Scottish Government Gender Equality Taskforce in Education and Learning

Terms of Reference

Purpose

- 1. Despite having developed and delivered a number of innovative policy initiatives in recent years, such as the Developing the Young Workforce Strategy, the STEM Strategy and Equally Safe in Schools, Scotland continues to see disparities in gender equality in education and learning. Gender segregation in subject choice and career pathways still exists as does gender based violence and bullying of girls. There is a raft of evidence to support this, some of which has informed the production of the strategies noted above and can also be found at **Annex B**. Addressing inequality generally, and gender inequality specifically, is a key Scottish Government commitment as set out in the Programme for Government, the National Performance Framework, the National Improvement Framework and Improvement Plan and Curriculum for Excellence.
- 2. The Gender Equality Taskforce in Education and Learning (GETEL) has been established by the Deputy First Minister and Cabinet Secretary for Education and Skills to implement the recommendation made by the First Minister's National Advisory Council on Women and Girls, namely:

'Establish a Commission on Gender Equality in Education and Learning, covering Early Years, Primary and Secondary Education and Learning tasked with providing bold and far-reaching recommendations on how gender equality can be embedded in all aspects of learning (from teacher training, to school behaviours/cultures, to the curriculum and CLD practice).

The Commission should be independent of key bodies such as Education Scotland. The intended outcome is for a radical, evidence based and gender competent national strategy, providing much needed coherence and a pathway to safe and gender-neutral education and learning in all settings.'

- 3. The Taskforce has the central aim of identifying measures which will address gender inequality which remains evident in education and learning settings, advising on potential changes in practice and concrete actions to support the desired outcome, which is a gender competent experience of education and learning for all girls and women. The group will be an action and outcomes focussed one, examining the key drivers of gender inequality, how barriers which still exist can be removed and how good practice can be built upon
- 4. This requires all members and their organisations to commit to providing high level strategic leadership, focussing on what members can do individually, in collaboration and collectively, to address gender inequality.

Principles

- 5. The Taskforce will ensure that they take forward actions in the context of the following principles:
 - Inspiring and driving change and improvement throughout the system
 - Focusing on action and solutions for both immediate and long term change
 - Placing emphasis on the gender competent experiences of learners
 - Drawing on high quality evidence and data, including direct lived experience of Scotland's education and learning landscape
 - Leading across the whole system working with and through a wide range of partners
 - Ensuring coherence in understanding and practices across education settings and transitions within the learner journey
- 6. To achieve these aims, the Taskforce will acknowledge and value the fact that each member will bring their own knowledge and understanding of education, learning and gender equality, together with experiences in improving provision. The Taskforce will also benefit from networks which support some of the members and their organisations.
- 7. The Taskforce will bring their different viewpoints together with evidence to form joint recommendations. In the case of differences of opinion, the Taskforce will ensure these are explored, addressed and do not get in the way of rapid work to set out solutions.

Remit

- 8. The primary role of the Taskforce is to co-ordinate and drive action resulting in the production of a strategy which will underpin a change in approach and will aim to ensure that girls and young women in Scotland have a gender competent experience of education and learning at all stages.
- 9. The Taskforce will:
 - Actively seek and consider from the beginning the views of young people in producing a strategy which ensures that their views inform the outcome that they agree will lead to improvement.
 - Consider the existing evidence which sets out where good practice in embedding gender equality in Scottish education and learning already exists, particularly Education Scotland's Improving Gender Balance and Equalities Programme, the Developing the Young Workforce Strategy and the Gender Pay Gap Action Plan.

- Identify good practice, both in other parts of the UK and internationally, and consider whether they provide potential measures and solutions which have relevance for the Scottish context.
- Identify specific barriers in the planning and delivery of gender equality education, at all stages of practitioners' learning, from Initial Teacher Education throughout Career Long Professional Learning (CLPL) and until retirement
- Identify where gaps and other barriers are, both strategically and in educational settings when delivering gender equality in education and learning, and establish short term sub groups to take forward discrete pieces of work to develop appropriate measures or solutions.
- Consider the best way in which the production of an overarching strategy, as set out in the First Minister's NACWG recommendation, can coordinate existing good practice as well as new and innovative ways of ensuring that gender equality is embedded at all stages of education and learning.
- In all of the Taskforce's work, it will take an intersectional approach, ensuring that diversity and inclusivity inform their work from the outset.

