



Qualifications and
Curriculum Authority

The gender gap in attainment

A brief international comparative review

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Key messages

- The literature and data confirm a gender gap in attainment between boys and girls. This is common across richer countries.
- This gap is demonstrated in terms of level of performance.
 - Data from the Programme for International Student Assessment (PISA) – a programme run by the Organisation for Economic Cooperation and Development (OECD) – show that the UK has greater gender inequalities than countries such as Finland, Sweden and Japan, but ranks alongside France and Australia.
- This gap is demonstrated in terms of participation rates at upper secondary and tertiary education.
 - From the data, the UK has a narrower gap between genders, but lower overall performance, compared with the top performers mentioned above.
- Key policy responses include:
 - early intervention
 - motivating greater participation on the part of boys from post-compulsory onwards
 - encouraging more active forms of teaching and learning
 - establishing constructive relationships between teachers and students based on respect and dialogue
 - designing relevant curriculum content based on clear links with the world outside school
 - implementing support policies, including teacher training.

Introduction

In the past, educational outcomes have favoured boys more than girls in countries around the globe. In the past decade the progress made by high-income countries in education has (visibly) reversed this situation. The focus has shifted to the apparent underperformance of boys relative to girls.

This paper provides the results of a brief scoping exercise on this topic. It pulls on three strands of information, which form the three main sections below.

The first section outlines a review of the literature. It identifies the following themes:

- single-sex classes/schools
- appropriate teacher role models
- pedagogy and curriculum
- assessment
- other inequalities: socioeconomic, ethnicity, culture and all such factors pertaining to social capital.

The second section provides a commentary on the data. This falls into two areas. The first is on measures of attainment through performance, drawing on the OECD's PISA 2003 survey. The second looks at measures of attainment in terms of progression to higher levels of education. This draws on other data from the OECD and data from European benchmarks on education and training.

The third section identifies the policy reactions and responses of the countries included in this study (Australia, Austria, Canada, Czech Republic, Estonia, Finland, France, Latvia, Liechtenstein, Netherlands, New Zealand, Scotland, Spain, Sweden and Switzerland). These have been drawn from contacts made through the Qualifications and Curriculum Authority's (QCA) International Review of Curriculum and Assessment (INCA) network,¹ the European Union's Eurydice network² and other country sources.

The concluding section summarises the three strands and lists considerations for future research activity in this area. More detailed information for each section is provided in the annexes to this paper.

¹ www.inca.org.uk.

² www.nfer.ac.uk/eurydice.

Section 1. What does the literature say?

From a rapid review of the English-language academic studies of gender gaps in attainment a number of consistent themes were identified and are outlined below. Full references to these studies are available in Annex 1.

Single-sex vs coeducation

The literature explores the common policy of introducing single-sex classes to address the underachievement of boys and girls (specifically in mathematics and science for girls). The evidence suggests in most cases that single-sex classes or schools have a positive effect on girls, leading to increased academic achievement (Carpenter et al., 1987, Lee et al., 1990, Wong et al., 2002) and higher confidence levels (Warrington et al., 2003). However, single-sex classes seem to have almost the opposite effect on boys and their achievement. Boys, it seems, need the 'moderating influence' of girls as part of their learning environment (Warrington et al., 2003) and achieve more when in coeducation classes.

Effective role models

Again, as with the single-sex vs coeducational classes/schooling, the use of same-gender teachers to improve achievement tends to be successful with girls and wholly unsuccessful with boys. Studies in both the UK and Australia have concluded that bonding between male teachers and students can actually serve to reinforce laddishness and encourage the macho culture, encouraging behaviour it was trying to reduce (Kenway et al., 1998, Warrington et al., 2003), whereas the visible female teacher role models have been shown to improve girls' achievement significantly (Dee, 2005, Porter, 1999).

Pedagogy/curriculum design

The evidence suggests that poor pupil–teacher interaction is another factor that appears to have a negative effect on student achievement, more so at the lower attainment levels (Gorard et al., 1999). In a study comparing experiences in the UK, USA, Canada and Australia three areas were identified which had an effect on student achievement in mathematics and science. The opportunity to learn (number of hours a week spent on each subject) and the inclusion of practical work (investigation and group work) and real life (work and life-related examples) had a strong, positive and, in most countries, statistically significant effect on achievement. Teacher-directed (didactical, traditional teacher-centred) classes, however, had a negative effect in mathematics and science achievement (Webster et al., 1999).

Assessment type

Evidence suggests that males and females have distinctly different learning style preferences (Hlawaty, 2002) and react differently to different forms of assessment.

