

Annex A

WHAT SOME COUNTRIES ARE DOING TO PROMOTE **GENDER EQUALITY IN EDUCATION**



ANNEX A

WHAT SOME COUNTRIES ARE DOING TO PROMOTE GENDER EQUALITY IN EDUCATION

In 2014, the OECD circulated a Questionnaire on Policies to Promote Gender Equality in Education to all PISA-participating countries and economies. The questionnaire gathered information on publicly funded policies, programmes and initiatives that address gender discrimination and stereotyping in education. The questionnaire asked countries to provide information on the objectives and characteristics of each initiative, the amount of public funding provided, and the duration of the programme. Figure A.1 lists the types of policies surveyed.

■ Figure A.1 ■

OECD Questionnaire on Policies to Promote Gender Equality in Education: Surveyed policies

SECTION 1

Policies for keeping boys and girls at school and prevent dropout.

- **SECTION 2** Policies for teachers to promote teaching and school practices that address gender discrimination and stereotyping.
 - Policies to remove gender discrimination and stereotypes from students' textbooks.
 - Policies to promote the development of stronger reading habits among boys.
 - Policies to make arts, humanities, social sciences and caring sectors attractive for boys.
 - Policies to make the study of science, technology, engineering and mathematics (STEM) attractive for girls in primary and secondary education.
 - Policies to promote women into STEM studies in higher education.

- Policies to promote male teachers up to secondary education.
 - Policies to promote female teachers in tertiary education.

Source: OECD Questionnaire on Policies to Promote Gender Equality in Education.

The questionnaire did not focus on the issue of gender equality in access to school, as school participation is now compulsory up to around age 16 in most PISA-participating countries and economies. Gender-equality provisions in general law and in anti-discrimination law, policies to tackle gender-based violence and harassment in schools, and policies to raise awareness of gender-equality issues among parents are also not addressed.

The response rate to the questionnaire was limited; only 12 PISA-participating countries responded: Australia, Belgium, Brazil, Canada, the Czech Republic, Germany, the Netherlands, Poland, Scotland (United Kingdom), Sweden, Switzerland and the United States. The Czech Republic, Poland and Scotland (United Kingdom) reported no support for any of the policies included in the questionnaire. The Netherlands is also not discussed in detail because, while the country provides support for some of the policies included in the survey, it did not submit information about them. Therefore, the examples cited below cannot be considered as representative of the policies and practices implemented by PISA-participating countries and economies in general, but rather as examples of the approaches taken by different education systems.



In some of the surveyed countries, gender equality in education is interpreted as equal treatment of girls and boys. In these cases, policy prescriptions mostly focus on eliminating discrimination and in providing teaching tailored to individual students, regardless of their gender. Equal treatment in this context does not mean that countries adopt a uniform approach to education; rather, it means that gender is not a factor shaping how schools attempt to provide high-quality education to individual students.

Other countries adopt policies differentiated by gender with the aim of achieving gender equality as an outcome. This approach reflects the idea that, even in the absence of outright discrimination, stereotyped expectations of boys' and girls' attitudes towards specific school subjects can negatively affect their performance in those subjects and their choices for further education. Among the countries that responded to the OECD questionnaire, the Czech Republic, Poland, Sweden and Scotland (United Kingdom) appear to follow the first approach, while Belgium, Brazil, Canada, Germany, the Netherlands, Sweden, Switzerland and the United States seem to follow the second approach. A study by the European Commission reports that other countries adopting a gender-differentiated approach in Europe include Austria, Finland, France, Iceland, Ireland, Liechtenstein, Luxembourg, Norway and Slovenia (European Commission, 2010). Because of its multiple education systems in different states and territories, and its mix of public and private education, Australia uses a combination of the two approaches across education systems and policy areas.

Surveyed countries that adopt the equal treatment approach do not implement policies specifically targeted at boys and/or girls - the policies targeted by the questionnaire. Among countries that adopt a gender-differentiated approach to education policies, some countries embed the gender-equality objective among wider goals of non-discrimination and equality of outcomes, without establishing more specific programmes. The rest of the countries provide support to various types of more specific gender-differentiated programmes. The activities included in these programmes are generally designed by the participating institutions, within established guidelines. Only in a few cases are educational institutions required to participate in these programmes; rarely are institutions required to adopt policy actions whose content is designed by policy makers.

In general, this review of policy practices, while limited to a small group of PISA-participating countries, suggests that programmes are often temporary and not replicated. Participation in the programmes tends to be voluntary. These types of programmes could be launched as part of a more systematic evaluation to better assess their effectiveness. Randomised control trials are fairly easily applied in education and could be one way forward.

