



Submission to the Royal Society of Edinburgh Tapping All Our Talents Review 2018

April 2018

INTRODUCTION

Close the Gap is a policy and advocacy organisation working in Scotland on women's labour market participation. We work with policymakers, employers and employees to encourage and enable action to address the causes of women's inequality at work.

Women's under-representation in STEM is a prominent feature of occupational segregation and is a major cause of the gender pay gap. The gender gap in employment is not only an equalities issue but also an economic issue as many women are working in jobs below their skill level which contributes to skills shortages, particularly in those sectors which are segregated by gender. Closing the gender gap in employment could add £17bn to Scotland's economy.

Our submission provides key points related to women's labour market inequality under each of the review areas of enquiry, and addresses specific questions, where relevant.

SECTION 1

Q1 Do you believe progress has been made towards achieving gender equality in the STEM workplace in Scotland since 2012?

Women's and girls' under-representation in STEM subjects in education, among those who have STEM qualifications, and in STEM jobs is well-rehearsed. Despite a myriad of short-term, targeted initiatives to address the gender imbalance, women and girls continue to experience stark occupational segregation, and progress to address this has been extremely slow.

Women's labour market and economic inequality

Women do not enjoy equality with men in Scotland. The gender pay gap is the key indicator of women's persistent inequality at work, and in Scotland the pay gap currently stands at 15%¹, with recent ONS data showing that progress in Scotland has stalled². The pay gap is headline figure which represents women's and men's different experiences in education, skills acquisition, employment, care and domestic which stems from gendered attitudes and assumptions about girls' and boys', and women's and men's behaviours, choices and lives.

The causes of the pay gap, and women's labour market inequality, are:

- **occupational segregation**, where gender norms and stereotyping about women's and men's capabilities and preferences results in women and men doing different types of work (horizontal segregation) and different levels of work (vertical segregation);
- a **lack of quality part-time and flexible working** which results in women's under-representation at management level and in senior grades;
- the **undervaluation of "women's work"** such as care, admin, cleaning and retail, in which women's employment, and part-time work is concentrated;
- women's disproportionate responsibility for **unpaid care work** and the length of time women have worked part-time in order to combine their caring roles with employment;
- **biased and untransparent** recruitment, development and progression practices;
- **male-orientated workplace cultures** that do not feel inclusive to women, nor meet the needs of their lives; and
- **discrimination** embedded within pay and grading systems, which results in women being paid less than men for doing equal work.

¹ Close the Gap (2016) *Gender pay gap statistics* <https://www.closesthegap.org.uk/content/resources/Briefing17.pdf> accessed May 2018

² Close the Gap (2017) *Close the Gap calls for cohesive, strategic response as new figures show Scotland's pay gap hasn't budged* <https://www.closesthegap.org.uk/news/blog/close-the-gap-calls-for-cohesive-strategic-response-as-new-figures-show-scotlands-gender-p1/>

Disabled women³, Black and minority ethnic women⁴, Muslim women⁵, lesbian and bisexual women⁶, trans women⁷, refugee women⁸, young women⁹, and older women¹⁰ experience different, multiple barriers to participation in the labour market, and to progression within their occupation. Across the labour market, disabled women, and some groups of Black and minority ethnic women are more likely to be under-employed in terms of skills, and experience higher pay gaps. Disabled, Black and minority ethnic women are also more likely to experience discrimination, bullying and harassment.

Q2 If yes, what action(s) do you believe have had the greatest impact on improving gender equality in STEM in Scotland?

Q3 Where you do not believe progress has been made, or could be improved upon, what do you believe have been the key limiting factors?

It is often asserted that if more girls and women acquire STEM education, training and skills they will go on to work in STEM industries and address the gender imbalance. Women's experiences of the workplace tell us this is not true. Without addressing the gendered barriers that women face in entering and progressing at work, occupational segregation will persist.

There continue to be myriad of short-term initiatives which aim to address girls' and women's under-representation in STEM subjects and jobs. Even where successful, these initiatives effect change for small numbers of women and girls. They are also usually resource intensive which creates challenges in scaling up to national level.

It is critical that this review recommends that action to address girls' and women's under-representation in STEM subjects and industries is mainstreamed across education and employer policy and practice, in addition to continuing to support interventions such as those delivered by Equate Scotland.