Recent changes to the national curriculum, coursework and examinations have had a positive effect on girls' performance (Oates, 2007).

Socioeconomic – it's not just gender

The vast majority of studies conclude that it is not just role model, assessment type, pedagogy or whether a child is in a single- or mixed-sex class that will have an impact on achievement. 'Ethnic background and socioeconomic status account for gender differences in achievement...' (Porter, 1999). Webster et al. (1999) suggest that the higher percentage of variance in student achievement in Canada and the UK can be explained by gender and socioeconomic status at student level. A child's socioeconomic status appears to be fundamental to their success, along with the opportunities and role models they will have as a result of where, how and by whom they are born and raised.

Section 2. What does the international data say?

Until the last decade, there was little in the way of comparative information on student performance and attainment. However, this has rapidly changed, most notably through the OECD's PISA programme and their *Education at a glance* yearly reports.³ The agreed European benchmarks for education and training, monitored by the European Commission, have provided another strand of information. This section considers some of the available data on attainment measured through performance in comparative tests (PISA) and attainment measured via progression through higher levels of education.

Comparative tables presenting the summary figures are given in Annex 2.

Attainment through performance (PISA)

The OECD's PISA programme tests 15-year-olds in participating countries on a three-year survey cycle. The UK did not meet the OECD's stringent sampling requirements for the 2003 cycle, so while data for the UK are available (see Annex 2 Table A), the UK is not included in the main PISA 2003 report, *Learning for Tomorrow's World: First Results from PISA 2003*. A detailed statistical analysis was carried out (Micklewright & Schnepf, 2006). This indicated that relatively poor performers were under-reported. If these were mainly boys, then the gender gap would appear narrower than it actually is.

However, the PISA 2003 survey gives unique information on attainment by performance across a large number of countries. The following quotation from the 2003 PISA survey summarises the findings of the survey on gender and attainment across three (reading literacy, mathematics and problem-solving) of the four areas tested.

Overall, a comparison of the different assessment areas shows gender differences to vary by area: *Female students outperform their male peers in reading performance and male students reach somewhat higher levels of performance in mathematics* [our emphasis]. In contrast, in the majority of participating countries male and female students do not differ significantly in problem-solving performance... Rather, gender-specific strengths seem to balance out in a way that leads to relatively equal outcomes for both genders in problem-solving performance. Moreover, the result may be viewed as an indication that in many countries there are no strong overall disadvantages for male students or female students as learners, but merely gender-specific strengths or preferences for certain subjects.

OECD. 2004. P.109.

³ These reports are available to view on the OECD website: www.oecd.org

With regard to science, despite higher performance by males in the past, no significant gender differences in performance are shown in PISA 2003. As reported above, females significantly outperform males in reading (in all countries). As also mentioned above, in mathematics males are slightly ahead, while females report much lower interest in mathematics, more negative attitudes and greater anxiety than males. The table below summarises the position across the countries involved.

Boys perform better in all four areas of mathematics*	No statistically significant gender difference	Girls perform better
Canada, Denmark, Greece, Ireland, Italy, Korea, Luxembourg, New Zealand, Portugal, Slovak Republic	Australia, Austria, Belgium, Japan, Netherlands, Norway, Poland	Iceland

* Space and shape, change and relationships, quantity, and uncertainty

Source: OECD *First results from PISA 2003*, Executive summary, p. 10.

With regard to problem-solving, females outperform males in: Iceland, Norway, Sweden, Indonesia and Thailand. Males outperform females in Macao-China. Elsewhere, the differences are not statistically significant. Males show a greater range of performance in this area than females. The UK is not included within these groupings because of comparability issues caused by sampling problems. The UK is included in the PISA data shown in Tables A and B of Annex 2.

Attainment through progression (*Education at a glance*, European benchmarks)

While PISA gives an indication of gender differences in attainment, *Education at a glance* provides comparative information for staying-on rates and progression to upper secondary and higher education. Though these are an indirect or proxy measure of attainment they provide a broader comparison. They also start to address the question that we may ask after considering the PISA study: 'Do gender differences matter?'

Table C in Annex 2 shows the average number of years spent in formal education by gender and by age group. For those aged 25–34 the majority of the countries (and the OECD average) have higher female averages. The only country where males are in education longer than females, by more than 0.1 years, is Switzerland. The UK is quite balanced with males spending an average of 13 years in education and females being 0.1 years behind. The groups aged 35 and above are dominated by higher male averages than female.

