exposed to control ‘major family and community control’ which limits their ability to transition through school and into higher education (de Jong, 2013).

In the US, where college education is not provided free or cheaply, gender is also found to influence families’ decisions on which children will receive more or less education. Young – Joo (2009) shows there is a significant and negative gender-specific birth order effect on educational attainment. The research analysed data from a representative longitudinal survey in an American state (Wisconsin). The analysis found that first born children tend to receive more schooling compared to later born children. However, this is only the case amongst sons. Daughters receive similar levels of schooling regardless of birth order however, they receive less schooling overall than their male siblings. These results suggest that parents invest differently in their children according to both birth order and gender. The author speculates that this preference may be a rational choice for parents who, aware of likely lower returns on educational investment for their daughters or expectations that daughters will marry, may affect their decision of whether to ‘invest’ in their education, for example by paying for college. Young-Joo argues that more research is needed to understand the gendered nature of allocation of resources within households.

Zhao (2010) discusses how in China, where differences between women and men were strongly discouraged by the state, different barriers are encountered for women. Zhao concludes that in China, whilst some barriers to women’s access to education were removed, wider social and cultural negative stereotypes about women and minority groups persist, even amongst high achieving university students and thus women continue to face discrimination in certain segments of the labour market.
5.2. Bullying and gender based aggression

Bullying, often linked with gender identities, has been estimated, on the basis of a number of surveys in European countries to affect nearly 30 percent of school-aged youth (Nansel, Overpeck, Pilla, Ruan, Simons-Murton, and Scheidt, 2001, Bradshaw, 2013).

A number of articles in this review examined the gendered impact of bullying and aggression within schools. Bullying is defined throughout this literature as consisting of physical, psychological aggression which occurs repetitively and intentionally with the aim of hurting the victim (Carrera-Fernandez et al, 2013). This body of research commonly identifies bullying as a pervasive and potent experience for students which may affect their educational outcomes. Victims of bullying experience a range of negative consequences for both academic achievement, interpersonal and physical and mental health problems (Bradshaw, 2013). Thus, bullying is a serious problem which a number of authors sought to explore to see if gender has an influence on both the likelihood of victimisation as well as its impact.

Bradshaw’s (2013) study of bullying from a national survey of teachers and educational support staff in the US identifies the many different forms that bullying takes. 59% of respondents reported that verbal aggression was a concern, 50% reported that social/relation aggression was a concern and 39% reported physical aggression as a concern within their school. 20% of respondents reported sexist remarks were a concern within their school (Bradshaw, 2013). The survey also identified ‘several professional development needs’ where staff appeared to be lacking knowledge or skills to address bullying. In particular, additional training was found necessary in relation to bullying on gender issues, sexual orientation and disability. Teachers and educational support staff reported feeling the least comfortable in intervening in cases of ‘sexting’ or ‘sexual texting’ where students are encouraged to send or may receive explicit pictures or messages. Whilst no data is provided in this study on the gender of victims and perpetrators noted by teachers and other staff, another study in this review concludes that ‘sexting’ disproportionately affects girls who experience it as harassment. Ringrose and colleagues’ qualitative study of ‘sexting’ and sexual harassment with 35 students from inner city London schools reports that ‘sexting’ is a complex concept whereby ‘victimisation’ may be ‘voluntary’ as well as coerced. However, they conclude that ‘sexting’ is not a gender neutral practice. The issue is shaped by gender dynamics in peer groups in which, typically, boys ‘harass’ girls and is exacerbated by the norms of popular culture (Ringrose et al, 2012).

In their study of 387 students aged between 7 and 14 in Portugal, Silva and colleagues find that both girls and boys are victims of bullying as well as perpetrators. However, there are significant differences between genders. In particular, boys are more likely than girls to be victims of physical aggression and insults, whilst for other types of bullying, boys and girls are equally likely to be victims. Girls are more likely than boys to experience indirect forms of aggression such as being talked about negatively. The research did not specify the gender of the perpetrators of different types of bullying (Silva et al, 2013).

Research conducted in the US shows that gender plays a significant role in the type of bullying victims experience and the impact of this on educational outcomes. Popp and colleagues (2014) note that overall, female students have better educational outcomes compared to male students. However, bullying victimisation is negatively associated with educational outcomes. The authors note that female victims of direct (such as hitting or
kicking or direct insults) and indirect (such as manipulation or gossiping) bullying rate their academic abilities lower than those not affected. This effect was not found in male victims of indirect victimisation— the authors found no statistically significant impact on boys’ self-rating of their academic abilities. The authors also note a gender-specific effect of direct bullying on educational achievement, which is greater for girls than boys. Indirect bullying, on the other hand, negatively affects both girls and boys educational achievement but direct bullying, only girls. The authors suggest that the more limited impact of direct bullying on boys compared to girls may be because physical, direct bullying is a more accepted and expected behaviour among boys. Boys may, therefore, have been able to develop coping skills for this type of bullying. Overall, the study shows the importance of bullying and strategies needed for protecting victims and preventing it from occurring, taking into account the different impacts for girls and boys (Popp et al, 2014).

Carrera-Fernandez and colleagues (2013) conducted a nationally representative survey of 1500 students in Spain including students attending any of the 4 years of Compulsory Secondary Education. The purpose was to explore the combined influence of several gender variables on the impact of bullying. The gender variables used included specific measures of how respondents describe themselves as either masculine or feminine and also a measure of sexism – both hostile sexism (negative attitudes towards women) and ‘benevolent’ sexism – attitudes that are ostensibly ‘positive’ in tone. The authors find that attitudes of hostile sexism predicted more acceptance of bullying and strongly correlated with bullying behaviour. It also found that boys were more likely than girls to hold negative attitudes towards women (hostile sexism) and also towards gay men and lesbians. The study concludes that the close relationship between sexism and support for a dominance-submission model of gender relations underlies bullying, however the results also present a more nuanced picture of how sexism and bullying relate to each other. The authors point out that benevolent sexism – in which girls are perceived as being nurturing or ‘purer’ than boys - actually mediates against bullying tendencies. The authors conclude that for adolescents demonstrating benevolent sexist attitudes may perpetrate other forms of discrimination even if they do not engage in actions traditionally associated with bullying (Carrera-Fernandez et al, 2013).

Gadin and colleagues (2013) conducted research to explore the challenges and processes involved in carrying out school health promotion project in a school in Sweden. The purpose was to identify the challenges in a context where gender equality and empowerment were leading principles (Gadin et al, 2013). The study was based on focus groups with 6 single sex groups of secondary school students aged between 7 and 12 years old. Despite not being raised explicitly by researchers as a topic of discussion, gender was raised by pupils. Girls complained of certain boys who they identified as violent or harassing. Participants in all focus groups conducted complained of this as a problem.

The research demonstrates how pupils were regularly exposed to violence and aggression including sexual harassment and aggression. Furthermore, these experienced had become ‘normalised’ in that victims felt unable to address the aggression for example, feeling unable to talk about it either to each other or to adults. Moreover, girls’ ability to form coping strategies to address the aggression was undermined by their belief that in asserting their authority and struggle for a stronger power base they risked being thought of as unfeminine (Gadin et al, 2013).