Q4 Which of the recommendations made in the 2012 Tapping All Our Talents report do you believe should be prioritised going forward?

³ Leonard Cheshire Disability (2014) *Realising the rights of women and girls with disabilities*

⁴ Scottish Parliament Equal Opportunities Committee (2016) *Removing Barriers: Race, ethnicity and employment*

⁵ House of Commons Women and Equalities Committee (2016) *Employment Opportunities for Muslims in the UK*

⁶ Stonewall (2014) *The Double-Glazed Glass Ceiling: Lesbians in the workplace*

⁷ House of Commons Women and Equalities Committee (December 2015) *Transgender equality*

⁸ Scottish Refugee Council (2014) *One Step Closer*

⁹ YWCA Scotland (2016) *Status of Young Women in Scotland*

¹⁰ Scottish Commission on Older Women (2015) *Older Women and Work: Looking to the future*

1. High quality, fairly paid flexible and part-time working to be available at all levels of organisations.
2. Progressive policies and practices in the workplace, to include fair and transparent recruitment and selection, and progression processes.
3. High quality, affordable, flexible, wraparound childcare to be available to all parents.

Q5 What further recommendations (if any) would you make to policy-makers, educators or employers to tackle gender inequality in STEM in Scotland?

Women's under-representation in STEM is a prominent feature of occupational segregation, and is a major cause of the gender pay gap. Occupational segregation is a cradle to the labour market problem which requires targeted action along the skills pipeline from the early years setting to the workplace. It is therefore self-evident that mainstreaming must be part of any solution. At present, activity to tackle occupational segregation, where it happens at all, is an addition to business-as-usual delivery, in spite of the gender mainstreaming requirement of the public sector equality duty. Meaningful mainstreaming would therefore represent a radical shift in approach.

SECTION 2: IN DETAIL

Q6 What lessons do you believe have been learned from initiatives undertaken since 2012 to tackle gender inequality in the STEM workforce across the public, academic and/or industry sectors? Examples of good practice would be useful.

Q7 In 2018's economic, political and social context, what do you consider to be the key influencers (positive and negative) on gender equality in STEM in Scotland?

Q8 To what extent do you believe that the issue of gender inequality in STEM is being recognised as a priority and to what extent do you believe that rhetoric is being met with action?

Despite numerous short-term, targeted initiatives to address the gender imbalance in STEM, women and girls continue to experience stark occupational segregation. Initiatives such as women-only networks, placements and courses are important and necessary; however if we are to see real change these

initiatives must be supported by the mainstreaming of gender in education and employment policy development.

Women's experiences of the workplace are the key component in addressing the gender imbalance in STEM. Unless labour market inequality is addressed actions relating to education settings will be undermined. The STEM workplace is still a hostile environment for women. Close the Gap delivered a project which developed the Women in Renewable Energy Scotland (WiRES) network. Research undertaken with women in the network found that only 39 per cent said that flexible working was available in their workplace; 25 per cent reported feeling out the loop because of their gender; 20 per cent felt that their contributions were valued less than their male counterparts; and 11 per cent reported working on fewer higher visibility major revenue projects than male colleagues¹¹.

Since the 2012 Tapping All Our Talents report there have been a number of policy developments which have relevance to women's labour market inequality and its causes; however these have yet to realise change for women. Meaningful action from employers continues to be the stumbling block, and without this the attrition rate of women with STEM skills will remain staggeringly high.

Gender pay gap reporting

The requirement of larger employers to publish their gender pay gap information is a welcome small step towards addressing women's inequality at work, and the associated media coverage has undoubtedly raised awareness of occupational segregation and its impact. However, the regulations fall short of requiring employers to publish a narrative explaining the causes of their gender pay gap, or to take action to address it.