With regard to the population of those who have attained at least upper secondary education (Table D), for those aged 25–64 the UK average for males (70 per cent) is just above the OECD average. However, for females the UK is some six percentage points lower, at 60 per cent. This is comparable with the figures for Australia, France and the Netherlands; but very much lower than those for Finland, Japan and Sweden, who also have narrow gender gaps for this age group.

With regard to the population of those who have attained tertiary education (Table E), males and females, aged 25–34 in the UK are equal. This contrasts with the OECD average where females are five percentage points ahead of males. With the exception of Austria, none of the other countries included have such equal attainment; in Finland the gap is 17 percentage points.

The percentage of the population aged 18–24 with only lower secondary education and not in education or training for the UK is notably higher than that for Austria, Finland or Sweden. The gender gap is, however, considerably closer for the UK than these other countries and the EU 25 (Table F). Table G shows that males are less likely than females to participate in education and training if they have less than upper secondary education. The size of the gap is favourable, though the overall level of participation is overshadowed by those of Finland and Sweden. This theme of a small gender gap but relatively unfavourable overall levels is continued in the percentage completion of upper secondary education by 20- to 24-year-olds (Table H).

Section 3. What do the policy makers think?

The following information is based on responses from QCA's INCA network and the EU's Eurydice network of contacts, designed to find out what policy-makers are prioritising. Limited information for Australia, Canada and New Zealand was identified separately and is included here.

Themes occurring across the countries are outlined in the tables below. Information for each country is then presented according to gender differences, possible causes, and policy considerations and responses in each country. Common responses are then summarised.

Gender inequality

Gender inequality not an issue	Gender inequality is an issue
Czech Republic, Latvia, Spain	Australia, Austria, Estonia, Finland, France, Liechtenstein, New Zealand, Scotland, Sweden, Switzerland

Underperformance of boys relative to girls

Issues and policies	Countries
Girls outperform boys in:	Australia, Austria, Finland, France, Liechtenstein, New Zealand, Sweden
... but not in all subjects (if stated):	Austria, Finland, France (and no longer in Sweden)
Causes and policies relating to attitudes to learning or teacher training:	Australia, Austria, Liechtenstein, New Zealand
Causes and policies relating to differences in learning styles and teacher training:	Australia, Finland, Liechtenstein
Causes and policies relating to teacher gender and lack of role models:	Australia, Austria
Personalised learning:	Finland, Liechtenstein
Single-sex classes/schools:	Liechtenstein, New Zealand
Identification of difficulties and early intervention:	Australia, Canada (other sources), Finland (other sources)

Countries

Australia

Gender differences:

- The underachievement of boys relative to girls is an issue and had attracted the attention of the federal government.

Policy considerations have included:

- a relevant curriculum that makes connections with life outside schools
- teacher education for interpersonal skills with boys
- early intervention to identify and respond to difficulties
- encouraging parents to develop pre-literacy/numeracy skills
- providing students with appropriate role models in schools.

Other research:

- Fostering cooperation in the classroom and dialogue between teachers and students is important in developing a sense of self-worth amongst boys. Active learning rather than passive learning processes are important for both boys and girls.

Austria

Gender differences:

- Gender inequality is an important issue in education and society generally.
- Girls tend to outperform boys.

Possible causes:

- Girls tend to be more cooperative.
- Teaching is dominated by women.
- Measurement issues associated with educational assessment.

Policy responses:

There are various policies and initiatives relating to 'gender mainstreaming', including:

- equal access to education programmes
- gender balance in the teaching professions and administrators (work/life balance)
- teaching, communication and environments that respond to gender differences

- teacher training to include equity as a compulsory subject for detecting disadvantages and rectifying them
- career and study guidance without stereotyping.

Canada

Gender differences:

- Girls tend to outperform boys.

Policy responses:

- Early identification of issues and interventions in response.

Czech Republic

Gender differences:

- Not a policy issue.

Estonia

Gender differences:

- Differences are recognised as a problem.
- About twice as many boys as girls drop out of school.

Finland

Gender differences:

- Gender inequality of attainment has been an issue since the mid-1990s.
- In general, girls outperform boys at school.
- There are gender-specific variations according to subject.
- Girls tend to perform better in maths.
- Boys tend to perform better in mother tongue and foreign languages.

Possible causes:

- Unequal treatment of boys and girls arising from gender stereotyping.
- Differences in the way boys and girls learn.

Policy responses:

- Personalised teaching, identifying and responding to differences in the ways boys and girls learn.
- Identify and respond to learning difficulties.
- Strengthening meta-cognitive skills.

France

Gender differences:

- Girls generally outperform boys.
- Girls tend not to opt for science-/industry-based courses.