In her study of girls’ experiences of gender relations both in school in Uganda, Muhanguzi (2011) identifies that students construct and replicate gender relations that feature
domination and subordination, which create gender inequalities to girls’ disadvantage. These gender relations are characterised by confusing and traumatic experiences that are built upon control of female sexuality, **sexual abuse** and exploitation and misogyny. The author conducted qualitative research with adolescent schoolgirls and schoolboys. As an example of beliefs held about gender relations, boys revealed their belief that it is ‘abnormal’ or ‘funny’ for a girl to initiate a sexual relationship. Muhanguzi draws parallels between this finding and research conducted in other parts of Africa which find that women who overtly express sexual desire are labelled as immoral. The importance of empowering girls to express and control their sexuality is underlined by Muhanguzi through reference to the negative impact of teenage pregnancy and abortion. The author argues that gender sensitive **sexuality education** is an important potential tool to combat these destructive gender relations and promote gender equality in school and society (Muhanguzi, 2011).
6. GENDER, EDUCATION AND THE LABOUR MARKET

### Key findings

- Gender gaps in employment rates are narrowing in most OECD and EU countries, as more women enter the labour force. However, the earnings differentials between men and women are still pronounced.
- Field of study plays a significant role in women’s lower average wages however, other factors play a role too including: the availability of affordable child care and the role of collective bargaining.
- In Pakistan, low education levels which trigger a vicious cycle in which poorly educated women remain ill-equipped to obtain well-paid jobs. This in turn, reduces incentives for parents to invest in girls’ schooling.
- Institutions which help the labour market to run such as careers advice services is governed by implicit norms and attitudes particularly for women and to the detriment of women.
- Attempts to address labour market segregation through improving Vocational Education and Training in health care failed in Norway through offering poor quality training with poor career opportunities.

Education systems vary in how much they are able to undo some of the wider gender inequalities reproduced in society. However, in all countries the transition between formal education and the labour market is one where gender inequalities, which may have been held at bay during schooling, reappear. Ensuring better outcomes for women in the labour market is desirable not only for de facto equality between women and men but because raising women’s earnings benefits the wider economy as well as families’ prosperity.

### 6.1. The gender wage gap

Gender gaps in employment rates are narrowing in most OECD and EU countries, as more women enter the labour force. However, the earnings differentials between men and women are still pronounced. One explanation for the persistency of the gender wage gap is the high degree of occupational segregation, and some of the roots of this lie in the education system (Schneeweis and Zweimuller, 2011).

A number of studies find that occupations in advanced economies are highly gender segregated. Moreover, gender integration – similarity between women and men’s wages and activities – occurs more in professional and managerial jobs than in clerical and blue-collar occupations (Cotter et al. 2004). Despite this however, male graduates are more likely than female to be in upper management and in high prestige professions, whereas women graduates dominate in professions such as nursing or teaching (Triventi, 2011).
Despite high numbers of female graduates in Europe, once in the labour market, overall, women get lower wages than their male colleagues with the same type of education (Triventi, 2011, Hassler, 2014), resulting in the ‘gender wage gap’. Triventi (2011) reports that Austria and Germany have larger differences in wages (women’s wages are around 62-67% that of men). In Spain, Finland, the Netherlands, Czech Republic and Italy, the gender gap is relatively lower (women’s wages are around 75% that of men). The lowest gender wage gap is in the United Kingdom and Belgium, where women’s average wage is more than 90% that of men.

Women’s careers tend to be discontinuous, featuring part time work. They tend to be secondary wage earners within the family. Their careers tend to slow down after some years of labour market participation once they have children and they find that career breaks disadvantage them in relation to future promotion (Hassler, 2014).

Triventi’s analysis of the gender wage gap within 11 European Union countries finds that field of study plays a significant role in women’s lower average wages in 11 EU countries overall. However, the effect differs between countries. The analysis finds that that if women’s choices of field of study were similar to those of men, the gender wage gap would be reduced by about 7% on average, overall. There are differences by country: in the Czech Republic, differences between male and female graduates’ field of study and skills actually reduces the gender wage gap. In the UK, Germany and Austria, field of study and skills have a negligible impact on the wage gap. However, in Norway and France, 19% and 27% respectively of the gender wage gap is accounted for by differences in field of study and skills.

Overall, Triventi concludes that the gender wage gap is explained in different ways across different EU countries included in the study. Her findings indicate that whilst educational factors such as field of study choice have an influence on the wage gap, this may be mediated by other factors which shape an individual’s earning power in the economy. Thus, wage determination is a process deeply rooted in the institutional context’. It is possible, Triventi concludes, that the gender wage gap is related to women’s broader role in society and their ‘general empowerment’ in the labour market. Such features as collective bargaining power and availability of affordable child care will impact wages, in addition to educational factors. Addressing differences between women and men’s choice of field of graduate study will not be a sufficient condition for increased economic empowerment, even though it may be a necessary one. Triventi’s findings are supported by Machin and Puhani (2003) who find that differences in field of study between men and women alone cannot account for the gender wage gap.

In Pakistan, women lag far behind men in terms of labour force participation. Where women do participate, they are concentrated in a much narrower set of occupations and perform mostly unskilled jobs. They are likely to have substantially lower earnings in employment than men also. The cause of this is attributed to low education levels which trigger a vicious cycle in which poorly educated women remain ill-equipped to obtain well-paid jobs. This in turn, reduces incentives for parents to invest in girls’ schooling (Aslam, 2012).
6.2. Careers advice and vocational training

Research conducted in Denmark, France, Italy, Netherlands, Spain and the UK details the impact of career advice offices on transitions through education and employment for girls from ethnic minority backgrounds. This finds that advice provided by official careers advice networks as well as girls’ own social networks tend to encourage these girls towards professions and choices that are traditionally dominated by women from ethnic minorities. This has the effect of reproducing gender and ethnicity-based social inequalities and creating a ‘racialised’ labour market. The author concludes that the labour market and institutions which help it to run is governed by implicit norms and attitudes particularly for women and to the detriment of women. In particular, the author notes discriminatory attitudes experienced by women wearing a headscarf. Such discrimination impacts strongly on career trajectories and personal decisions and results in labour market discrimination and segregation (Farris, de Jong, 2013).

In a study conducted in 2014, Hassler notes that while young women perform better than men in many European countries, in terms of educational attainment and qualification, women do not expect to gain as much from this as men in the labour market. The reasons for this are explored through the experience of the German labour market. The research notes that women who are qualified at the intermediate skills level are more likely to move horizontally than vertically in their career in Germany. This underlines the importance for women in engaging with continuing education and training, which places greater demands on women, who frequently juggle child care commitments also, as formal qualifications are usually required for promotion in the German labour market (Hassler, 2014).

Horst and colleagues explore the influence of Vocational Education and Training (VET) on labour market segregation in Norway. Health and social care VET programmes are the most popular in the country for female applicants. However, the authors suggest that the experience and opportunity provided by the health and social care VET is of poor quality, leading to only part time work with limited career opportunity. Only a minority of those participating on the VET programme go on to undertake apprenticeships as health care workers. Instead, most switch to general education as a means of accessing higher education. Those who continue with a health care apprenticeship usually do so in combination with another part time job. Thus, the authors conclude that the introduction of health and social care VET, as an attempt to improve career options for mainly female participants and thus improve gender equality in the labour market, has failed (Horst et al 2013).
7. ADDRESSING THE VICIOUS CIRCLE: ACHIEVING EMPOWERMENT THROUGH EDUCATION

Key findings

- Free school education is a highly effective policy for addressing the barrier of poverty in getting girls into school. However, free school provision is most successfully implemented when:
  - The role of girls and women in families, local communities and economies are understood and worked with and
  - Social norms and practices which have gender implications are also addressed at the same time.

- Education is a powerful means of improving women’s status in their community through boosting their economic status

- Educating women means that daughters are more likely to be educated as well.