That there is no legal requirement to take action to close their pay gap is the major weakness. Close the Gap has undertaken an assessment of gender pay gap reporting by Scottish employers. The assessment reviewed the reporting of a cross-sectoral sample of 200 employers in Scotland, and found:

- **Very high pay gaps of up to 60%** in male-dominated sectors such as construction, finance and oil and gas;

¹¹ https://www.closesthegap.org.uk/content/resources/1480883421_CtG-How-womens-networks-and-mentoring-can-address-occupational-segregation.pdf accessed 26 April 2018

- **Extremely high gender gaps in bonus earnings of up to 100%** in male-dominated sectors such as manufacturing, construction, energy and finance;
- **Less than a fifth** of employers have set out actions they will take to close the pay gap, with many actions unmeasurable and unlikely to create change; and
- **Only 5%** have set targets to reduce their pay gap.¹²

This aligns with existing evidence on employer actions to advance gender equality at work. Research by Close the Gap into employer action on the gender pay gap showed that while 94% of those employers we surveyed had an equal pay policy in place, less than a third had undertaken an equal pay review, and only 3% had taken any action to address pay gaps.¹³

Public sector equality duty

The public sector equality duty is a positive duty which requires public bodies to take a proactive and organised approach to tackling institutional discrimination, and aims to mainstream equality into public bodies in practical ways. Listed public bodies are required to report on how they have met the duty, including publishing their gender pay gap, an equal pay statement, and information on occupational segregation.

Close the Gap's third biennial assessment of public bodies' compliance with the public sector equality duty¹⁴ has identified a significant decline in performance of the duty since it replaced the single equality duties on gender, disability and race. There has been an increasing homogenisation of equalities work, and public bodies are still experiencing challenges on the fundamental parts of the duty. Mainstreaming reports and outcome plans rarely provide evidence of concrete programmes of work to meet the duty. The assessment findings indicate significant capacity issues around gender equality, and mainstreaming itself, and a lack of prioritisation of equality at senior levels. As

¹² Close the Gap (2018) Forthcoming. A summary of findings are available at <https://www.closesthegap.org.uk/news/blog/close-the-gap-assessment-of-scottish-gender-pay-gap-reporting-suggests-most-employers-are-/>

¹³ Close the Gap (2013) *Missing Out on the Benefits: Summary of research on the reporting of the gender pay gap in Scotland* <http://www.closesthegap.org.uk/content/resources/Missingoutonthebenefits-CTG.pdf>

¹⁴ Close the Gap (2018) Forthcoming.

a result, the duty has not resulted in meaningful change for women in Scotland.

Procurement

There is considerable potential for the use of public procurement and conditionality to lever improved employment practice from those businesses accessing support from public bodies. At present, there is little evidence of public procurement being used in this way in Scotland's public sector¹⁵.

In implementing its equalities action plan for Modern Apprenticeships, Skills Development Scotland has taken the first tentative steps to including conditionality around action on equality to the funding it provides to Modern Apprenticeship training providers. This conditionality should be extended to the employer engagement function of the organisation, targeting those private sector businesses which benefit from the products and services of Skills Development Scotland.

Scotland's enterprise agencies should also include a conditionality on equalities action to companies accessing its account management function. At present, companies are encouraged to voluntarily sign up the light-touch Scottish Business Pledge. Of the optional pledges relates to improving gender equality, although only 35 per cent of Pledge companies have signed up to take action on gender¹⁶, the least popular of all the pledges. Including a conditionality would provide a strong lever to improve equalities practice among STEM employers.

Skills Investment Plans

SIPs are *"created through a process of labour market and skills supply research and analysis, industry consultation, and action planning with industry and partners across Scotland's education and skills system"*. Yet the consideration that has been given to gender, and increasing women's representation in STEM industries, is very weak. For example, the energy SIP acknowledges that more women must be attracted to the industry but makes no mention of improving retention¹⁷; the life sciences SIP acknowledges occupational segregation within

¹⁵ See, for example, Sarter, K. (2016) *Public Procurement and the Public Sector Equality Duty: Equality Sensitive Tendering in Scotland*, Women in Scotland's Economy research centre, Glasgow Caledonian University

¹⁶ <https://scottishbusinesspledge.scot/information/scottish-business-pledge-statistical-overview-january-2018/> accessed 26 April 2018

¹⁷ Skills Development Scotland (2015) Skills Investment Plan for Scotland's Energy Sector http://www.skillsdevelopmentscotland.co.uk/media/35691/sds_energy_sip_digital.pdf accessed 25 April 2018

the sector but has no actions to reduce it¹⁸; and the ICT and digital technologies SIPs mentions a need to encourage more women into the sector but only has one action relating to gender around establishing a computer club for girls¹⁹.