Membership and Responsibilities

- 10. Membership of the Taskforce is at the invitation of the Scottish Government.
 - Members will demonstrate commitment to make a positive, practical, meaningful and lasting contribution to the work of the Taskforce while working with each other to drive action to facilitate an outcome which fulfils the recommendation made by the First Minister's NACWG.
 - Members will communicate with and provide feedback from their organisations and ensure regular communication with the Taskforce and other relevant stakeholders.
 - Members are expected to attend meetings in person wherever possible.
 However, the substitution of a deputy is acceptable on the understanding that
 the deputy will provide a report on the meeting to the substantive member
 and the group they represent. Members submitting apologies for meetings
 and who are unable to send a deputy, should notify the Secretariat in
 advance.
 - All members will make a full declaration of interests. If a member is uncertain
 as to whether or not an interest should be declared, they should seek
 guidance from the Secretariat.
- 11. The Taskforce is made up of a group of women and men aged 17+. The membership in its entirety is set out at **Annex A**.

Leadership and Links with Other Relevant Activity

- 12. Meetings will be conducted by the joint Chairs.
- 13. The Secretariat will facilitate all appropriate communication and co-ordination with the wide range of other organisations, activities and Programme for Government commitments which are relevant to the work of the Taskforce.

Communications

14. Taskforce members will ensure their organisations work with SG communications colleagues to allow consistency and coordination of messaging around its work and to support successful engagement with the wider sector as well as the public.

Frequency and location of meetings

- 15. It is proposed that the Taskforce will meet quarterly throughout 2020 (25 February, 13 May, 26 August and 18 November). The Taskforce will be operational for approximately 12 months, making recommendations to Ministers on conclusion of its findings. The First Minister's National Advisory Committee on Women and Girls will be kept informed of the Taskforce's progress throughout as well as informed of recommendations as they emerge.
- 16. The first meeting of the Taskforce will take place in the Scottish Parliament, with the locations for the subsequent meetings will be communicated to the Taskforce by the Secretariat in due course.

Secretariat

17. Secretariat support for the Taskforce will be provided by the Scottish Government's Learning Directorate and can be reached at GETEL@gov.scot. The Secretariat will support the Taskforce as it draws on the wider experience across the Scottish Government as well as from external organisations. It will also pro-actively publish all meeting papers and minutes on the Taskforce's webpage.

Directorate for Learning March 2020

Annex A - Membership

- Deputy First Minister and Cabinet Secretary for Education & Skills, John Swinney MSP (joint-Chair)
- · Razannah Hussain, Joint Chair
- Minister for Older People and Equalities, Christina McKelvie MSP
- Louise Macdonald, Chair, NACWG (correspondence member)
- Graeme Logan, Director of Learning, Scottish Government
- Joe Griffin, Director of Early Learning & Childcare, Scottish Government
- Eileen Flanagan, Gender Equality Team Leader, Equality Unit, Scottish Government
- Gayle Gorman, Chief Executive and Chief Inspector of Education, Education Scotland
- Hannah Axon, Equality, Representation & Diversity Officer, COSLA
- Peter McNaughton, Chief Officer, Association of Directors of Education in Scotland (ADES)
- Andrea Bradley, Assistant Secretary, Educational Institute for Scotland (EIS)
- Professor lan Rivers, Chair, Scottish Council of Deans of Education
- Dr Marion Alison, Director, CLD Standards Council
- Lauren Kelly, MSYP, Education & Lifelong Learning Committee, SYP
- Amy Woodhouse, Head of Policy, Participation and Projects, Children in Scotland
- Emma Ritch, Chief Executive, Engender
- Anna Ritchie Allan, Executive Director, Close the Gap
- Rachel Adamson, Co-Director, Zero Tolerance
- Kathryn Dawson, Prevention Co-ordinator, Rape Crisis Scotland
- Khaleda Noon, Chief Executive, Intercultural Youth Scotland
- Dr Mhairi Crawford, Chief Executive, LGBT Youth Scotland