Policy responses:

- 2010 target of 45 per cent of girls taking the scientific and technological branch of the Baccalauréat.
- Inter-ministerial agreement on promoting equality of opportunity in education.

Latvia

Gender differences:

- Not a policy issue.

Liechtenstein

Gender differences:

- The attainment of boys is an issue.

Possible causes:

- Possibly boys' attitudes and learning styles.

Policy responses:

- CPD for teachers.
- Single-gender classes for some subjects.

Netherlands

Gender differences:

- Girls generally perform better than boys in school.

Possible causes:

- Relative levels of maturity and attitudes to learning.
- The feminisation of education: a lack of male role models.

Policy responses:

- Encouraging more men to become teachers is a government objective.

- Various, relating to gender mainstreaming (emancipatory goals for women), including encouraging more women to study science and technology, especially women from ethnic minority groups.

New Zealand

Gender differences:

- Boys in single-sex schools outperform boys in coeducational schools.
- Boys and girls performed better in single-sex schools.
- Boys in single-sex schools still lag behind girls in single-sex schools.
- The underachievement of rural boys relative to rural girls is far greater than that of urban boys to urban girls.

Scotland

Gender differences:

- The underachievement of boys is an issue but there are no specific policies.

Spain

Gender differences:

- Gender inequality in education is not a major policy issue.
- To the extent that it is monitored, the focus is on female participation in education.

Sweden

Gender differences:

- Girls now outperform boys in all subjects having recently made advances in physics and PE.

Policy responses:

- A major policy launch is planned in June 2007 and will support equality in compulsory and post-compulsory education but details are not available.

Switzerland

Gender differences:

- Gender inequality is an important issue in education and in general.

Policy responses:

- Various under the heading of gender mainstreaming to ensure equality, with the emphasis on equity for women.

Summary of policy responses

In many countries there is clear policy concern that boys underperform in comparison with girls. This is strongly associated with class and other socioeconomic factors. The policy response of some countries is to attempt to motivate higher levels of participation of boys in post-compulsory education, through the orientation of pathways to meet the needs of all learners. Canada has a thorough policy of early, integrated intervention in some provinces.

In terms of addressing the salient issues in teaching and learning, the most common policy responses are:

- encouraging more interactive forms of teaching that engage learners
- establishing constructive relationships between teachers and students based on respect and dialogue
- designing relevant curriculum content with clear links to the world outside of school
- implementing support policies including, in particular, teacher training.

Summary

Perhaps the most salient point raised from the literature is that gender is just one factor leading to differences in attainment. A grasp of the wider context is essential to understanding the issue and for developing successful policy responses. It is difficult if not impossible to study gender differences in isolation from other forms of inequality arising from socioeconomic, ethnic and cultural factors. Another issue, which could only be touched on in this paper, relates to any interaction effects between gender and any of these other factors. The evidence suggests that these factors are at least as important as gender.

The data reinforces the conclusions arising from the literature. A gender gap is apparent in many countries and favours girls. Girls outperformed boys in all subject areas with the exception of mathematics, where boys were ahead, and problem-solving, where performance was similar. In terms of attainment through performance (from PISA 2003), of the selected countries, Sweden, Japan and Finland comprise a top tier of performers. They have relatively high attainment and a relatively small gap between boys and girls. The UK is behind these countries, both in terms of overall performance and the size of the attainment gap between the sexes. Its performance appears to be comparable with that of Australia and France in a second tier of the countries studied. Looking at attainment in terms of progression through education, the UK has (particularly for those aged under 34) a small gender gap – improvement could be made by both sexes relative to that of other EU and OECD countries.

Most of the contacts providing information through the INCA and Eurydice networks reported that gender inequality in education is a policy issue in their countries. Of these countries, the issue was almost always one of the underperformance of boys relative to girls. However, in a few cases, respondents stated that gender inequality was not being directly addressed in policy or that the focus was on the participation of girls rather than the attainment of boys. In acknowledging the underperformance of boys, the respondents often recognised difference in the attitudes or learning styles of boys and girls. The policy agenda therefore seems to focus on appropriate responses to these differences. These included encouraging more active forms of teaching, constructive relationships between teachers and students based on respect and dialogue, relevant curriculum content with clear links to the world outside of school, and implementing support policies including teacher training. The issue, then, is tailoring these measures in response to the specific needs of boys. The same is true for girls.

Future research

This brief comparative analysis has identified headline theme and policy responses. If this topic is to be addressed by further research, those involved may wish to consider the following. The scope and depth of the three strands of this paper (literature, data, and policy) could be extended in the following ways to elaborate the themes identified and to extend the evidence base for policy.