- Daughters of educated women are more likely to experience better educational and occupational attainment.

- Education is capable of increasing women’s sense of agency which will support wider reforms in support of gender equality.

- Institutions that train teachers should investigate their own gender norms and ideas and how these are likely to impact upon the student teachers that they train.

- Sexual education is more effective when undertaken from an empowerment, feminist perspective.

- Teacher training offers a window of opportunity to improve teachers’ skills in challenging persistent and damaging gender norms and expectations.

The first sections of this review provide an overview of the challenges for empowering women through education. The following section pulls together findings on how to meet those challenges – opportunities for empowerment. The opportunities cover the distribution of educational resources, social norms and attitudes towards gender and educational institutions and policies.

7.1. Addressing the direct and indirect costs of education to get girls into school

Following the introduction of free primary education in Northern Tanzania and Northern Nigeria, there was ‘spectacular increase in enrolment’, which grew by 50% from 4.4 million in 2000 to 6.6 million in 2003 and reached 8.4 million in 2009 (Unterhalter et al, 2010).
Similarly, Deininger (2003) shows the effectiveness of meeting direct costs of education as it removes significant barriers to education for girls. In Uganda, following the introduction of Universal Primary Education (UPE) gender gaps amongst children enrolled from low income families almost disappeared. UPE sought to eliminate the cost of primary school for up to four children per household, two of which had to be girls. UPE was supported at the same time by large scale publicity campaigns to encourage parents to enrol their children, particularly girls, and to discourage parents from agreeing early marriages for their daughters. Despite some persistent problems of attendance amongst the poorest students and girls the effects of UPE in Uganda, the last ten years have seen an enormous expansion of girls’ enrolment in primary school (Deininger, 2003).

Thus, free school education is a highly effective policy for addressing the barrier of poverty in getting girls into school. However, free school provision is most successfully implemented when:

- The role of girls and women in families, local communities and economies are understood and worked with and
- Social norms and practices which have gender implications are also addressed at the same time.

In Unterhalter’s 2013 research, the example of two different communities are used to describe the different challenges of implementing free education. In Tanzania where free primary education was introduced, one community, the Chagga, were particularly keen to engage girls in education owing to a long tradition of educating women over generations. However, another community in the same region, a nomadic pastoral community, were more reluctant as their girls tend to be married before puberty, owing to the importance of marriage in building up and maintaining herds of animals. Thus, the policy of free primary education had to take account of the local economic and cultural contexts in order to be effective (Unterhalter, 2013).

In considering the effects of low income and economic status in the UK, which appears to adversely affect boys’ educational attainment more than girls’, Mensah and Keirnan (2010) suggest that parenting behaviours, particularly those which are ‘cognitively enhancing’ such as reading to a child, may be effective ways of overcoming the educational disadvantage of low income. The importance of these parenting behaviours particularly for boys is because boys’ attention and emotion may require greater external facilitation and support compared to girls (Mensah and Keirnan, 2010).

7.2. Overcoming social norms and attitudes that block equality in education, through education

The research reviewed shows how education is a powerful means of challenging the social norms and attitudes surrounding gender which, themselves, act as barriers to gender equal education in the first place.

Mali and Courtney (2010) explore the ways that education may overcome social norms and practices that have a pervasive effect on gender discrimination in Pakistani society. The authors note that discriminatory attitudes and practices commence in the family, for example, in the home where women and girls are often excluded from decision making processes and are thus denied developing confidence in their personal abilities. In this
Empowering women and girls through education

way, social norms of discrimination can undermine macro level reforms that are intended to benefit women. For example, legislation in the area of divorce and inheritance rights was introduced to provide women with greater protection. However, the impact of the reform was limited because women did not feel able to take advantage of these new protections.

The authors argue that education of women is the most effective way of stopping the cycle between poor protection of women’s rights and low regard for women’s rights. This will be achieved, the authors argue through empowering women in the education system to become better advocates for themselves. The mechanisms through which this can be achieved is by providing women with better economic outcomes which, in turn, buys greater respect and status in the community. However, this effect may only be realised, the authors further argue, if the education provided does not simply reinforce the value system experienced by girls at home. Thus, providing a safe and supporting education that builds girls’ confidence as well as academic achievement will help to end the cycle of discrimination (Mali and Courtney, 2010).

7.3. Intergenerational transfers of values and benefits

Parents’ attitudes and resources have a powerful influence on how gender intersects with wider social norms and practices, educational outcomes and occupational attainment.

A number of studies point to the potential inter generational effects of increasing the number of women in education. Improving both father’s and mother’s education increases the educational attainment of daughters more than that of sons, but raising mother’s education is associated with a significantly greater reduction of the difference in educational attainment between sons and daughters. This is the finding of Afridi (2010) in a study of educational outcomes in India. The study also shows a positive relationship between higher levels of education of daughters and mothers’ expressions of autonomy. Thus the inter-generational effects of educating women are marked.

The transmission of attitudes and beliefs towards gender across generations has also been a key focus of recent research on labour market outcomes. Farré & Vella (2012) find that mothers with less traditional views about the role of women in society are more likely to have working daughters, for example. Similarly, Fernández and colleagues (2004) highlight the increasing number of men growing up in families with working mothers and suggest this is an important factor in explaining the increase in women’s involvement in the labour force (Roman and de la Rica, 2012). Roman and de la Rica demonstrate in their analysis of PISA data, at the international level, that having a mother who participates in the labour market increases the daughter’s performance in maths. Moreover, this effect is particularly the case for those in countries with low female labour market participation rates, which the authors argue is where such mothers ‘make a difference’. These effects are not noted for boys. Again, this research suggests that educating women will create a ‘virtuous cycle’ whereby education leads to increased autonomy and empowerment, which in turn leads to better educational outcomes for daughters.

In Pakistan, Aslam and colleagues (2010) also explore the ways in which education may end cycles of discrimination for women. In response to women’s low participation levels and gender segregation in the labour market, the authors note that women’s education may indeed improve equality through increased wages and access to occupations, based on analysis of data on educational attainment and occupation by gender in Pakistan. However, the research also notes that the equalising effect provided by education for women is only
realised if she has been educated for ten years or more. Despite this, the researchers note that there may have been some improvement in this regard - the proportion of women with ten or more years of education has also risen over time (Aslam et al 2012).

7.4. Overcoming discriminatory practices in educational institutions: same sex schools

In order for education to be a transformative experience, both for individual girls and women, and to address discrimination in wider society, the experience of education must be gender sensitive for both boys and girls. The literature has provided many examples of how damaging gender norms and stereotypes are perpetuated through educational institutions. A number of studies suggest ways in which this may be tackled. For example, in Kenya and Bangladesh research suggests that gender sensitivity of the school environment affects girls’ likelihood of attending more than it does for boys (Warner et al, 2012).

7.4.1. Single sex schools

One issue connected with the quality of educational experience is single sex schooling. Schneeweis and Zweimuller (2012) explore the impact of the proportions of female peers on girls’ choices of school and, therefore, choice of field of study. They test the hypothesis that the higher the proportion of female peers, the more likely girls are to choose schools specialising in subjects that are atypical for their gender, in an examination of gender data and school choice on Austrian school children. Their results show girls are less likely to choose a traditionally ‘female’-specialism school type and more likely to choose a traditionally ‘male’-specialism dominated school type at the age of 14 if they were exposed to a higher share of girls in previous grades. Furthermore, the results show that this effect is significantly large. The authors draw upon previous research which shows that women in male dominated employment sectors have disproportionately graduated from single-sex colleges. Similar patterns are observed in research on primary and secondary schools, argue the authors, whereby higher female proportions in class lead to higher female earnings and less gender segregation in the employment market (Schneesweis and Zweimuller, 2012).