- Dr Maureen Sier, Director, Interfaith Scotland
- Jan Savage, Director External Affairs & Strategic Development, Enable Scotland
- Katie Horsburgh, Girlguiding Scotland

1. Summary

- 1. This paper endeavours to provide a snapshot of gender equality in Scotland. It is not intended to tell the whole story, but attempts to provide some insight in to life for women and girls in Scotland today, across a number or areas including: advanced learning and skills; crime and justice; employment; health and poverty.
- 2. It also looks at an array of evidence which relates to specific examples of gender inequality:
 - gender based violence;
 - how gender impacts upon employment, particularly where women are returning to work after maternity leave and the consequences that has for the division of household labour
 - how gender impacts upon education and learning, in particular, school population, performance and gender segregation by subject.
- 3. It is clear to see that women and girls continue to experience gender inequality across the majority of areas examined. The areas in which girls and women *do* experience more positive outcomes than boys and men is in entry to Further and Higher Education. However this does not translate in to working life with just over 70% of women in Scotland in employment compared to 78% of men, and a gender pay gap of around 15%.
- 4. In school attainment, girls have consistently outperformed boys at SCQF levels 4-6 over the last 10 years. However, this is tempered somewhat when considering the breakdown of subject choice by sex: it is clear to see that there is significant segregation. Explored later on in this paper, research shows that as children and young people progress through the education system, their ideas about gender and work become increasingly fixed and results in their concentration in subjects, based on gender stereotypes.
- 5. Outwith education and employment, it is clear that women and girls are far more likely than men to be victims of certain violent crimes including domestic abuse, rape and forced marriage. Public attitudes towards sexual violence, domestic abuse and sexual harassment have improved in recent years, however many of the statistics remain shocking with 79% of incidents of domestic abuse reported to Police Scotland in 2014-15 having a female victim and male perpetrator.
- 6. Women are also more likely to undertake part-time work when they have children (only 19% of women with fewer than 3 children returns to work on a fulltime basis after maternity leave) and to absorb more of the childcare and household tasks, with two thirds of fathers reporting spending less than 10 hours per week on domestic responsibilities and over three quarters of mothers report spending more than 10 hours on them.

2. Key facts and stats:

Advanced learning and skills:

- In 2018/19, 92.2% of young women (aged 16-19) were participating in education, employment or training, compared to 90.9% of young men (Annual Participation Measure for 16 – 19 year olds in Scotland 2019).
- 58.1% of entrants into Higher Education in Scotland's HEIs and colleges were women in 2017/18 (<u>Higher Education Students and Qualifiers at Scottish</u> Institutions 2017/18.
- Women made up 51.9% of all full-time Scottish domiciled entrants, and 53.9% of all part-time Scottish domiciled entrants, to further education in 2017-18 (Report on Widening Access 2017/18).
- 62% of Modern Apprenticeship starts were men in 2018-19 and 38% were women.
- 72% of MA frameworks had a gender imbalance of 75:25 or worse in 2018-19.
- In the same period, the occupational groupings with the highest proportion of men were Construction & Related (98%), Automotive (98%) and Engineering & Energy related (95%).
- The framework groupings with the highest proportion of women were Personal Services (94%), Sport, Health & Social Care (84%) and Administration and Related (66%). (<u>Modern Apprenticeship Statistics</u> 2018/19)

Crime and Justice:

- Sex has an impact on the way violence is experienced, with women more likely than men to have experienced partner abuse, including psychological as well as physical abuse.
- There has been a decrease in violence over the past decade, driven by a reduction in younger males' involvement in violent crime, however this has not resulted in a change in the proportion of females who experienced violence.
- Women were less likely than men to feel safe walking alone in their neighbourhood after dark in 2016-17 (67% compared to 89% of men).
 Scottish Crime and Justice Survey 2016-17).
- During 2016-17, the average daily prison population decreased by 1% to 7,185 for men, and by 9% for women to 366 (94.9% male, 5.1% female) (https://www.sps.gov.uk/Corporate/Information/SPSPopulation.aspx).