- The literature review could be enlarged to include studies of interactions between gender and other factors linked to inequality.
- The international data could include comparisons between additional countries and include new data from various international assessments⁴ such as PISA 2006,⁵ TIMSS, Progress in International Reading Literacy Study (PIRLS) and *Education at a glance*, 2007.
- The policy analysis could be extended beyond descriptions to encompass the impact, and success or otherwise of the policies identified across the countries.

4 This is recommended in part because sampling problems caused comparability issues with the UK PISA 2003 data.

5 The UK has met the OECD's stringent PISA 2006 sampling requirements.

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Annex 2. Summary data on gender gaps in attainment

Table A. 2003 PISA mean scores

Country	Gender	Reading mean	SE*	Mathematics mean	SE	Science mean	SE	Problem solving mean	SE
Australia	Females	545	2.55	522	2.69	525	2.78	533	2.48
	Males	506	2.84	527	3.01	525	2.91	527	2.68
Austria	Females	514	4.21	502	3.96	492	4.18	508	3.75
	Males	467	4.54	509	3.95	490	4.28	505	3.92
Finland	Females	565	1.97	541	2.11	551	2.17	553	2.25
	Males	521	2.21	548	2.46	545	2.55	543	2.54
France	Females	514	3.18	507	2.92	511	3.54	520	2.93
	Males	476	3.79	515	3.55	511	4.14	519	3.81
Japan	Females	509	4.07	530	3.97	546	4.1	548	4.07
	Males	487	5.48	539	5.81	550	6.0	546	5.74
Liechtenstein	Females	534	6.54	521	6.28	512	7.32	524	5.92
	Males	517	7.24	550	7.23	538	7.72	535	6.65
Netherlands	Females	524	3.2	535	3.48	522	3.65	518	3.58
	Males	503	3.66	540	4.08	527	4.16	522	3.6
Spain	Females	500	2.48	481	2.19	485	2.59	485	2.59
	Males	461	3.78	490	3.38	489	3.85	479	3.64
Sweden	Females	533	2.89	506	3.09	504	3.46	514	2.83
	Males	496	2.81	512	2.98	509	3.07	504	2.96

Switzerland	Females	517	3.1	518	3.65	508	3.94	523	3.29
	Males	482	4.37	535	4.74	518	4.99	520	3.98
UK	Females	520	3.62	505	3.88	517	3.98	514	3.5
	Males	492	3.07	512	2.9	520	3.14	506	2.97
OECD	Females	511	0.72	494	0.76	497	0.75	501	0.77
	Males	477	0.73	506	0.75	503	0.74	499	0.76

*SE = standard error.

Source: PISA 2003 database, www.pisa.oecd.org.

Table B. 2000 PISA mean scores

Country	Gender	Reading mean	SE	Mathematics mean	SE	Science mean	SE
Australia	Females	546	4.74	527	5.15	529	4.78
	Males	513	4.04	539	4.12	526	3.91
Austria	Females	520	3.59	503	3.66	514	4.27
	Males	495	3.23	530	3.98	526	3.79
Finland	Females	571	2.78	536	2.62	541	2.7
	Males	520	3	537	2.83	534	3.51
France	Females	519	2.72	511	2.79	498	3.77
	Males	490	3.5	525	4.07	504	4.24
Japan	Females	537	5.39	553	5.92	554	5.89
	Males	507	6.74	561	7.29	547	7.18
Liechtenstein	Females	500	6.83	510	11.11	468	9.29
	Males	468	7.33	521	11.47	484	10.93
Netherlands	Females	547	3.77	558	4.59	529	5.05
	Males	517	4.78	569	4.9	529	6.31
Spain	Females	505	2.76	469	3.3	491	3.58
	Males	481	3.35	487	4.26	492	3.49

Sweden	Females	536	2.48	507	3.02	513	2.87
	Males	499	2.56	514	3.24	512	3.49
Switzerland	Females	510	4.5	523	4.82	493	4.65
	Males	480	4.85	537	5.31	500	5.69
UK	Females	537	3.45	526	3.67	531	3.98
	Males	512	3.03	534	3.49	535	3.44
OECD	Females	517	0.75	495	0.92	501	0.76
	Males	485	0.82	506	0.99	501	0.88

Source: PISA 2000 database, www.pisa.oecd.org.