The authors offer a number of explanations for this. Gender composition may have an influence on students’ confidence in their abilities. During adolescence, students are especially sensitive to gender roles and likely to adhere strongly to gender stereotypes. Thus, in mixed male and female schools, this effect is amplified while, by contrast, in single sex schools, gender related beliefs are less important for students to construct beliefs about their abilities and personal identities. The authors do not make recommendations as to whether single sex schools should be pursued as a policy, although their evidence supports the notion that girls are more likely to choose STEM subjects in female-dominated classrooms.

Similar results are detected by Kessels and Hannover in their 2008 randomised controlled experiment with 400 students in Berlin, Germany, in which students were assigned either to single sex or mixed gender classes in physics through the 8th grade (age 14-15). The research found that, after one year, girls in the single-sex classes reported greater self-belief in their physics ability compared to girls taught in mixed classes. This effect was not
detected in boys who took part in the experiment. Moreover, both boys and girls taught in single sex classes were less adherent to gender stereotypical views.

Whilst other studies call into doubt the effectiveness of single sex schooling on gender equal outcomes (see Goodkind, 2013 and Kim and Law, 2013,) the research on single sex schooling offers compelling evidence about the importance of school environment and how it challenges or reproduces damaging gender roles and stereotypes.

7.4.2. Making schools and colleges gender sensitive

A number of studies also highlighted the importance of teacher attitudes and expectations of boy and girl students, reporting that negative gender attitudes are often perpetuated by teachers, albeit unconsciously. The research suggests a number of ways in which this may be tackled.

Kreitz-Sandberg shows how gender is constantly constructed and restructured in teacher education. Thus, universities which are responsible for teaching teachers must develop strategies to collectively challenge and understand gender concepts. The research supports gender awareness components of teacher training education so that gender stereotypes can be challenged throughout the teacher profession. Further, the author recommends that teachers are provided with knowledge and support about how gender notions are constructed in the school environment and that this knowledge is constantly refreshed and updated.

7.5. Addressing sexual harassment and gender based violence both through and in education

In addressing bullying and aggression experience by school children in Sweden, Gadin and colleagues suggest that teachers must address specific individuals’ bullying behaviour, rather than address whole classes about the issue. Ringrose and colleagues (2010) suggest that teachers must be aware of the gender-specific nature of sexual text messaging and harassment (‘sexting’), particularly noting that what may appear to be voluntary participation in sexual messaging may in fact be a result of subtle forms of coercion.

Similarly, Bradshaw (2013) finds that teachers and educational support staff in the US were ill equipped and unconfident in addressing sexual harassment or bullying which is gendered in tone, thus further training and support is recommended to allow teachers and others working in schools to create environments that are safe and supportive to girls.

7.6. Education and health and reproductive rights

Female empowerment was found to relate to positive sexual health outcomes and attitudes in research conducted in the US on sexual education (Fitz and Zucker, 2014). Research with college women finds that women with stronger liberal feminist beliefs were more sexually confident and more likely to engage in safer sexual practices compared to those with lower levels of liberal feminist beliefs. The authors conclude that feminist beliefs work in tandem with their social environments to mould young women’s sexual practices. This is because feminist beliefs reduce the effect of sexism within society and thus, impact
positively on two factors relevant for women’s sexual well-being: sexual self-efficacy and condom use intentions. These findings provide an argument in support of pro-feminist sexual education, conclude the authors.

In their research on sexual health education, also in US schools, Grose and colleagues (2014) similarly find that where sex education leads to progressive attitudes towards girls and women and less agreement with traditional models of masculine and feminine roles in society, this also leads to greater knowledge about sexual health and resources related to sexual health. School-based sexual education programmes may be well positioned to address social factors that are found in research to be linked to poor sexual health outcomes. However, the authors argue that sex education by itself is not sufficient to produce the changes necessary to address the social and cultural barriers that many young people experience in the area of sexual health. This is because the effect of personal attitudes, beliefs, or efficacy may be limited if one does not have adequate power over or access to resources, such as contraception and local health services (Grose, et al, 2013).

7.7. Educating for empowerment

Research conducted in Bolivia outlines the influence of a broader notion of empowerment through education. Gervais (2010) explores the ways that adolescent girls in an area in Bolivia learn about their human rights through human rights workshops run by non-governmental organisations. The research shows that by encouraging girls to use their own voices and ideas about human rights in a safe and supportive environment, they are able to develop their own sense of safety and dignity, despite living in conditions where their human rights may be compromised through patriarchal constraints and economic instability.

The authors recommend that non-governmental pro-rights education projects should be supported in other similar international development initiatives (Gervais, 2010).
8. CONCLUSIONS AND RECOMMENDATIONS

8.1. Conclusions

This review has not only covered a very broad range of issues and regions but has also attempted to address the literature from the perspective of both challenges and opportunities for women and girls through education. Still, there is more complexity than could be covered by the scope of this review.

Therefore, for example, it did not address the role of textbooks. However, the gendered portrayal of women and men in textbooks has elicited much comment throughout the literature on education and gender (see Unterhalter et al, 2014 for example). While in many high income countries care has been taken to ensure gender equitable representation in textbooks, this remains an issue of concern in developing countries.

The bulk of the literature reviewed outlined particular adverse consequences and outcomes for girls through the education system. The challenges reviewed in this study are diverse. They relate to a) the distribution of educational provision and financial resources available to help girls get educated; b) policies and institutional factors that deliver education; c) cultural and social norms.

In terms of the distribution of educational provision and financial resources, the literature examined the influence of poverty and socio-economic status on educational outcomes as well as potential solutions for this. The key findings were:

- Poverty has a strong influence on gender equal access to education due to both direct and indirect costs of sending children to school;
- Providing free access to school is a very effective way of addressing gender inequalities in education however,
- Strategies to improve gender equal educational access must address not only direct costs of schooling but also the wider social factors that impact a families’ decision to send their children to school;
- Parental behaviour, for example reading with children, can counter the effect of socio-economic disadvantage on children’s educational outcomes;
- Girls are slightly more likely than boys in general, throughout OECD countries, to be classed as ‘economically disadvantaged low achievers’;
- Boys are slightly more likely than girls to be ‘resilient’ students meaning that they are high achievers despite being poor, again based on OECD data.

Other research focused on institutional cultures and practices in both schools and universities and how these reproduce gender stereotypes. Key findings include:

- There is evidence of gender segregation in University and schools hierarchies in Europe and advanced economies which is both horizontal and vertical in nature – male academics tend to earn more than female and women are more likely to be associated with non-science subjects. This segregation reinforces gender stereotypes throughout the education system.
- Teachers attitudes and beliefs towards gender similarly reinforces students’ gender roles, often to the disadvantage of girls, for example teachers are more likely to under-rate girls’ maths abilities and over-rate boys’.

- There is a considerable literature detailing horizontal segregation among students in their choice of subject in which girls are discouraged from taking subjects that are perceived as ‘male’, for example, science, technology, engineering and maths.

- Horizontal segregation is found to be associated with the extent to which girls and boys adhere to traditional gender roles as well as teachers’ attitudes towards children, which may reinforce gendered views of students’ abilities.

- Literature also pointed towards more pronounced educational inequalities for girls in ethnic minority groups, this is explained both by direct discrimination against ethnic groups and socio-economic factors associated with ethnicity.