Employment:

In 2018 in Scotland:

 The employment rate for women overall was 70.3%; less than the employment rate for men which was 78%. This figure changes when it is broken down by ethnicity with the employment rate for white women sitting at 72.8% but only 52.5% for minority ethnic women, resulting in an employment rate gap of 20.3 percentage points (ONS, Annual Population Survey, Oct 2018 – Sep 2019).

- One of the NACWG's Spotlight series, which focused on disability, observed that the gendered nature of disability and employment resulted in just over a third (35%) of disabled women being paid below the Living Wage in the UK in the period up to 2014, compared to 29% of non-disabled women.
- The gender employment gap was 7.6%, lower than the gap of 10.5% in 2008.
- 86.9% of men in employment are in full time employment compared to 57.5% of women.
- 16.3% of men in employment work in the public sector, compared to 35.4% of women. Since 2008, there has been a larger reduction in the proportion of men in employment in the public sector than women (down from 19.0% and 37.8% respectively).
- Almost half of women in Scotland (47.4%) work in the public administration, education and health sectors. (Note: this is not the same as the Public Sector).
- Over two-fifths (44.5%) of men work in sectors that show high levels of gender segregation: Construction (12.4%), Transport and communication (11.0%), Manufacturing (11.8%), Energy and water (6.8%) and Agriculture and Fishing (2.5%).
- 43.3% of women in Scotland were employed in occupations that are gender segregated towards women: Administrative and secretarial (15.7%), Personal service (17%) and sales and customer service occupations (10.6%).
- 31.5% of men in Scotland were employed in occupations that exhibit high levels of gender segregation towards men: Skilled trades (19.8%) and Process, plant and machine operatives (11.8%). (<u>Regional Employment</u> <u>Patterns in Scotland: Statistics from the Annual Population Survey 2018</u> May 2019).

Health:

- 77.4% of NHSScotland's workforce (WTE) were women (NHS Workforce Statistics).
- Carers 59% of people who provide unpaid care to a relative, friend or neighbour are women; 41% are men. (<u>Scotland's Carers</u>).
- In 2018, of adults aged over 16 in Scotland, men (70%) were more likely to meet the Chief Medical Officer's guidelines of 150 minutes of moderate to vigorous physical activity (MVPA) a week than women (62%).
- The greatest difference between men and women's adherence to the MVPA guidelines in Scotland was in the youngest and oldest age groups: 83% of men aged 16-24 met the guidelines compared with 70% of women.

Poverty:

- In 2015-18, the relative poverty rate after housing costs was higher for lone mothers (39%) than for other single working-age adults.
- The poverty rate for single working-age women without dependent children was 28%, and for single working-age men it was 26%. Poverty and Income Inequality in Scotland 2015-18).
- In 2019, for full-time employees (excluding overtime) the gender pay gap increased from 5.6% to 7.1% in 2019.

- Over the past 10 years, the gender pay gap for full-time employees decreased from 8.5% in 2009 to 7.1% in 2019 (<u>Annual Survey of Hours and Earnings</u> 2019).
- Employment rates for women increased from 68.4% in 2008 to 70.3% in 2018.

Travel:

Men in Scotland are more likely to hold a driving license than women (76% compared to 64%). The proportion of men holding a driving licence has remained fairly stable, whereas the number of women holding a license has increased from 51% in 1999 (Source <u>Transport and Travel in Scotland 2018</u> September 2019).

Future work:

The Scottish Government is developing a new Gender Equality Index which is due to publish in November 2020.