Table C. Educational attainment expressed in average number of years in formal education (2004)

The 25- to 64-year-old population, by gender and age group

Country	Gender	Age group			
		25–34	35–44	45–54	55–64
Australia	Female	13.3	12.4	12.3	11.7
	Male	13.2	12.8	12.7	12.2
Austria	Female	12.3	12.0	11.4	10.8
	Male	12.4	12.4	12.2	12.0
Finland	Female	13.5	13.0	11.2	8.5
	Male	12.5	12.3	10.5	8.5
France	Female	13.1	12.0	10.7	9.6
	Male	12.8	12.1	11.3	10.3
Japan	Female	13.2	12.9	11.9	10.5
	Male	13.3	13.3	12.4	11.2
Netherlands	Females	12.5	11.4	10.5	9.8
	Males	12.0	11.5	11.3	10.6
Spain	Female	12.5	11.4	9.7	8.0
	Male	11.9	11.2	10.1	8.9
Sweden	Female	13.6	13.0	12.7	11.8

	Male	13.1	12.7	12.2	11.3
Switzerland	Female	13.0	12.7	12.3	11.7
	Male	13.7	13.7	13.5	13.2
UK*	Female	12.9	12.4	12.3	12.0
	Male	13.0	12.6	12.7	12.4
OECD Av	Female	12.8	12.1	11.4	10.3
	Male	12.5	12.2	11.7	11.0

* Including some ISCED 3C short programmes.

Source: OECD Table A.1.5. Available at: <http://dx.doi.org/10.1787/207238520880>.

Table D. Population of those who have attained at least upper secondary education (2004)

Percentage, by age group, by gender

Country	Gender	Age group				
		25–64	25–34	35–44	45–54	55–64
Australia	Female	59	75	60	54	39
	Male	70	78	69	69	59
Austria	Female	75	86	81	71	61
	Male	85	89	88	84	79
Finland	Female	79	92	89	78	58
	Male	76	87	84	74	59
France	Female	63	82	69	55	44
	Male	67	79	71	63	53
Japan*	Female	84	96	95	83	63
	Male	84	92	93	82	67
Netherlands	Female	67	81	73	63	48
	Male	74	79	75	73	69
Spain	Female	45	66	51	33	17
	Male	45	57	49	39	26

Sweden	Female	85	93	90	84	73
	Male	81	90	87	77	68
Switzerland	Female	82	87	84	80	73
	Male	88	90	88	87	85
UK**	Female	60	68	62	57	46
	Male	70	72	69	71	66
OECD Av	Female	66	78	71	61	48
	Male	69	76	72	67	58

* Year of reference 2003.

** Including some ISCED 3C short programmes.

Source: OECD Tables A.1.2.b and A.1.2.c. Available at:

<http://dx.doi.org/10.1787/207238520880>.

Table E. Population of those who have attained tertiary education (2004)

Percentage, by age group, by gender

Country	Gender	Age group			
		25–34	35–44	45–54	55–64
Australia	Female	41	32	32	22
	Male	32	30	30	24
Austria	Female	20	17	13	8
	Male	20	22	22	22
Finland	Female	47	47	36	24
	Male	30	33	29	27
France	Female	41	25	18	14
	Male	35	22	17	15
Japan*	Female	54	44	29	14
	Male	49	47	36	24
Netherlands	Female	36	28	25	18
	Males	33	32	33	30

Spain	Female	42	29	17	8
	Male	34	28	22	17
Sweden	Female	47	38	36	29
	Male	38	33	30	26
Switzerland	Female	23	22	18	12
	Male	38	40	37	33
UK**	Female	35	29	26	21
	Male	35	30	28	24
OECD Av.	Female	34	27	22	15
	Male	29	27	24	21

* Year of reference 2003

** Including some ISCED 3C short programmes

Source: OECD Tables A1.3b. and A1.3c. Available at:

<http://dx.doi.org/10.1787/207238520880>.

Table F. Percentage of the population aged 18–24 with only lower secondary education and not in education or training, 2004

Country	Females	Males
Austria	8.5	9.9
Finland	6.9	10.6
France	12.4	16.0
Spain	23.2	37.2
Sweden	7.9	9.3
UK	16.4	17.0
EU 25	13.6	18.1

Source: Fig. 6.2 in *Progress towards the Lisbon objectives in education and training*.

Commission Staff Working Paper (2005). SEC(2005) 419. Data from Eurostat, Labour Force Survey, 2004.

Table G. Percentage of population aged 25–64 with less than upper secondary education (ISCED 0–2) participating in education and training in the four weeks prior to the survey, 2004

Country	Females	Males
Austria	3.9	5.1
Finland	13.7	7.9
France	3.2	3.7
Spain	1.7	1.1
Sweden	24.1	17.9
UK	8.1	6.4
EU 25	2.7	2.4

Source: Fig. 5.4 in *Progress towards the Lisbon objectives in education and training*.