This nugatory consideration of gender fails to provide a comprehensive, gendered analysis and overview of Scotland's skills challenges and opportunities, and is very unlikely to create meaningful change on women's representation in STEM.

Regional Skills Assessment

RSAs are described as providing "robust" and "comprehensive" data on current and projected skills demand, supply and investment. However, there is no gender-disaggregated data in RSAs, including those which relate to workforce profile, and people and skills-supply. Furthermore, there is no acknowledgment that these significant data gaps exist in the national and regional skills evidence base, and therefore action plan to address the gaps. This a serious failing, especially given the extremely high attrition rate of women with STEM skills. The lack of gender analysis will do nothing to reduce occupational segregation in STEM, and serves only to reinforce the gender-blind skills analysis which contributes towards women's under-representation.

Colleges and universities

Through the outcome agreement process, Scottish Funding Council asks colleges to:

"Work with local authorities to map STEM provision in their area and where appropriate, prioritise the development of relevant new vocational pathways on this area. These pathways should focus on labour market need (drawing on information from Skills Investment Plans and Regional Skills Assessments and direct engagement with employers; prioritise STEM subjects if there is an identified skills gap in the region; and be developed in a way that achieves gender balance and supports key equality groups."

Universities are asked to:

¹⁸ Skills Development Scotland (2015) Skills Investment Plan for Scotland's life sciences sector http://www.skillsdevelopmentscotland.co.uk/media/35685/life_sciences_sip_april14.pdf accessed 25 April 2018

¹⁹ Skills Development Scotland (2015) Skills Investment Plan for Scotland's ICT and digital technologies sector http://www.skillsdevelopmentscotland.co.uk/media/35682/ict_digital_technologies_sector_skills_investment_plan.pdf accessed 25 April 2018

“Evidence how the institution meets the needs of current and future skills requirements of employers outlined in Skills Investment Plans, other labour market information, and through their partnerships with employers.”

It is very difficult to see how work undertaken by colleges and universities that is based on the evidence in SIPs and RSAs, which both have a distinct lack of gender-disaggregated data and gender analysis, will result in a meaningful reduction in gender segregation in STEM subjects.

Education

Q9 What do you believe should be done to encourage more girls and young women to engage with STEM subjects in early years, primary and secondary education?

Q10 What innovative or impactful practice do you know of or believe should be taking place in universities and colleges to tackle issues of gender disparities in STEM subjects? What do you think can be done to embed STEM gender equality thinking across universities and colleges?

Early years and schools

Close the Gap recognises that women’s under-representation in STEM is caused by gender inequality. Gender stereotyping in subject choice remains a significant barrier to girls studying STEM subjects in pre and post-16. Careers information advice and guidance is a major opportunity to influence, challenge stereotypes, and create change by widening and positively challenging stereotypical choices. There is, however, no evidence of a mainstreamed, gendered approach to career information advice and guidance in Scotland.

Close the Gap’s Be What You Want project aims to help young people make informed decisions about subject choice with the wider aim of encouraging them to consider non-traditional subjects and careers. Outputs since its inception in 2011 have included campaign materials and a teachers’ resource which were disseminated to every primary and secondary school in Scotland; ongoing delivery of school visits to deliver classroom sessions on gender stereotyping, occupational segregation and the gender pay gap; and interventions to build capacity in careers advisers on gender stereotyping and occupational segregation.

Evidence from Be What You Want and elsewhere shows that attitudes and assumptions around gender roles, and girls’ and boys’ interests become

entrenched from a very early age. It is essential that work to tackle gender stereotyping is mainstreamed in schools and early years provision, and not seen as an 'add-on' to discussions around subject choice.