- There were a significant number of articles on bullying, violence and gender discrimination in schools. Bullying is found to have a profound effect upon educational outcomes.

- Boys and girls are likely to experience bullying to similar extents however, they are likely to experience different types of bullying and be affected by these experiences in different ways.

- Gender-based bullying and harassment includes sexual harassment and ‘sexting’.

- Bullying is found to be closely related to dominance-submission models of gender relations whereby those holding ‘traditional’ views of gender relations are also more likely to be bullies.

Across the findings, the influence of social and cultural norms was found to be an intervening factor in whether or not education can translate into greater empowerment for women. The review also considered the impact of social and cultural norms and expectations of gender. Key findings are:

- Whilst girls may outperform boys at school, families and communities’ expectations of their future careers may prevent them from translating educational success into career success.

- In some countries girls are less likely than boys to continue education into higher levels.

- In other countries, particularly in advanced economies, although women may outnumber men in tertiary education, they may choose fields that are not as lucrative or prestigious (science or technology subjects), owing to embedded beliefs that these are not ‘female’ subjects.

- Media attention to the influence of family dynamics on educational outcomes has scrutinised mothers’ roles disproportionally.

The findings in this review may be organised according to elements of the ‘negative’ and ‘positive’ feedback loop which perpetuates or changes gender inequalities through education (see figure one). Distribution of resources, institutional cultures and practices as well as social norms and expectations of gender all play a part in how education can empower women. These factors are interlinked and mutually reinforcing. This demonstrates the challenge for policy makers. Policies and initiatives to increase empowerment for education must take account of this complexity. This has been a failure, to a large extent, of gender mainstreaming when applied purely as a technical tool.
Gender mainstreaming is intended as a **transformative process** for improving gender equality across multiple areas, whether it is applied in a single institution or across many. However, the evidence in this review suggests that despite good intentions, if gender equalities policy does not tackle socio-cultural, economic as well as institutional factors connected with gender it impact will be hampered.

Another challenge for policy makers and educational institutions is **challenging often invisible gender stereotypes and beliefs** which are subtly reproduced throughout the education system. Beliefs are transferred through teacher training, through teachers’ attitudes and practices towards boys and girls and also through young people themselves. Adolescents particularly adhere to traditional male and female roles and archetypes as they try to make sense of their roles and identities. Addressing detrimental gender stereotypical views in the classroom will involve **improving teachers’ self-awareness** of their own views and how to challenge destructive gender beliefs in the classroom. Some authors have suggested that single sex schools may have a positive effect in this regard, however, the evidence is mixed on this and there may be other ways that the same result can be achieved, for example, training of teachers, or through directly educating girls on their human rights and encouraging their autonomy.

The extent to which education leads to empowerment for women and girls depends on the **definition of empowerment**. Education has been shown to improve economic empowerment for women and girls, however, *only if* they are able to access similar levels and types of education and boys and men and *only if* they are able to continue their studies. That is to say, education can empower women economically *if* they are actually being educated. There are a number of ways in which girls are excluded from education, as this review details.

Furthermore, equality of educational attainment and achievement may not automatically translate into better labour market outcomes. Other factors are at play including the disproportionate amount of child and other caring that women undertake, the tendency of women to take career breaks for child rearing and the role of wage bargaining power in different economies. Thus, **education alone cannot empower women economically** although it is a powerful necessary condition.

Importantly, education may be an empowering experience in and of itself. If girls access good quality education which is provided in **gender-sensitive, safe and supportive environments**, they may be able to develop self-awareness and confidence to overcome the very broad challenges they face as a result of gender inequality.

### 8.2. Recommendations that follow from this review include:

#### 8.2.1. Recommendations for educational institutions:

- All educational and support staff should be trained and supported to be aware of the impact of gender roles and stereotypes on their students’ self-confidence and personal identities in particular:
  - The influence of gender norms and stereotypes on subject choice.
- All educational and support staff should be trained and supported to address the gendered nature of bullying and harassment including an awareness of the different impacts of bullying on girls and boys.
• Institutions that train teachers should investigate their own gender norms and ideas and how these are likely to impact upon the student teachers that they train.

• Higher education institutions should investigate how their own gender norms and ideas impact upon women’s academic career options.

• Meso level educational institutions such as education departments or ministries must consider the wider influence and impact of social, and economic norms and practices which affect girls and boys differently, when designing policies for increasing educational access for girls.

• Careers advice services should ensure they are not reproducing gender or other minority group stereotypes in the advice they provide.

• Sexual education should adopt an empowerment approach, whereby women and girls are encouraged to take informed decisions about their sexual practices.

8.2.2. Recommendations for government and European union institutions:

• Policies designed to improve the economic prospects of different regions should include programmes to increase the numbers of women and girls in education.

• Policies designed to increase the numbers of women and girls in education should consider three domains of how education can empower women: through social norms and values on gender, through institutions and through the equitable distribution of educational resources.
REFERENCES

Afridi, F (2010) Women's empowerment and the goal of parity between the sexes in schooling in India, Population Studies, 64


Eurydice (2012) Key Data on Education in Europe 2012


OECD (2014) Education at a glance


## ANNEX I: ADDITIONAL TABLES ON EDUCATIONAL ACCESS AND ATTAINMENT BY GENDER

### Table 1: Gender Parity Index (GPI) for primary level school enrolment 2012 (lowest GPI shown first)

If a country has a GPI score of 1 there is equality in rates of girls’ and boys’ enrolment. Scores of less than 1 indicate more boys than girls, scores of more than 1 - more girls than boys are enrolled.