Commission Staff Working Paper (2005). SEC(2005) 419. Data from Eurostat, Labour Force Survey, 2004.

Table H. Percentage completion of upper secondary, age 20–24, 2004

Country	Females	Males
Austria	85.9	84.6
Finland	87.9	81.2
France	81.3	78.3
Spain	70.0	55.2
Sweden	87.6	85.1
UK	76.6	76.2
EU 25	79.1	73.8

Source: Table 2.11 in *Progress towards the Lisbon objectives in education and training*.

Commission Staff Working Paper (2005). SEC(2005) 419. Data from Eurostat, Labour Force Survey, 2004.

Annex 3. Country enquiry responses

Context

The Qualifications and Curriculum Authority (QCA) in England is interested in information relating to policies, initiatives or strategies in primary and secondary general education which address the following questions:

- Is gender inequality in the attainment of girls and boys an issue of concern in your country?
- Have any specific policies, initiatives or strategies been put in place in response to such concerns?

The information which follows is an edited summary, by country, of the responses received from the other Units in the Eurydice information network on education in Europe.

Austria

The issue of gender inequality is important in Austria, both in terms of the education system and in society in general. Various policies and initiatives have been put in place under the terminology largely used in Austria – gender mainstreaming.

Further information, in German, is available. See, for example:

<http://www.bmukk.gv.at/service/suche.xml?search=gender+mainstreaming&option=1&suche=Suche> and

http://www.bmukk.gv.at/schulen/unterricht/ba/erziehung_gleichstellung.xml.

Finland

Gender inequality in the attainment of girls and boys has been an issue and a focus of studies since the middle of 1995. Studies have evidenced poor levels of achievement and attainment for some girls and boys, with gender-specific variations according to subject. However, in general, girls' learning outcomes are better in many subjects.

The assessment of girls and boys has been found to vary, especially in mathematics and mother tongue and language teaching. Girls are graded more favourably than boys in mathematics, and boys are graded with more favourable criteria than girls in mother tongue and language teaching. Reasons for success in studies also appear to be interpreted differently depending on gender. It has been concluded that teachers do not acknowledge their own attitudes, and this leads to the unequal treatment of girls and boys. In addition, both girls and boys have some difficulties learning, but the nature of these difficulties differs.

The Ministry's Development Plan for Education and Research for 2003-2008 specifies that in basic (compulsory level) education, "it is necessary to study the differences in girls' and boys' learning".

One important initiative was a project carried out during the period 2004-2006 by the Finnish National Board of Education. Entitled "Different Learners Within the Same School" ("*Erilaiset oppijat - yhteinen koulu*"), the project aimed at reducing underachievement and promoting practices to enable students to fulfil their learning potential. The differences in learning between girls and boys were one of the central perspectives of the project. The aim was to develop learning environments that are beneficial to different learners, and the methods used included:

- identifying and tackling learning difficulties;
- strengthening meta-cognitive skills; and
- developing pedagogy and guidance taking the differences between learners into account, including the identification of different learning styles, resulting in personalised teaching.

France

Detailed information, in French, is available via the following web addresses:

<http://www.education.gouv.fr/cid4006/egalite-des-filles-et-des-garcons.html>
<http://media.education.gouv.fr/file/77/5/4775.pdf>

In sum, from primary school onwards, girls generally perform better at school than boys and repeat years less. In 2005, almost 82 per cent of girls taking the *baccalauréat* examination were successful, compared with 77.7 per cent of boys.

Despite this academic success, girls are less inclined to opt for science- or industry-based courses/options or to diversify. Eight out of ten continue to opt for administrative/ secretarial, financial/accounting, business, or health and social courses or careers. Boys opt for more varied choices.

The French Government has set the target that, by 2010, the proportion of girls taking *baccalauréat* courses in the scientific and technological branch will have increased by 20 per cent to 44.6 per cent.

There is also a new interministerial agreement on the promotion of equality of opportunity in the education system for the period 2006-2011.

The above is a summary provided from the urls cited.

Liechtenstein

There is currently a voluntary working group in Liechtenstein which is looking at issues relating specifically to working with boys ("Bubenarbeit"). This working

group organises various activities on the subject (workshops, lectures etc.). One member of the working group is a representative of the Office of Equal Opportunity.

In addition, a course on the topic "With boys successfully throughout the year" is offered in continuing professional development courses for nursery and primary school teachers.