Modern Apprenticeships

If an education or skills programme does not actively engage with the issue of occupational segregation, and gender stereotyping and assumptions and “men’s work” and “women’s work”, it is very likely to further entrench these. The Modern Apprenticeship Programme is characterised by acute and persistent occupational segregation, which is the key entry point into the labour market for young people not in further and higher education. Just 0.1 per cent of engineering and energy-related and 0.02 per cent of construction MA starts in Q2 2016/17 were women²⁰. Women are more likely to be in stereotypically female frameworks such as early years education and care, beauty and hairdressing. There are significant public spending implications for the programme as male-dominated frameworks are longer in average duration and therefore more resource intensive, attract higher rates of pay, have lower drop-out rates, and are associated with better labour market outcomes than female-dominated frameworks. The average spend per male apprentice is 53 per cent higher per female apprentice.²¹

There is an emerging tension between the target culture created by the drive to deliver 30,000 apprenticeships each year and delivering quality, effective initiatives to reduce occupational segregation. This is compounded by the prioritisation of Modern Apprenticeships for those aged under 24 years as women are more likely to consider training or retraining at an older age.

Actions to improve employer practice are particularly pertinent to reducing occupational segregation in Modern Apprenticeships because the majority of apprentices are already employed before they take up their apprenticeships.

Public sector equality duty

Public bodies such as schools (education authorities), colleges and universities are required under the public sector equality duty to mainstream activities to advance gender equality, and consider how in the delivery of services, they can

²⁰ Skills Development Scotland (2016) *Modern Apprenticeship Statistics: Up to the end of quarter 2, 2016/17* <http://www.skillsdevelopmentscotland.co.uk/media/42484/modern-apprenticeship-statistics-up-to-the-end-of-quarter-2-2016-17-final.pdf> accessed 30 January 2017

²¹ Sosenko and Netto (2013) *Scotland focused analysis of statistical data on participation in four UK countries*, Heriot Watt University

take action on reducing occupational segregation. Research by Close the Gap found that there is very little evidence of this happening in practice²².

Of particular concern is the lack of evidence of education authority activity to meet the gender equality aspects of the duty as it relates to service delivery. The duty provides a clear framework which can support effective work on the equality recommendations of the Developing the Young Workforce strategy, and broader equalities work across education policy in general.

A specific link to the public sector equality duty could usefully be included in the review recommendations to encourage public bodies to strategically align their work to address girls' and women's under-representation in STEM with ongoing work the meet the gender equality aspects of the duty.

Cultural Change

Q11 In what ways do you believe industry can lead by example to tackle inequality within workplace culture?

Q12 What do you believe are the most effective ways to challenge and change deep-rooted attitudes and institutional culture in order to improve gender equality in STEM?

In order for women to gain, and retain, employment in Scotland's STEM sectors there needs to be significant change at the enterprise level in employment practice. Poor employer equalities practice is a key reason for many women leaving STEM related jobs. The gendered barriers that women experience across the labour market, but which are more pronounced in male-dominated STEM industries, are detailed in Section 1 of this response.

Action to address workplace culture is inseparable from action to improve employer practice. It is therefore critical that the recommendations arising from this review prioritise change at the end point of the education and skills pipeline – the labour market.

²² See Close the Gap (2015) *Making Progress? An assessment of public bodies' compliance with the public sector equality duty* <https://www.closesthegap.org.uk/content/resources/Making-Progress---An-assessment-of-employers-compliance-with-PSED-November-2015.pdf> and Close the Gap (2013) *Monitoring public bodies compliance with the public sector equality duty* https://www.closesthegap.org.uk/content/resources/1450180414_CTG-Working-Paper-12---Monitoring-Scottish-public-bodies-compliance-with-the-public-sector-equality-duty.pdf

Close the Gap's most recent research, *The Gender Penalty*²³, contains a range of recommendations on addressing women's labour market inequality, which include specific recommendations for employers:

- Use the Close the Gap Close Your Pay Gap reporting tool²⁴ to identify the steps that will address the causes of the pay gap.
- When reporting on pay gaps, develop an action plan that includes realistic measurable actions that will narrow the pay gap.
- Monitor recruitment, retention and progression of male and female employees to identify gendered patterns.
- Enable female employees to participate in women's professional networks to support their progression.
- Where possible, offer flexible and part-time working at all levels of the organisation.
- Undertake an equal pay review.
- Work with Close the Gap to audit workplace policies and practice to ensure that female employees have a positive workplace experience.

²³ Close the Gap (2018) *The Gender Penalty: Exploring the causes and solutions to Scotland's gender pay gap*

²⁴ <https://www.closeyourpaygap.org.uk/>