- It is aimed at measuring Scotland's progress over time on gender equality, using statistical indicators to inform a number of domains covering a range of policy areas.
- The domains to be developed are: work, money, time, knowledge (with various aspects of education and training being considered), justice, health and power, and each of these domains is expected to be comprised of 6-8 statistical indicators.
- The Scottish Government is working with prominent gender equality
 organisations on this project to ensure the output meets the requirements of
 stakeholders. A working group has been formed and is meeting quarterly to
 discuss the development of the seven domains which will comprise the overall
 index. Scottish Government expects to publish a baseline index in late 2020.
- The Scottish Gender Equality Index will be made accessible to a wide range of users who have an interest in gender equality, including policy makers, the media and the public. It will show an up-to-date picture of the many facets of gender equality and will be designed to clearly demonstrate change over time.

3. Evidence of specific examples of gender inequality

Violence Against Women and Girls:

- 1. Violence Against Women and Girls (VAWG), also referred to as Gender Based Violence (GBV), damages health and wellbeing, limits freedom and potential, and is a violation of the most fundamental human rights. In Scotland in 2014-15:
 - 59,882 incidents of domestic abuse were recorded by Police Scotland. 79% of these incidents had a female victim and a male perpetrator.
 - 1,901 rapes or attempted rapes were recorded by the police. Where gender was known, 95% had a female victim (source Equally Safe 2016).

- 2. We also know that across the UK, 79% of forced marriage cases involved female victims and that 1 in 3 girls report some form of sexual violence in intimate partner relationships (source Equally Safe 2016).
- 3. For the purposes of this paper, and also the deliberations of the Gender Equality Taskforce, the definition of GBV includes violent and abusive behaviour carried out predominantly by men directed at women and girls precisely because of their gender. This includes sexual violence, domestic abuse, coercive control, commercial sexual exploitation (e.g. prostitution) and so called honour-based violence (e.g. FGM and Forced Marriage).
- 4. The Scottish Social Attitudes Survey: Attitudes to Violence Against Women in Scotland 2014 (due to be updated at the end of 2020) found that overall, people in Scotland thought that sexual violence and domestic abuse were 'seriously wrong' and that they caused 'a great deal' or 'quite a lot' of harm to the victim. However, the type of abuse made a difference to people's views, as did the gender of the perpetrator and the context within which the abuse took place. It found that:
 - The majority of people thought that stranger rape and marital rape were 'seriously wrong' (95% and 93% respectively).
 - Only 58% of those questioned said that a woman who wore revealing clothing on a night out was 'not at all to blame' for being raped, with 60% saying the same of a woman who was very drunk.
 - Nearly a quarter (23%) agreed with the statement that 'women often lie about being raped' and 37% agreed that 'rape results from men being unable to control their need for sex'.
- 5. When considering sexual harassment, different scenarios elicited different responses with 82% thinking that a boss touching a female employee's shoulder was wrong, seriously wrong or very seriously wrong. 66% gave the same scores to groups of men wolf-whistling at women and 62% thought the same for stalking. Contrary to the pattern in relation to sexual violence and domestic abuse, it was younger people who were less likely than older people to view sexual harassment in the workplace or stalking as 'very seriously wrong': only 30% of those aged 18 to 29 thought that a male boss touching his female employee's shoulder was 'very seriously wrong', compared with 47% of those aged 65 years or over. Women were more likely than men (49% compared with 43%) to think that sexual harassment in the workplace was 'very seriously wrong', as were those with lower levels of education. However, it was men who were more likely to regard men wolf-whistling and stalking as harmful.
- 6. The Scottish Social Attitudes Survey found that generally speaking, those educated to a higher level, those who are younger, those who do not hold rigid views on gender stereo types and those who are not religious are far more likely to express the believe that all forms of GBV are very wrong and particularly damaging. Similarly those who held stereotypical views on gender roles were consistently less likely to view a wide range of abusive behaviours as wrong or harmful.