Policies to keep girls and boys in school

As noted earlier, in many countries, girls are less likely than boys to drop out of upper secondary education, girls are more likely than boys to complete their upper secondary education within the stipulated time, and young women attain higher levels of education than young men.

The OECD Questionnaire on Policies to Promote Gender Equality in Education asked whether countries have policies to prevent dropout to keep boys and girls in school. Among the countries surveyed, Australia, Belgium, Brazil, Canada and the United States reported that they have such policies. These policies may include monitoring students who are considered more at risk of not graduating, providing mentors for students in difficulty, and offering flexible learning solutions for disengaged students. In Australia's Northern Territory, girls' academies have been established to strengthen engagement and increase girls' attendance at school and completion of year 12 (Clontarf Academies and Girls Academies).

Despite clear gender patterns in educational attainment and school completion rates, none of the surveyed countries implements system-level, gender-specific policies to address inequality in attainment rates. In Australia, many schools establish and operate their own gender-specific programmes to meet the needs of their students.



Gender equality in performance and field-of-study choice

As earlier chapters discussed, young women are much less likely than men to pursue certain science, technology, engineering and mathematics (STEM) fields in their education or as a career, while young men are less likely than women to graduate from the fields of health, welfare and the humanities. The longitudinal component of the PISA surveys conducted in Australia, Canada, the Czech Republic, Denmark, Switzerland and Uruguay show that performance in mathematics, science and reading is strongly correlated to the subjects students choose to study in post-secondary education (Salvi Del Pero and Bytchkova, 2013). But the role of performance in this relationship is mediated by gender differences in motivation, enjoyment of these subjects, and students' belief in their own abilities (self-concept) in these subjects.

A number of studies (Ipsos Reid, 2010; Parvin and Porter, 2008; OECD, 2008) reveal the importance of teachers' attitudes in shaping students' dispositions towards school subjects. At the same time, students' interest in the sciences appears to decline significantly as they grow up. Given these findings, it is important for educators to provide an engaging context for these subjects early on, and throughout all levels of education, to address gender-related attitudes in the classroom, and to introduce gender-neutral concepts in teaching material.

Various studies (European Commission, 2010; Hill et al., 2010; OECD, 2008) highlight the importance of career opportunities in generating interest among students, especially among students who are under-represented in certain fields. Raising the profile of career opportunities and role models, and improving the work-life balance, particularly in STEM fields, can help to promote greater gender equality in all fields of study.

Teaching material and practices

Since the language and images used in school textbooks and teaching materials influence students' perceptions of social norms, these materials should avoid conveying a stereotyped representation of the role of men and women. Research has shown that men appear more often and in a wider set of roles as workers, whereas women are often depicted in domestic and "romantic" roles (European Commission, 2010). Teachers' attitudes are also essential in shaping students' self-image. Even when teachers believe students are, in principle, equally proficient in school subjects, they may unconsciously treat boys and girls differently, which can have a profound effect on students' behaviour.

Some countries have programmes in place to help teachers become more aware of gender-sensitive teaching practices. In **Brazil**, for example, the 2004 National Plan of Policies for Women calls for an education system that does not reproduce stereotypes based on gender, race and ethnicity. As part of this goal, the Plan specifically calls for textbooks to be free of discriminatory content.

Some countries support programmes to review teaching materials and practices to ensure that they are free of gender stereotypes. In 2012, **Germany** launched a training tool to help eradicate stereotypes based on gender, culture and religion in textbooks. In the **French Community of Belgium**, the Direction of Equal Opportunity and the school inspectorate have produced a manual² to help education providers detect gender stereotypes in textbooks (up to upper secondary education). The Department of Education of **Alberta**, **Canada** has produced guidelines to help education staff to review educational resources to ensure that they foster diversity, including gender diversity. Through the Women's Educational Equity Act, the **United States** Department of Education has supported research and development of innovative curricula and teaching and learning strategies to promote gender equality. Washington and Alaska are two states that require that local school districts eliminate gender bias from their instructional materials.

Training tools and programmes have also been developed to help teachers eliminate gender stereotypes in their teaching practices. Among programmes to promote gender equality in school, **Sweden** offers gender-awareness training to teachers, reflecting the gender equality objective in the curriculum. **The French Community of Belgium** funds a website that provides tools to help education staff address gender stereotypes in their work.