In some grammar schools in Liechtenstein there are some single gender classes for some subjects. The Eurydice Unit respondent's own experience as a former grammar school teacher demonstrated to her that classes in which boys and girls are taught separately were usually very successful.

Spain

The difference in the attainment of girls and boys is analysed periodically from the data obtained from national and international evaluations (and from evaluations carried out by the individual Autonomous Communities) compared with other types of variables.

There is also a specific branch of educational research in the Ministry of Education which monitors the presence - and trends - of women in the education system (enrolment figures for the various phases/levels of education; enrolment in specialist subject areas in general upper secondary education, in vocational training and in university studies; numbers of women with doctorates, drop-out rates, etc).

In addition, there is a policy to encourage more women to take up courses in what are traditionally male areas of study.

The above said, gender inequality in attainment is not an issue of concern in current political debate, and no strategies/measures are planned in this regard.

In Spain, co-education and integration remain the guiding principles of the education system.

Sweden

In Sweden, girls get better grades in all subjects; until a few years ago boys did better in physics and physical education. Female students are also now a majority in many university programmes (medicine 59 per cent, animal health 68 per cent, dentistry 61 per cent. A higher percentage of boys also drop out of school, and of those who do not proceed to upper secondary education (16+), they are a majority. 90.7 per cent of girls transfer to post-compulsory upper secondary education, compared with 87.7 per cent of boys.

In June 2007, the Government will launch a significant new programme aimed at supporting equality in compulsory and post-compulsory upper secondary education. Information on this new programme is, unfortunately, not currently available.

Additional country response received via the INCA Network

Switzerland

The issue of gender inequality is important, both in terms of the education system and in society in general. Various policies and initiatives have been put in place under the terminology largely used in Switzerland – gender mainstreaming; the main objective of which is to ensure equality between the sexes. Policies and strategies put in place and the importance/priority of such strategies in the education system vary significantly from canton to canton. A report available online (in German), published in 2006, provides an overview of the issues in 2003. This report was written by the CIDREE Network contact for Switzerland, Dr Silvia Grossenbacher. QCA may be interested to contact Silvia for further information.

http://www.skbf-csre.ch/information/publikation/tb10_skbf.pdf

GROSSENBACHER SILVIA, Trendbericht SKBF Nr. 10, Aarau 2006, *Unterwegs zur geschlechtergerechten Schule - Massnahmen der Kantone zur Gleichstellung der Geschlechter im Bildungswese*. (Translated title: On the journey towards gender equality in school: cantonal measures towards gender equality in education.)

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Context

The Qualifications and Curriculum Authority (QCA) in England is interested in information relating to policies, initiatives or strategies in primary and secondary general education which address the following questions:

- Is gender inequality in the attainment of girls and boys an issue of concern in your country?
- Have any specific policies, initiatives or strategies been put in place in response to such concerns?

Information was originally provided for Austria, Finland, France, Liechtenstein, Spain, Sweden and Switzerland. The information which follows is an edited summary, by country, of four additional responses received from Units in the Eurydice information network on education in Europe.

Czech Republic

The differences in the attainment of girls and boys are not an issue of specific interest in the Czech Republic. With regard to gender studies and gender equality, the activities of the Ministry of Education, Youth and Sports have focused mainly on the content of textbooks.

Estonia

Although differences in attainment between girls and boys are recognised as a problem in discussions in Estonia, no studies or analyses of the issue have been completed recently. The yearbook of statistics includes some figures/tables that are related to the issue, for example, "Grade repeaters by gender, language of instruction and grades" or "Share of grade repeaters by gender, language of instruction and level of education". About twice as many boys as girls drop out of school according to the data.

Latvia

At present, gender inequality in the attainment of girls and boys is not an issue of concern at national level, and no specific policies or strategies are in place.

Scotland

The Scottish Executive does collect data disaggregated by gender and there is a general awareness that girls are outperforming boys. However, there are no specific strategies to address this.

The Executive has a major cross-cutting strategy 'Closing the Opportunity Gap' (<http://www.scotland.gov.uk/Topics/People/Social-Inclusion/17415/opportunity>) which aims to address many aspects of social inclusion, including education.

Target F (<http://www.scotland.gov.uk/Topics/People/Social-Inclusion/17415/CtOG-targets/ctog-target-f>) is concerned with increasing attainment at the lower end of the attainment scale. Specifically - "Increase the average score of the lowest attaining 20 per cent of S4 (Secondary 4) pupils (aged 15-16) by 5 per cent by 2008". Boys make up a disproportionate share of this "bottom 20 per cent". However, they are not specifically targeted as a group.

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