<table>
<thead>
<tr>
<th>Countries below gender parity</th>
<th>Countries above or equal to gender parity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source: UN Millennium Development goals indicators</td>
<td>Source: UN Millennium Development goals indicators</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>0.72</td>
</tr>
<tr>
<td>Central African Republic</td>
<td>0.74</td>
</tr>
<tr>
<td>Chad</td>
<td>0.76</td>
</tr>
<tr>
<td>Yemen</td>
<td>0.83</td>
</tr>
<tr>
<td>Eritrea</td>
<td>0.84</td>
</tr>
<tr>
<td>Guinea</td>
<td>0.84</td>
</tr>
<tr>
<td>Niger</td>
<td>0.84</td>
</tr>
<tr>
<td>Cote d’Ivoire</td>
<td>0.85</td>
</tr>
<tr>
<td>Pakistan</td>
<td>0.87</td>
</tr>
<tr>
<td>Cameroon</td>
<td>0.88</td>
</tr>
<tr>
<td>Democratic Republic of the Congo</td>
<td>0.88</td>
</tr>
<tr>
<td>Mali</td>
<td>0.88</td>
</tr>
<tr>
<td>Benin</td>
<td>0.89</td>
</tr>
<tr>
<td>Djibouti</td>
<td>0.9</td>
</tr>
<tr>
<td>Cape Verde</td>
<td>0.91</td>
</tr>
<tr>
<td>Comoros</td>
<td>0.91</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>0.91</td>
</tr>
<tr>
<td>Lebanon</td>
<td>0.91</td>
</tr>
<tr>
<td>Mozambique</td>
<td>0.91</td>
</tr>
<tr>
<td>Country</td>
<td>Score</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Papua New Guinea</td>
<td>0.91</td>
</tr>
<tr>
<td>Togo</td>
<td>0.92</td>
</tr>
<tr>
<td>Antigua and Barbuda</td>
<td>0.93</td>
</tr>
<tr>
<td>Algeria</td>
<td>0.94</td>
</tr>
<tr>
<td>Ghana</td>
<td>0.94</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>0.95</td>
</tr>
<tr>
<td>Cambodia</td>
<td>0.95</td>
</tr>
<tr>
<td>Lao People’s Democratic Republic</td>
<td>0.95</td>
</tr>
<tr>
<td>Morocco</td>
<td>0.95</td>
</tr>
<tr>
<td>South Africa</td>
<td>0.95</td>
</tr>
<tr>
<td>Egypt</td>
<td>0.96</td>
</tr>
<tr>
<td>El Salvador</td>
<td>0.96</td>
</tr>
<tr>
<td>Saint Vincent and the Grenadines</td>
<td>0.96</td>
</tr>
<tr>
<td>Belize</td>
<td>0.97</td>
</tr>
<tr>
<td>Chile</td>
<td>0.97</td>
</tr>
<tr>
<td>Colombia</td>
<td>0.97</td>
</tr>
<tr>
<td>Dominica</td>
<td>0.97</td>
</tr>
<tr>
<td>Lesotho</td>
<td>0.97</td>
</tr>
<tr>
<td>Mongolia</td>
<td>0.97</td>
</tr>
<tr>
<td>Namibia</td>
<td>0.97</td>
</tr>
<tr>
<td>Panama</td>
<td>0.97</td>
</tr>
<tr>
<td>Saint Lucia</td>
<td>0.97</td>
</tr>
<tr>
<td>Sao Tome and Principe</td>
<td>0.97</td>
</tr>
<tr>
<td>Syrian Arab Republic</td>
<td>0.97</td>
</tr>
<tr>
<td>Thailand</td>
<td>0.97</td>
</tr>
<tr>
<td>United Arab Emirates</td>
<td>0.97</td>
</tr>
<tr>
<td>Country</td>
<td>Score</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>0.98</td>
</tr>
<tr>
<td>Brunei Darussalam</td>
<td>0.98</td>
</tr>
<tr>
<td>China, Hong Kong Special Administrative Region</td>
<td>0.98</td>
</tr>
<tr>
<td>Equatorial Guinea</td>
<td>0.98</td>
</tr>
<tr>
<td>Jordan</td>
<td>0.98</td>
</tr>
<tr>
<td>Kyrgyzstan</td>
<td>0.98</td>
</tr>
<tr>
<td>Portugal</td>
<td>0.98</td>
</tr>
<tr>
<td>Solomon Islands</td>
<td>0.98</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>0.98</td>
</tr>
<tr>
<td>Tunisia</td>
<td>0.98</td>
</tr>
<tr>
<td>United States</td>
<td>0.98</td>
</tr>
<tr>
<td>Venezuela</td>
<td>0.98</td>
</tr>
<tr>
<td>Belgium</td>
<td>0.99</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>0.99</td>
</tr>
<tr>
<td>Burundi</td>
<td>0.99</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>0.99</td>
</tr>
<tr>
<td>Cuba</td>
<td>0.99</td>
</tr>
<tr>
<td>Denmark</td>
<td>0.99</td>
</tr>
<tr>
<td>Finland</td>
<td>0.99</td>
</tr>
<tr>
<td>Hungary</td>
<td>0.99</td>
</tr>
<tr>
<td>Iran (Islamic Republic of)</td>
<td>0.99</td>
</tr>
<tr>
<td>Korea, Republic of</td>
<td>0.99</td>
</tr>
<tr>
<td>Latvia</td>
<td>0.99</td>
</tr>
<tr>
<td>Lithuania</td>
<td>0.99</td>
</tr>
<tr>
<td>Madagascar</td>
<td>0.99</td>
</tr>
<tr>
<td>Mauritius</td>
<td>0.99</td>
</tr>
<tr>
<td>Netherlands</td>
<td>0.99</td>
</tr>
<tr>
<td>Country</td>
<td>Value</td>
</tr>
<tr>
<td>--------------</td>
<td>-------</td>
</tr>
<tr>
<td>Peru</td>
<td>0.99</td>
</tr>
<tr>
<td>Romania</td>
<td>0.99</td>
</tr>
<tr>
<td>San Marino</td>
<td>0.99</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>0.99</td>
</tr>
<tr>
<td>Spain</td>
<td>0.99</td>
</tr>
<tr>
<td>State of Palestine</td>
<td>0.99</td>
</tr>
<tr>
<td>Tonga</td>
<td>0.99</td>
</tr>
<tr>
<td>Turkey</td>
<td>0.99</td>
</tr>
<tr>
<td>Zambia</td>
<td>0.99</td>
</tr>
</tbody>
</table>
Table 2: Gender Parity Index (GPI) for secondary level school enrolment 2012 (lowest GPI shown first)

If a country has a GPI score of 1 there is equality in rates of girls' and boys' enrolment. Scores of less than 1 indicate more boys than girls, scores of more than 1 - more girls than boys are enrolled.