The Flemish Community of Belgium also offers educational tools to address gender stereotypes in education. These include the "Gender click for boys", an interactive website³ targeting boys and girls in upper secondary school that helps raise awareness of stereotypes about men, and the "Gender click in pre-school", a brochure on how to address gender stereotyping among pre-schoolers. In the United States, grants are allocated, under the Women's Educational Equity Act, to training programmes for teachers and other school personnel to encourage gender equality in the classroom. The state of Queensland in Australia supports online courses on inclusive education, and Switzerland provides funding for programmes, targeted at teachers, students and school principals, to reduce gender stereotypes in vocational education and training. In Brazil, the "Inclusive Education Programme" was expanded in 2011 to include support for teacher training to help teachers promote diversity, including gender diversity, in primary to upper secondary education.

Encouraging boys to read

When students can't read well, they struggle in other school subjects too. Helping girls and boys to develop the habit of reading for pleasure pays dividends throughout students' school years and far beyond. Yet many boys do not read for enjoyment and are poor readers.

Some countries support specific initiatives to foster better reading habits among students, particularly boys. The "Lesestart" programme in Germany distributes books and reading guides to children aged one to three, in co-operation with paediatricians and local libraries. Various Australian states and territories offer programmes to encourage good reading habits. Some of these initiatives aim to improve reading skills by challenging and encouraging students to read more, while others focus on raising awareness of the benefits of reading among parents and encouraging them to participate in reading activities with their children. The Australian state of Victoria funds a programme, specifically targeted at boys, called "Boys, Blokes, Books & Bytes" that promotes learning styles that are appealing to boys, and involves adult men as positive role models and reading partners.

In Sweden, the National Agency for Education offers the "Boost for reading and writing development", a programme to increase students' reading comprehension and writing skills by developing and strengthening the quality of teaching. The programme is based on peer learning, as teachers learn from and with each other with the support of a tutor. Once fully developed, the programme will be offered to teachers from pre-school to upper secondary school.

In the United States, the White House initiative "My Brother's Keeper" connects boys and young men of colour with mentors at five key stages - one of which is early literacy - on the path to adulthood. New York City's Young Men's Initiative includes reading and math classes for young black and Latino men who are not yet ready to take the General Education Development (high school equivalency) test.

Developing interest in school subjects and careers, early childhood to upper secondary education

Many countries use career guidance for students, awareness-raising campaigns, contests and competitions to stimulate students' interest in a wider set of academic subjects and careers than they might otherwise consider. National Boys' Days and Girls' Days are organised in several countries, including Belgium, Germany and Switzerland, among countries surveyed in the OECD Questionnaire on Policies to Promote Gender Equality in Education. As part of these programmes, universities and businesses usually invite students to spend a day on their premises and learn more about academic degrees and occupations in sectors in which their gender is under-represented. In the French Community of Belgium, boys' and girls' days are preceded by discussions about gender issues during class.

There are also various programmes that, in different ways, promote interest in the study of STEM subjects among female students. In the United States, the Department of Education's "Race to the Top" programme⁴



prioritises improving STEM achievement overall and within under-represented groups – including women and girls – in awarding grants to states. The same approach is used in the Department of Education's "Investing in Innovation" programme, which focuses on increasing the number of individuals from groups traditionally under-represented in STEM – including minorities, individuals with disabilities, and women – among those who teach STEM subjects, and provide them with high-quality preparation and professional development.

In Canada, two regions support programmes specifically aimed at promoting non-traditional jobs among girls. The "Futures in Skilled Trades and Technology Programme" supports greater participation of women in skilled trades in the Newfoundland and Labrador Province by piloting modules targeted at girls in grade school. The Ontario "Youth Apprenticeship Programme" reserves some of its funding to promote skilled trades among women through conferences and hands-on activities.

As one of four key elements under its "Restoring the focus on STEM in schools" initiative, the **Australian government** is expanding summer schools for STEM students with the aim of increasing the number of girls and disadvantaged students participating in these activities.

Other organisations operating in STEM fields can also support programmes to attract more talent, particularly female talent. The National Aeronautics and Space Administration (NASA) in the **United States** has two programmes that focus on girls. Through the NASA/Girls Scouts of the USA partnership, NASA scientists provide training sessions, led by NASA scientists, for girl scouts. Some 100 000 girls have participated in these sessions to date. Under the "NASA G.I.R.L.S" programme, female NASA professionals provide online lessons in STEM fields to girls selected through a competitive process. Surveyed countries support many other programmes that foster interest in STEM careers, but these are not specifically targeted to women.

Some countries also support initiatives to attract interest among male students in female-dominated professions. **Germany**, for example, funds a nation-wide network and information platform to support gender-sensitive career and life orientation for boys through the programme "New Paths for Boys and Boys' Day". The programme provides information and material to education and social work professionals, career advisers, human resource teams, education and training specialists, and parents. Nationwide conferences and meetings are also organised to facilitate exchanges between researchers and practitioners.