Employment and Gender:

- 7. The issue of gender inequality in the workplace has wider implications than just career progression for women. Career trajectories of both parents and decisions made in relation to division of labour in the home, models gender stereotypes and behaviours for girls and boys.
- 8. The Scottish Government's Gender Pay Gap Action Plan committed to funding research on the extent to which women return to employment after the birth of their first child to lower skilled, lower paid work and in some cases drop out of employment altogether. The research <u>Understanding Society: Gender & Work in Scotland</u> examines:
 - · career trajectories of mothers returning to work, and;
 - gender roles and attitudes of married parents in opposite sex relationships, particularly around division of labour in the home.
- 9. It found that the majority (89%) of new mothers intended to return to employment, however this figure is negatively impacted upon by factors such as family size, whether there is a disabled person the family, and whether the mother has a partner living in the home. The most common reason given for not returning was "I prefer to look after my child". Other reasons given were:
 - could not earn enough to pay for childcare (27%)
 - could not find suitable childcare (20%)
 - could not find a job with the right hours for me (20%)
- 10. It also found that after having their first child, the majority of women return to work on a part time basis. Only 19% of women with fewer than 3 children returns to work on a full time basis. The figure drops to 4% for women with more than 3 children. While part time employment increased for women across all the groups questioned, full time work *increases* for men, particularly for men under 25 which saw an increase from 52% 87%.
- 11. Many of the findings around gender roles and attitudes of married parents around division of labour in the home, came from the larger <u>Understanding Society-the UK Household Longitudinal Study</u>. It found that fathers report spending less time on domestic responsibilities than mothers, a pattern which is more pronounced in married different sex couples where only the father works. Where parents are married and in employment, 56% of mothers and 51% of fathers agreed with the statement "husband and wife should both contribute to household income. However across all groups this position inverts, with only 49% of mothers agreeing with this statement and 52% of fathers.
- 12. When questioned on domestic responsibilities, where couples are married and both in employment, two thirds of fathers report spending less than 10 hours per week on domestic responsibilities and over three quarters of mothers report spending more than 10 hours on them. In couples where the woman is not in employment there is a higher degree of polarisation.
- 13. The findings in this report in relation to gender roles and attitudes are in line with the wider body of research in this area including the latest Time Use Survey for

<u>Scotland</u> and the latest British Social Attitudes Survey <u>British Social Attitudes</u> <u>Survey</u>, both of which show that women tend to spend more time on housework than men.

14. More widely, the UK Government's <u>Return to Work: Potential Decision Making</u> finds that mothers are more likely to sacrifice employment than fathers for a variety of reasons including the fact that fathers often receive a higher salary as well as societal expectations around gender roles.

4. Gender equality in Education & Learning

School Population:

- 15. According to the <u>Summary Statistics for Schools in Scotland 2019</u> (Pupil Census), female pupils account for nearly 49.1% of the pupil population in publicly funded schools in Scotland.
- 16. The <u>Summary Statistics for Schools in Scotland 2019</u> (Teacher Census) shows that in both the primary and secondary sectors the proportion of teachers who are female falls at each level of seniority. In primary schools, 89% of teachers at all grades were female compared to 85% of head teachers. In secondary schools 64% of teachers at all grades were female compared to 42% of head teachers. However the number increases in special schools, where 76% of teachers at all grades were female compared to 79% of head teachers.
- 17. In September 2018, across all school teachers. 77% were women and across all school head teachers, 78% were women. <u>Summary Statistics for Schools in Scotland</u>, No.9: 2017 Edition
- 18. When considering attendance rates, girls in primary schools are marginally ahead of boys at 94.6% and 94.5% respectively. However this changes in secondary school where female pupils' attendance drops to 90.7%. Male pupils' attendance in secondary school also decreases but remains slightly higher than female attendance at 90.8%. While the reasons for lack of attendance are not broken down by sex, Managing School Attendance encourages practitioners to take in to account the possibility of lack of attendance having a basis in gender e.g. FGM, Forced Marriage or Child Sexual Exploitation.
- 19. However, exclusion rates show a much more extreme picture with the rate per 1,000 pupils being more than three times higher for male pupils (33.4) than female pupils (9.5).