<table>
<thead>
<tr>
<th>Countries below gender parity</th>
<th>Source: UN Millennium Development goals indicators</th>
<th>Countries above or equal to gender parity</th>
<th>Source: UN Millennium Development goals indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chad</td>
<td>0.46</td>
<td>Cook Islands</td>
<td>1</td>
</tr>
<tr>
<td>Central African Republic</td>
<td>0.51</td>
<td>Cuba</td>
<td>1</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>0.55</td>
<td>Czech Republic</td>
<td>1</td>
</tr>
<tr>
<td>Democratic Republic of the Congo</td>
<td>0.59</td>
<td>El Salvador</td>
<td>1</td>
</tr>
<tr>
<td>Yemen</td>
<td>0.65</td>
<td>Japan</td>
<td>1</td>
</tr>
<tr>
<td>Niger</td>
<td>0.67</td>
<td>Portugal</td>
<td>1</td>
</tr>
<tr>
<td>Burundi</td>
<td>0.73</td>
<td>Syrian Arab Republic</td>
<td>1</td>
</tr>
<tr>
<td>Pakistan</td>
<td>0.74</td>
<td>United Kingdom</td>
<td>1</td>
</tr>
<tr>
<td>Papua New Guinea</td>
<td>0.76</td>
<td>United States</td>
<td>1</td>
</tr>
<tr>
<td>Djibouti</td>
<td>0.77</td>
<td>Brunei Darussalam</td>
<td>1.01</td>
</tr>
<tr>
<td>Eritrea</td>
<td>0.8</td>
<td>Denmark</td>
<td>1.01</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>0.81</td>
<td>France</td>
<td>1.01</td>
</tr>
<tr>
<td>Mauritania</td>
<td>0.85</td>
<td>Lebanon</td>
<td>1.01</td>
</tr>
<tr>
<td>Cameroon</td>
<td>0.86</td>
<td>Montenegro</td>
<td>1.01</td>
</tr>
<tr>
<td>Morocco</td>
<td>0.86</td>
<td>Slovakia</td>
<td>1.01</td>
</tr>
<tr>
<td>Congo</td>
<td>0.87</td>
<td>Spain</td>
<td>1.01</td>
</tr>
<tr>
<td>Lao People’s Democratic Republic</td>
<td>0.87</td>
<td>Bahrain</td>
<td>1.02</td>
</tr>
<tr>
<td>United Republic of Tanzania</td>
<td>0.88</td>
<td>China</td>
<td>1.02</td>
</tr>
<tr>
<td>Mozambique</td>
<td>0.89</td>
<td>Cyprus</td>
<td>1.02</td>
</tr>
<tr>
<td>Ghana</td>
<td>0.9</td>
<td>Ecuador</td>
<td>1.02</td>
</tr>
<tr>
<td>Country</td>
<td>Score</td>
<td>Country</td>
<td>Score</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>-------</td>
<td>---------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Malawi</td>
<td>0.9</td>
<td>Ireland</td>
<td>1.02</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>0.9</td>
<td>Republic of Moldova</td>
<td>1.02</td>
</tr>
<tr>
<td>Iran (Islamic Republic of)</td>
<td>0.94</td>
<td>Serbia</td>
<td>1.02</td>
</tr>
<tr>
<td>Solomon Islands</td>
<td>0.94</td>
<td>Indonesia</td>
<td>1.03</td>
</tr>
<tr>
<td>Australia</td>
<td>0.95</td>
<td>Jordan</td>
<td>1.03</td>
</tr>
<tr>
<td>Germany</td>
<td>0.95</td>
<td>Mongolia</td>
<td>1.03</td>
</tr>
<tr>
<td>Madagascar</td>
<td>0.95</td>
<td>San Marino</td>
<td>1.03</td>
</tr>
<tr>
<td>Turkey</td>
<td>0.95</td>
<td>South Africa</td>
<td>1.03</td>
</tr>
<tr>
<td>Austria</td>
<td>0.96</td>
<td>Chile</td>
<td>1.04</td>
</tr>
<tr>
<td>Belarus</td>
<td>0.96</td>
<td>Croatia</td>
<td>1.04</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>0.96</td>
<td>Malta</td>
<td>1.04</td>
</tr>
<tr>
<td>Comoros</td>
<td>0.96</td>
<td>Mauritius</td>
<td>1.04</td>
</tr>
<tr>
<td>Lithuania</td>
<td>0.96</td>
<td>Nepal</td>
<td>1.04</td>
</tr>
<tr>
<td>Peru</td>
<td>0.96</td>
<td>Belize</td>
<td>1.05</td>
</tr>
<tr>
<td>Saint Vincent and the Grenadines</td>
<td>0.96</td>
<td>Costa Rica</td>
<td>1.05</td>
</tr>
<tr>
<td>Belgium</td>
<td>0.97</td>
<td>Finland</td>
<td>1.05</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>0.97</td>
<td>New Zealand</td>
<td>1.05</td>
</tr>
<tr>
<td>Latvia</td>
<td>0.97</td>
<td>Panama</td>
<td>1.05</td>
</tr>
<tr>
<td>Nauru</td>
<td>0.97</td>
<td>Bhutan</td>
<td>1.06</td>
</tr>
<tr>
<td>Switzerland</td>
<td>0.97</td>
<td>Sri Lanka</td>
<td>1.06</td>
</tr>
<tr>
<td>Egypt</td>
<td>0.98</td>
<td>Thailand</td>
<td>1.06</td>
</tr>
<tr>
<td>Hungary</td>
<td>0.98</td>
<td>Aruba</td>
<td>1.07</td>
</tr>
<tr>
<td>Netherlands</td>
<td>0.98</td>
<td>Rwanda</td>
<td>1.07</td>
</tr>
<tr>
<td>Norway</td>
<td>0.98</td>
<td>Mexico</td>
<td>1.08</td>
</tr>
<tr>
<td>Romania</td>
<td>0.98</td>
<td>Colombia</td>
<td>1.09</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>0.98</td>
<td>Venezuela</td>
<td>1.09</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>0.98</td>
<td>State of Palestine</td>
<td>1.1</td>
</tr>
<tr>
<td>Sweden</td>
<td>0.98</td>
<td>Fiji</td>
<td>1.11</td>
</tr>
<tr>
<td>Country</td>
<td>Value</td>
<td>Country</td>
<td>Value</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>-------</td>
<td>--------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Ukraine</td>
<td>0.98</td>
<td>Samoa</td>
<td>1.11</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>0.99</td>
<td>Dominican Republic</td>
<td>1.12</td>
</tr>
<tr>
<td>China, Hong Kong Special Administrative Region</td>
<td>0.99</td>
<td>Bangladesh</td>
<td>1.14</td>
</tr>
<tr>
<td>China, Macao Special Administrative Region</td>
<td>0.99</td>
<td>Sao Tome and Principe</td>
<td>1.14</td>
</tr>
<tr>
<td>Estonia</td>
<td>0.99</td>
<td>Antigua and Barbuda</td>
<td>1.15</td>
</tr>
<tr>
<td>Korea, Republic of</td>
<td>0.99</td>
<td>Guyana</td>
<td>1.15</td>
</tr>
<tr>
<td>Poland</td>
<td>0.99</td>
<td>Cape Verde</td>
<td>1.19</td>
</tr>
<tr>
<td>Saint Lucia</td>
<td>0.99</td>
<td>Armenia</td>
<td>1.21</td>
</tr>
<tr>
<td>Slovenia</td>
<td>0.99</td>
<td>Honduras</td>
<td>1.22</td>
</tr>
<tr>
<td>The former Yugoslav Republic of Macedonia</td>
<td>0.99</td>
<td>Lesotho</td>
<td>1.4</td>
</tr>
</tbody>
</table>
### Table 3: Key figures on educational outcomes for males and females in EU countries