Developing interest in school subjects and careers, tertiary education

In many countries, universities and other higher education institutions sponsor programmes to attract more women to STEM subjects and more men to the fields of education, health and welfare. Some of these programmes involve monitoring the gender composition of students and teaching staff, others aim to improve work-life balance in these fields, and still others focus on offering financial support to students from demographic groups that are under-represented in the fields.

In Switzerland, the seven public Universities of Applied Sciences are required to submit action plans to address gender inequality in subject choice (Chancengleichheit von Frauen und Männern an den Fachhochschulen programme). The programmes address gender balance among students – and among teachers – and often also include actions to improve work-life balance. The universities fund the programmes themselves and receive a matching contribution from the federal government. The federal government evaluates the programme based on a number of objective measures, outlined in the action plan, such as the proportion of male and female students by field of study and degree level.

Universities in the French Community of Belgium are also asked to monitor gender equality within their institution, covering such issues as the gender composition of students, teachers and staff; the policies in place to promote gender equality; and how gender issues are addressed in teaching and research. In the United States, the National Science Foundation plans to expand the right to delay or suspend their grants to researchers who need to take parental or family leave to help eliminate some of the barriers to women's



advancement and retention in STEM careers. The Australian Research Council provides paid maternity leave and part-time appointments for all fellowships. It also introduced selection criteria that help applicants whose careers have been interrupted because of childbirth and caring responsibilities.

Other programmes provide research funds or fellowships to support female students and researchers in STEM fields. In the United States, the National Science Foundation's ADVANCE programme provides research grants to projects that specifically aim to increase the participation and advancement of women in STEM academic careers. In Queensland, Australia, scholarships are made available to women studying in priority fields, such as agricultural and environmental studies, engineering and information technology. The Australian Research Council allocates at least two Australian Laureate Fellowships to women researchers, with recipients awarded additional funding to promote women in research and mentor female researchers who are just starting out in their careers. A current fellowship recipient has recently launched the "Science 50:50" campaign to increase the participation of girls in science and technology through internship opportunities, an innovation scholarship, school visits and online resources.

In Germany, the National Pact for Women in STEM Careers (Go MINT) aims to encourage more girls and women to pursue training, university degrees and careers in STEM fields. It presents positive role models in these areas of work and attracts numerous partners from industry, science, research, politics and the media.

The White House's Educate to Innovate Campaign (United States) aims to expand STEM education and career opportunities, in part by broadening the participation of under-represented groups, including women. The initiative works through public-private partnerships between the federal government and businesses, foundations, non-profit organisations, and science and engineering societies. Besides raising funds for research and improving the quality of teaching in science, the goal of the initiative is to appoint female role models to lead the initiative and reach out to students. Many of the women who serve as role models for the Educate to Innovate Campaign also serve as role models in the Women in STEM Speakers Bureau, which engages women scientists at the top of their field to spark interest in STEM subjects among girls in grades 6 through 12.

Some countries also use mentoring programmes to support women in STEM fields in tertiary education. The United States Department of Energy, for example, offers mentoring to female undergraduate STEM students with female employees who specialised in the relevant subject. In Ontario, Canada, women in skilled trades or information and communications technology offer gender-sensitive classes and on-the-job training to disadvantaged women.

Some countries surveyed in the OECD Questionnaire on Policies to Promote Gender Equality in Education reported that they implement programmes that focus on promoting research on gender equality. The research activity is often not confined to studying gender equality in education, but extends to employment and economic empowerment more generally. Examples of initiatives to support research on promoting gender equality in education in the United States include the Research on Education and Learning programme, sponsored by the National Science Foundation, to facilitate research on learning and teaching practices in STEM education, and research financed by the National Institutes of Health to understand the factors that influence the careers of women in biomedical and behavioural science and engineering. In Brazil, the programme Premio Construindo a Igualdade de Genero provides funding for research on discrimination, including gender discrimination. Germany's Ministry of Education also supports research on how to promote women to the highest level in science, scientific research and the economy.

Gender equality among teachers and researchers

In OECD countries, the teaching profession, up to secondary education, is dominated by women. On average across OECD countries, about two out of three teachers and academic staff members are women (OECD, 2012), but the share of women declines as the level of education increases. At the tertiary level,



most teachers are men. Some 97% of teachers in early childhood education are women, as are 83% of teachers in primary education, 68% of teachers in lower secondary education, 56% of teachers in upper secondary education, and 41% of teachers at the tertiary level (Salvi Del Pero and Bytchkova, 2013).