School Performance:

20. Breaking down the percentage of school leavers attaining SCQF levels 4-6 in 2009-10 – 2017-18 by sex, girls have consistently outperformed boys by as much as 1.7% at SCQF level 4, with the gap widening to as much as 12.6% at SCQF level 6. In 2017-18:

- 96.8 per cent of female school leavers achieved one or more passes at SCQF Level 4 or better, compared to 95.6 per cent for male school leavers.
- 88.2 per cent of female school leavers achieved one or more passes at SCQF Level 5 or better, compared to 83.7 per cent for male school leavers.
- 68.6 per cent of female school leavers achieved one or more passes at SCQF Level 6 or better, compared to 56 per cent for male school leavers.
- 21. Similarly, breaking down the percentage of school leavers in a positive initial destination from 2009-10 2017-18 by sex, female school leavers consistently outperformed males by as much as 3% in 2009-10 with the gap narrowing to 1.9% in 2015-15 and increasing again during the final 2 years in that period. Attainment & School Leaver Initial Destinations
- 22. Similarly, the Achievement of Curriculum for Excellence Levels 2018-19 (ACELs) statistics have found since 2015-16 that female pupils outperformed male pupils across all stages and organisers. In 2018-19 achievement of CfE Levels (in literacy and numeracy) broken down by sex show that 83% of girls achieved expected CfE levels in P1, P4 and P7 across all 5 subject headers, compared to 76% of boys. At S3 (4th level) 63 % of girls achieved expected CfE levels across all 5 subject headings compared to 48% of boys:
- 23. Key findings from the Programme for International Student Assessment (PISA) demonstrate that reading amongst girls during the 2006-18 period has been consistently higher than boys. However, the picture is reversed when considering proficiency in maths with boys consistently scoring higher, although it should be noted that the gap between males and females has gradually narrowed over the last 3 reporting periods. Where science is concerned, male pupils have outperformed female pupils over the last 5 reporting periods. However, unlike maths where the gap between the 2 groups has narrowed over the last 5 reporting periods, science scores fluctuate across the same timescale. An overview of the 2019 PISA statistics is as follows:
 - Reading: In 2018 in Scotland, performance among girls was higher than among boys in reading (511 vs 497).
 - Maths: In 2018 in Scotland, performance among boys was higher than among girls in Mathematics (497 vs 481). This was also the case in 2006, 2009, 2012, but not in 2015 where their performance was similar.
 - Science: Boys and girls in Scotland had statistically similar scores in Science.
 There are no countries in the OECD that have a statistically smaller gender gap in science.
 - Career intentions: 10.7 per cent (similar to the OECD, lower than the UK as a whole) of pupils indicated that they expected to work in the science and engineering profession (14.4 per cent of boys and 7.2 per cent of girls). 3.1 per cent (lower than the OECD and the UK as a whole) indicated the health profession (6.4 per cent of boys and 19.1 per cent of girls)

- Reading: Girls in Scotland were less confident in their reading ability than the UK and OECD average, although girls in Scotland scored higher in reading attainment than the OECD average. Girls in Scotland were less likely to say that reading was a hobby.
- Fear of Failure: Girls in Scotland were much more likely than the OECD average and boys in Scotland to express a fear of failure. When answering the question, 'when I am failing, this makes me doubt my plans for the future', 72.0 per cent of pupils in Scotland agreed (higher than the OECD average of 53.8 per cent, but similar to the UK figure of 70.5 per cent). 83.6 per cent of girls in Scotland agreed with this statement, compared to 59.7 per cent of boys.