<table>
<thead>
<tr>
<th>Country</th>
<th>18-year-olds in education. Both sexes %</th>
<th>Early leavers from school. Males %</th>
<th>Early leavers from school. Females %</th>
<th>Tertiary education graduated age 30-34. Males %</th>
<th>Tertiary education graduated age 30-34. Females %</th>
<th>Males graduates in mathematics, science and technology per 1,000 female inhabitants aged 20-28</th>
<th>Female graduates in mathematics, science and technology per 1,000 female inhabitants aged 20-28</th>
<th>Employment rates of recent graduates. Males %</th>
<th>Employment rates of recent graduates. Females %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albania</td>
<td>:</td>
<td></td>
<td></td>
<td>:</td>
<td>:</td>
<td>:</td>
<td>:</td>
<td>44.4</td>
<td></td>
</tr>
<tr>
<td>Austria</td>
<td>73.5</td>
<td>7.9</td>
<td>7.3</td>
<td>26</td>
<td>26.6</td>
<td>24.2</td>
<td>8.4</td>
<td>91.8</td>
<td>90.6</td>
</tr>
<tr>
<td>Belgium</td>
<td>89.5</td>
<td>14.4</td>
<td>9.5</td>
<td>37.1</td>
<td>50.7</td>
<td>19.5</td>
<td>6.3</td>
<td>82.1</td>
<td>79.7</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>80.6</td>
<td>12.1</td>
<td>13</td>
<td>20.5</td>
<td>33.6</td>
<td>16.1</td>
<td>10.4</td>
<td>67.2</td>
<td>67.3</td>
</tr>
<tr>
<td>Croatia</td>
<td>70.6</td>
<td>4.6</td>
<td>3.6</td>
<td>19.4</td>
<td>28.8</td>
<td>22.4</td>
<td>12.3</td>
<td>59.4</td>
<td>57.7</td>
</tr>
<tr>
<td>Cyprus</td>
<td>34.7</td>
<td>16.5</td>
<td>7</td>
<td>43.6</td>
<td>55.5</td>
<td>9.3</td>
<td>8.8</td>
<td>74.7</td>
<td>71.6</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>89.9</td>
<td>6.1</td>
<td>4.9</td>
<td>22.4</td>
<td>29.1</td>
<td>22</td>
<td>11.1</td>
<td>87.2</td>
<td>77.2</td>
</tr>
<tr>
<td>Denmark</td>
<td>86.4</td>
<td>10.8</td>
<td>7.4</td>
<td>33.7</td>
<td>52.6</td>
<td>23.3</td>
<td>14.2</td>
<td>87.5</td>
<td>80.6</td>
</tr>
<tr>
<td>Estonia</td>
<td>92.9</td>
<td>13.3</td>
<td>7.3</td>
<td>28.3</td>
<td>51.3</td>
<td>16.3</td>
<td>9.8</td>
<td>81.4</td>
<td>66.8</td>
</tr>
<tr>
<td>Finland</td>
<td>93.7</td>
<td>9.8</td>
<td>8.1</td>
<td>36.7</td>
<td>55.4</td>
<td>30.5</td>
<td>12.4</td>
<td>81.7</td>
<td>79.6</td>
</tr>
<tr>
<td>Former Yugoslav Republic of</td>
<td>62.6</td>
<td>11.1</td>
<td>12.3</td>
<td>20.8</td>
<td>22.6</td>
<td>9</td>
<td>6.2</td>
<td>45.3</td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------</td>
<td>------------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>France</td>
<td>76.9</td>
<td>13.3</td>
<td>9.7</td>
<td>38.4</td>
<td>:</td>
<td>:</td>
<td>76.6</td>
<td>76.4</td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>86.1</td>
<td>11.3</td>
<td>9.9</td>
<td>31</td>
<td>32.9</td>
<td>23.1</td>
<td>9</td>
<td>90.5</td>
<td>87.1</td>
</tr>
<tr>
<td>Greece</td>
<td>67.9</td>
<td>13.7</td>
<td>8.9</td>
<td>28.1</td>
<td>34.2</td>
<td>16.8</td>
<td>10.9</td>
<td>45.9</td>
<td>40.6</td>
</tr>
<tr>
<td>Hungary</td>
<td>86</td>
<td>12.2</td>
<td>10.7</td>
<td>24.7</td>
<td>35.5</td>
<td>13.4</td>
<td>5.4</td>
<td>74.8</td>
<td>72.2</td>
</tr>
<tr>
<td>Iceland</td>
<td>83.1</td>
<td>23.6</td>
<td>16.5</td>
<td>34.5</td>
<td>51.2</td>
<td>20.2</td>
<td>11.3</td>
<td>90</td>
<td>83.8</td>
</tr>
<tr>
<td>Ireland</td>
<td>97.9</td>
<td>11.2</td>
<td>8.2</td>
<td>44</td>
<td>57.9</td>
<td>33</td>
<td>12.6</td>
<td>68.6</td>
<td>69.8</td>
</tr>
<tr>
<td>Italy</td>
<td>80</td>
<td>20.5</td>
<td>14.5</td>
<td>17.2</td>
<td>26.3</td>
<td>15.4</td>
<td>10.8</td>
<td>58</td>
<td>50.9</td>
</tr>
<tr>
<td>Latvia</td>
<td>94.4</td>
<td>14.7</td>
<td>6.3</td>
<td>26.2</td>
<td>48.1</td>
<td>18.5</td>
<td>8.3</td>
<td>74.7</td>
<td>73.9</td>
</tr>
<tr>
<td>Liechtenstein</td>
<td>83.5</td>
<td></td>
<td>14.7</td>
<td></td>
<td>0.9</td>
<td>:</td>
<td>:</td>
<td>:</td>
<td>:</td>
</tr>
<tr>
<td>Lithuania</td>
<td>97</td>
<td>8.1</td>
<td>4.6</td>
<td>40.3</td>
<td>56.7</td>
<td>32.8</td>
<td>12.8</td>
<td>72.6</td>
<td>78.5</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>71.4</td>
<td>10.7</td>
<td>5.5</td>
<td>50.4</td>
<td>48.9</td>
<td>3.2</td>
<td>2.3</td>
<td>88.9</td>
<td>80.6</td>
</tr>
<tr>
<td>Malta</td>
<td>40.7</td>
<td>25.2</td>
<td>16.8</td>
<td>23.4</td>
<td>26.6</td>
<td>16.1</td>
<td>5.7</td>
<td>93.1</td>
<td>91.7</td>
</tr>
<tr>
<td>Netherlands</td>
<td>90.3</td>
<td>10.2</td>
<td>7.3</td>
<td>39.8</td>
<td>44.6</td>
<td>16.3</td>
<td>5</td>
<td>90</td>
<td>88.7</td>
</tr>
<tr>
<td>Norway</td>
<td>88.4</td>
<td>17.6</td>
<td>11.9</td>
<td>39.9</td>
<td>55.9</td>
<td>14.3</td>
<td>6.5</td>
<td>:</td>
<td>:</td>
</tr>
<tr>
<td>Poland</td>
<td>93.3</td>
<td>7.8</td>
<td>3.5</td>
<td>31.9</td>
<td>46.5</td>
<td>21.1</td>
<td>14.5</td>
<td>78.7</td>
<td>68.2</td>
</tr>
<tr>
<td>Portugal</td>
<td>77.6</td>
<td>26.9</td>
<td>14</td>
<td>24.3</td>
<td>31</td>
<td>23.8</td>
<td>14.9</td>
<td>71.2</td>
<td>64.6</td>
</tr>
<tr>
<td>Romania</td>
<td>77.7</td>
<td>18</td>
<td>16.7</td>
<td>20.5</td>
<td>23.2</td>
<td>21.6</td>
<td>15.8</td>
<td>72</td>
<td>66.9</td>
</tr>
<tr>
<td>Slovakia</td>
<td>84.9</td>
<td>6</td>
<td>4.6</td>
<td>19.4</td>
<td>28.2</td>
<td>22.6</td>
<td>13.1</td>
<td>72.1</td>
<td>65.3</td>
</tr>
<tr>
<td>Slovenia</td>
<td>92.1</td>
<td>5.4</td>
<td>3.2</td>
<td>29.5</td>
<td>49.6</td>
<td>26.1</td>
<td>11.8</td>
<td>78.3</td>
<td>66.5</td>
</tr>
<tr>
<td></td>
<td>78.4</td>
<td>28.9</td>
<td>20.5</td>
<td>36</td>
<td>47.1</td>
<td>21.3</td>
<td>9.8</td>
<td>62</td>
<td>65</td>
</tr>
<tr>
<td>----------------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>-----</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>Spain</td>
<td>96</td>
<td>8.5</td>
<td>6.3</td>
<td>42.4</td>
<td>53.7</td>
<td>21.1</td>
<td>10.6</td>
<td>84</td>
<td>82.4</td>
</tr>
<tr>
<td>Sweden</td>
<td>82.8</td>
<td>5.7</td>
<td>5.3</td>
<td>47.2</td>
<td>40.5</td>
<td>26.9</td>
<td>6.9</td>
<td>86.4</td>
<td>87.1</td>
</tr>
<tr>
<td>Switzerland</td>
<td>44.4</td>
<td>36.1</td>
<td>43</td>
<td>19.8</td>
<td>16.2</td>
<td>13.1</td>
<td>7.1</td>
<td>70.6</td>
<td>53.4</td>
</tr>
<tr>
<td>Turkey</td>
<td>63.3</td>
<td>14.7</td>
<td>12.4</td>
<td>44</td>
<td>50.2</td>
<td>27.3</td>
<td>12.1</td>
<td>83.6</td>
<td>79.7</td>
</tr>
<tr>
<td>United Kingdom</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Role

Policy departments are research units that provide specialised advice to committees, inter-parliamentary delegations and other parliamentary bodies.

Policy Areas

- Constitutional Affairs
- Justice, Freedom and Security
- Gender Equality
- Legal and Parliamentary Affairs
- Petitions

Documents