A number of the countries that participated in the OECD Questionnaire on Policies to Promote Gender Equality in Education indicated that they have developed specific policies to improve the gender balance in the teaching profession at the tertiary level. Some countries have also adopted policies to increase the representation of men in early childhood and primary education.

In Switzerland, the programme Chancengleichheit von Frauen und Männern an den Fachhochschulen, supports universities in their efforts to achieve gender equality in their teaching staff. In order to increase the number of female professors in higher education, Germany's Federal Ministry of Education and Research, in collaboration with regional authorities, launched a Programme for Women Professors that focuses on increasing the number of women in leadership positions and improving the work-life balance. Almost two-thirds of all public higher education institutions in Germany have submitted an equality policy and 260 professorships have been financed.

In addition, Germany's Mehr Männer in Kitas ("More Men in Early Childhood Education and Care") project aims to increase the number of men working in this field. The initiative tries to encourage boys and men (at all levels of education, from lower secondary to advanced research programmes) to make career choices based on their personal interests and abilities rather than on gender stereotypes. The programme offers strategic counselling to political decision makers and service providers, research, monitoring, and dissemination of information. In 2013, Sweden launched a national information campaign to encourage men to consider careers in pre-school education. The campaign was organised by the National Agency for Education which also organised conferences discussing related good practices. The Flemish Community of Belgium also provided funding between 2008 and 2011 to attract under-represented groups, such as men, students with an immigrant background, and students with disabilities, to the teaching profession.

Notes

- 1. The information provided by Australia does not include policies adopted by New South Wales, the Northern Territory and the Australian Capital Territory.
- 2. Fédération Wallonie-Bruxelles, Sexes et Manuel. Promouvoir l'égalité dans les manuels scolaires, www.egalite.cfwb.be/index.php?id=9454.
- ${\bf 3.\ www.genderklikvoorjongens.be\ and\ www.genderatwork.be/wp-content/uploads/GENDERKLIKvoorWEB2.pdf.}$
- 4. The main priorities of the United States Department of Education's Race to the Top programme are developing rigorous standards and better assessments; supporting effective teachers and school leaders; providing schools, teachers, and parents with student progress data by adopting better data systems; and increasing resources and focus to implement programmes with the aim of improving achievement in the lowest-performing schools.



References

European Commission (2010), Gender differences in educational outcomes: Study on Measures Taken and the Current Situation in Europe, Education, Audio-visual and Culture Executive Agency, available at http://eacea.ec.europa.eu/education/eurydice/documents/thematic_reports/120en.pdf.

Hill, C., C. Corbett and A. St Rose (2010), Why So Few? Women in Science, Technology, Engineering, and Mathematics, American Association of University Women, Washington, DC.

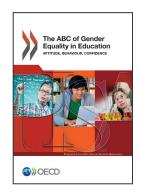
Ipsos Reid (2010), "Canadian Youth Science Monitor", Canada Foundation for Innovation, May.

OECD (2012), Closing the Gender Gap: Act Now, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264179370-en.

OECD (2008), *Encouraging Student Interest in Science and Technology Studies*, Global Science Forum, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264040892-en.

Parvin, J. and C. Porter (2008), Learning to Love Science: Harnessing Children's Scientific Imagination, Report from the Chemical Industry Education Centre, University of York, United Kingdom.

Salvi Del Pero, A. and A. Bytchkova (2013), "A bird's eye view of gender differences in education in OECD countries", OECD Social, Employment and Migration Working Papers, No. 149, OECD Publishing, Paris, http://dx.doi.org/10.1787/5k40k706tmtb-en.



From:

The ABC of Gender Equality in Education Aptitude, Behaviour, Confidence

Access the complete publication at:

https://doi.org/10.1787/9789264229945-en

Please cite this chapter as:

OECD (2015), "What some countries are doing to promote gender equality in education", in *The ABC of Gender Equality in Education: Aptitude, Behaviour, Confidence*, OECD Publishing, Paris.

DOI: https://doi.org/10.1787/9789264229945-10-en

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

You can copy, download or print OECD content for your own use, and you can include excerpts from OECD publications, databases and multimedia products in your own documents, presentations, blogs, websites and teaching materials, provided that suitable acknowledgment of OECD as source and copyright owner is given. All requests for public or commercial use and translation rights should be submitted to rights@oecd.org. Requests for permission to photocopy portions of this material for public or commercial use shall be addressed directly to the Copyright Clearance Center (CCC) at info@copyright.com or the Centre français d'exploitation du droit de copie (CFC) at contact@cfcopies.com.