Gender segregation in subject choice:

24. As part of the development process of the Scottish Government's Gender Pay Gap Action Plan, Close The Gap produced a paper which considered what we know about gender segregation in subject choice. Close the Gap found that:

"Research shows that as children and young people progress through the education system, their ideas about gender and work become increasingly fixed, and results in their concentration in subjects, based on gender stereotypes.¹ Data from SQA shows that in 2017, at Higher SCQF level young women were more likely to study art and design (82%), French (87%), health and food technology (87%) and childcare and development (95%), while young men were more likely to study computing science (84%), physics (72%) and graphic communication (68%).² Gender segregation is a cradle to the labour market problem, ingrained in the education and skills pipeline, starting in early years and resulting in women's clustering in undervalued, low-paid jobs and sectors such as care and admin, and their under-representation in STEM sectors.³

Gender stereotyping permeates society, and the classroom is no exception. Research by Girl guiding found that half (51%) of girls aged 7-10 in the UK reported that gender stereotypes changed their behaviour and affect how much they participate in class. It also found that 71% of girls and young women aged 11-21 reported that they often or sometimes saw or heard teachers using gender stereotypes.⁴

Gender segregation restricts girls' and boys' choices, and limits their ambitions. Other research by Girlguiding⁵ found that girls' and young women's views changed as they got older on whether they have the same chance of being successful in future jobs as boys. 86% of girls aged 7-10 said they did have the same chance as

⁵ Girlguiding is the leading charity for girls and young women in the UK.

¹ Van der Vleuten, Maaike, Eva Jaspers, Ineke Maas & Tanya van der Lippe (2016) "Boys' and girls' educational choices in secondary education: The role of gender ideology", *Educational Studies*, 42:2, 181-200

² SQA (2017) Attainment Statistics August 2017 available at https://www.sqa.org.uk/sqa/63001.8312.html last accessed 3 August 2018

³ Close the Gap, *Occupational segregation statistics* available at https://www.closethegap.org.uk/content/gap-statistics/ last accessed 3 August 2018

⁴ Girlguiding (2017) Girls' Attitudes Survey 2017

boys; this reduced to 54% for aged 11-16 years and dropped to 35% for young women aged 17-21.6

Gender segregation in education is linked to occupational segregation among the education workforce. In 2017, 90% of primary teachers were women, and 63% of secondary teachers were women⁷, while only 41% of secondary head teachers were women⁸."

STEM:

- 25. Gender segregation is particularly prevalent as girls and young women enter and navigate the STEM sector. The Scottish Government's STEM Education & Training Strategy for Scotland finds that gender imbalances in participation in STEM courses are evident across the education and training system, with girls under-represented in STEM subjects at school. Two thirds of STEM learners at college are male and men outnumber women in the number of Modern Apprenticeship registrations in STEM frameworks. There are wide variations in the pattern of female and male participation in the different STEM subjects and courses with males being over represented in subjects such as physics, engineering, computing and construction.
- 26. Conversely, females are over represented in subjects and courses relating to biology, life sciences, medicine, dentistry and veterinary science. For example, in 2016, 67% of Higher Biology and 71% of Higher Human Biology of total passes in the subject were by females whereas only 18% of Higher Computing Science and 30% of Higher Physics passes were by females. In 2016, the percentage of female passes in Higher Mathematics, Chemistry and all the other Technology subjects were 48%, 51% and 44% respectively.
- 27. This gender segregation and imbalance is exacerbated in the STEM workforce. Research indicates that women are underrepresented across a range of STEM sectors such as energy, life and chemical sciences, engineering and ICT/ digital and, in particular construction, where in 2015 less than 2% of trade workers and only 10% of professionals were female. Other sectors, in other parts of the economy, such as the care sector have high proportions of women. Gender segregation and imbalance results in lost economic potential for the country and missed opportunities for individuals.

Directorate for Learning February 2020

⁶ Girlguiding (2016) Girls' Attitudes Survey 2016

⁷ Scottish Government (2018) Supplementary statistics from the Teacher Census 2017 available at: https://www.gov.scot/Topics/Statistics/Browse/School-Education/teachcenssuppdata/TeaSup2017 last accessed 15 August 2018

⁸ Engender (2017) Sex and Power in Scotland 2017